

**THE INFLUENCE OF ENTREPRENEURIAL ORIENTATION ON THE  
GROWTH OF MICRO, SMALL, AND MEDIUM ENTERPRISES IN KENYA**

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**A Thesis Submitted to the Institute of Postgraduate Studies of Kabarak University  
in Partial Fulfillment of the Requirements for the Award of Doctor of Philosophy in  
Business Administration (Entrepreneurship)**

**KABARAK UNIVERSITY**

**NOVEMBER, 2025**

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## **DEDICATION**

This thesis is dedicated to my late mother, Mrs. Joyce Mariech, whose early nurturing and encouragement instilled in me a deep sense of curiosity and a passion for learning.

## ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) are pivotal to Kenya's economic development, contributing to employment creation, innovation, and GDP growth. However, many continue to face persistent growth constraints, stagnation, and high failure rates despite various government and institutional support mechanisms. Against this backdrop, this study investigates the influence of Entrepreneurial Orientation (EO) on the growth of MSMEs in Kenya. EO, conceptualized as a multidimensional construct comprising innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness, is recognized as a key driver of firm performance, yet empirical evidence in Sub-Saharan Africa remains mixed and context-dependent. Anchored on Schumpeterian Entrepreneurship Theory, the Risk-Taking Theory of Entrepreneurship, and the Theory of Competitive Advantage, the study adopts the multidimensional perspective of EO advanced by Lumpkin and Dess (1996). A sequential mixed-methods design integrating positivist and pragmatic paradigms was employed. Quantitative data were collected from 284 MSMEs, comprising manufacturing firms registered with the Kenya Association of Manufacturers (KAM) and innovation-driven start-ups supported by NACOSTI. This phase was followed by qualitative interviews with 15 purposively selected MSME owners or managers to provide contextual insights. Quantitative analysis, conducted using SPSS (Version 26), involved descriptive statistics, factor analysis, correlation, and multiple regression. The results revealed that proactiveness ( $r = 0.631$ ), risk-taking ( $r = 0.529$ ), and innovativeness ( $r = 0.452$ ) were positively correlated with MSME growth, while autonomy ( $r = -0.576$ ) was negatively associated, and competitive aggressiveness ( $r = 0.318$ ) showed a weak positive correlation. Multiple regression analysis confirmed proactiveness ( $\beta = 0.380$ ,  $p < .001$ ), innovativeness ( $\beta = 0.246$ ,  $p < .001$ ), and competitive aggressiveness ( $\beta = 0.219$ ,  $p < .001$ ) as significant positive predictors of growth. Conversely, autonomy ( $\beta = -0.323$ ,  $p < .001$ ) had a significant negative effect, and risk-taking was positive but statistically insignificant. The model explained 60.2% of the variance in MSME growth ( $R^2 = 0.602$ ). Qualitative findings supported these results, indicating that innovation and proactive market engagement are central to competitiveness, while excessive autonomy can lead to poor coordination and strategic drift. The study concludes that EO has a significant influence on MSME growth in Kenya, although the impact of its dimensions varies. Proactiveness and innovativeness are strong growth drivers, while autonomy may hinder performance if not strategically managed. It recommends that MSME managers strengthen innovation, calculated proactiveness, and structured autonomy. At the same time, policymakers enhance EO through innovation incentives, access to finance, and collaborative industry networks to promote sustainable enterprise growth.

**Keywords:** *Entrepreneurial Orientation, Growth, Micro, Small, and Medium Enterprises*

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

EO	Entrepreneurial Orientation
EFA	Exploratory Factor Analysis
BETA	Bottom-Up Economic Transformation Agenda
CFA	Confirmatory factor analysis
df	Degree of Freedom
GDP	Gross Domestic Product
GOK	Government of Kenya
KAM	Kenya Association of Manufacturers
KIRDI	Kenya Industrial Research and Development Institute
MSEA	Micro and Small Enterprises Authority
NCST	National Council for Science and Technology
NACOSTI	National Commission for Science, Technology and Innovation
MSME	Micro, Small, and Medium Enterprise
RBV	Resource-Based View
SEM	Structural Equation Model
SME	Small and Medium Enterprise
SPSS	Statistical Package for Social Sciences
VIF	Variance Inflation Factor

## CONCEPTUAL AND OPERATIONAL DEFINITION OF TERMS

**Autonomy:** Refers to independent actions undertaken by individuals or teams being self-directive, developing and implementing new ideas aimed at accomplishment of business concept or vision (Lumpkin and Dess, 1996). This study adopts this definition, with particular emphasis on autonomy, which is defined as the independent actions of individuals or teams within MSMEs in generating new ideas, concepts, and visions, and in ensuring their successful implementation.

**Competitive Aggressiveness:** Competitive aggressiveness posture reflects the intensity of a firm's effort to directly confront and outperform industry rivals, characterized by a strong offensive stance and a forceful response to competitors' actions (Lumpkin & Dess, 2001). This study uses Lumpkin and Dess' (2001) definition, whereby competitive aggressiveness entails the intensity of MSME's effort to confront and outperform industry competitors directly.

**Entrepreneurial Orientation:** Refers to the entrepreneurial process, that is, methods, practices, and decision-making activities that are used to explain entrepreneurial firm behavior (Lumpkin and Dess, 1996). In this study, entrepreneurial orientation refers to the extent to which MSMEs exhibit entrepreneurial characteristics and entails processes and practices that facilitate entrepreneurial decisions and actions.

**Innovativeness:** Refers to a firm's willingness to engage in and support the generation of new ideas and to explore and experiment with them creatively (Lumpkin & Dess, 1996). Innovation is demonstrated by finding novel solutions to problems and needs, finding creative solutions, and developing new products and services (Lumpkin & Dess, 2001). This study adopts the above definitions, whereby innovativeness denotes MSMEs' propensity to pursue and support the accomplishment of intensive product innovation and an inclination to develop or adopt novel product innovations compared to the competition.

**Proactiveness:** Rauch et al. (2009, p. 763) view proactiveness as an “opportunity-seeking, forward-looking perspective characterized by the introduction of new services and products ahead of the competition and acting in anticipation of future demand.” In this research, proactiveness encompasses the recognition of new market opportunities by MSMEs and the initiation of appropriate actions to exploit these opportunities ahead of industry competitors.

**Risk-Taking:** The degree to which managers are willing to undertake large and risky commitments through engaging in uncertain ventures, making high resource commitments, and borrowing heavily (Miller & Friesen, 1978; Lumpkin & Dess, 1996). This research adopts this definition, wherein risk-taking reflects the extent to which managers or owner-managers in MSMEs are willing to commit resources to business undertakings with uncertain outcomes.

**Micro, Small and Medium Enterprise:** Small enterprise means a firm, trade, service, industry or a business activity whose annual turnover ranges between five hundred and five million shillings; and employs between ten and fifty people while micro enterprise refers to a firm, trade, service, industry or a business activity whose annual turnover does not exceed five hundred thousand shillings and employs less than ten people (Republic of Kenya, 2012). On the other hand, medium enterprises employ 50 to 149 employees, and large enterprises employ over 150 employees (Republic of Kenya, 2012). This study used enterprises employing between 1 and 150 workers (MSMEs).

**Micro, Small and Medium Enterprise Growth:** Growth refers to either an increase in the amount of output, for instance, export and sales, or an increase in size or improvement in quality (Per Davidsson, Achtenhagen, & Naldi, 2010). Growth is commonly measured by employment, assets, physical output, market share, and profits (Andersén, 2010; Krauss, Frese, Friedrich, & Unger, 2005; Weinzimmer, Nystrom, & Freeman, 1998). In this study, micro, small, and medium enterprise growth entails changes in the volume of annual sales, the value of assets, and the number of employees.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Overview of the Study**

This chapter outlines the background of the study, establishing the context in which the research is situated. It then presents the research problem and delineates the objectives and hypotheses that guide the inquiry. Finally, it highlights the study's significance and defines its scope, thereby laying the foundation for the subsequent chapters.

The research employed a sequential mixed-methods design integrating positivist and pragmatic paradigms. The quantitative phase focused on testing hypothesized relationships between Entrepreneurial Orientation (EO) dimensions and MSME growth, while the qualitative phase provided deeper contextual insights to explain and elaborate on quantitative findings. This design ensured both empirical rigor and practical relevance in understanding how EO influences the growth of MSMEs in Kenya.

#### **1.2 Background of the Study**

Micro, Small, and Medium Enterprises (MSMEs) are globally recognized as engines of inclusive growth, innovation, and job creation. The World Bank (2024) estimates that MSMEs constitute about 90 percent of all businesses and generate over 50 percent of total employment worldwide. In emerging economies, they contribute roughly 35–40 percent of GDP (OECD, 2024). In Africa, MSMEs account for nearly 80 percent of employment but face enduring challenges such as informality, financing gaps, and limited managerial capacity (CSIS, 2021; World Bank, 2025; ILO, 2025).

In Kenya, MSMEs dominate the business landscape, representing about 98 percent of all enterprises and employing more than 7.8 million people (KNBS, 2025). The sector's contribution to GDP rose from 33.8 percent in 2022 to approximately 35 percent in 2024 (FSD Kenya, 2025). According to the Kenya National Bureau of Statistics (2025),

MSMEs created approximately 870,000 new jobs in 2024, accounting for 87 percent of the total employment growth. These enterprises are therefore indispensable to the country's Bottom-Up Economic Transformation Agenda (BETA, 2023–2027), which prioritizes industrialization, innovation, and small-business development as pillars of sustainable growth.

Despite their importance, MSMEs in Kenya face significant growth challenges stemming from structural and institutional barriers, including limited access to finance, unstable regulatory frameworks, inadequate infrastructure, and intense competition from both formal and informal enterprises (KNBS, 2022; Lagat & Njaramba, 2024). These constraints limit their ability to scale, innovate, and fully contribute to inclusive economic transformation. Consequently, it is essential to investigate how internal strategic orientations particularly Entrepreneurial Orientation (EO) impact firm growth within this dynamic, resource-constrained environment.

Entrepreneurial Orientation (EO) refers to the strategic posture and behavioral tendencies that guide how firms identify and exploit opportunities through innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness (Lumpkin & Dess, 1996). EO reflects the extent to which a firm is willing to innovate, take calculated risks, and proactively shape its market environment to achieve competitive advantage. Although global studies affirm EO as a critical determinant of firm performance (Cheng, Wu, & Xiao, 2025; Wales, Covin, & Slevin, 2023), its effects are context-dependent—varying across industries, firm sizes, and national environments. In emerging economies, EO enhances firms' capacity to navigate volatility and resource scarcity through innovation and adaptability (Basco et al., 2020; Asare-Kyire et al., 2023).

In Africa, EO has attracted growing scholarly interest as a strategic response to institutional voids and market uncertainty (Rukiko & Mambali, 2024; Kant, Niguse, &

Adula, 2025). Firms that exhibit entrepreneurial behaviors—particularly innovativeness, proactiveness, and calculated risk-taking—often outperform those relying on conventional business models (Akinwale, Adelowo, & Surujlal, 2025). However, the impact of EO varies across countries, depending on local institutional and environmental conditions. For instance, Wakjira, Debela, and Kant (2024) found that in Ethiopia’s textile industry, EO significantly enhanced innovation and growth. In contrast, Dossou et al. (2023) reported that external hostility weakened EO’s benefits among women-led agribusinesses in Benin.

In Kenya, interest in EO has risen in tandem with efforts to strengthen the MSME sector, which is seen as a key driver of industrialization and job creation. Empirical studies identify EO as a key predictor of SME growth and competitiveness (Kiwara, Gathungu, Ogutu, & Njihia, 2023; Musyoka & Kyule, 2024; Musimbi, Mukulu, & Senelwa, 2025). For example, Musimbi et al. (2025) found that innovativeness, risk-taking, and proactiveness significantly enhanced SME performance in Nairobi, while Musyoka and Kyule (2024) reported similar findings in Machakos County. These findings suggest that EO enables Kenyan MSMEs to identify new market opportunities, introduce innovative products, and remain resilient amid uncertainty. Nonetheless, the extent to which all five EO dimensions influence MSME growth, particularly across different sectors, remains underexplored.

The relationship between EO and MSME growth can be examined through both quantitative and qualitative indicators. Growth is typically reflected in increased sales, profits, employment, or asset expansion (Coad et al., 2016; Adomako & Mole, 2018). For MSMEs in developing economies, growth encompasses not only financial dimensions but also non-financial aspects, including innovation capability, market diversification, and sustainability. However, measuring growth in Kenya’s MSME sector

remains challenging due to limited record-keeping and informality (Mwangi & Njoroge, 2014). This underscores the need for a contextualized approach that captures how EO behaviors translate into tangible and intangible growth outcomes.

From a policy perspective, EO provides a framework for understanding how MSMEs can enhance competitiveness and achieve sustainable growth in line with Kenya's Bottom-Up Economic Transformation Agenda (BETA, 2023–2027), which prioritizes MSME development, manufacturing, and innovation (The National Treasury and Economic Planning [NT&EP], 2024). The sector is also central to achieving Kenya Vision 2030, EAC Vision 2050, AU Agenda 2063, and the Sustainable Development Goals (Government of Kenya, 2007; EAC, 2015; AUC, 2015; United Nations, 2015). Under BETA, the sector could expand Kenya's economy by up to 60 percent if its productivity is effectively supported. Moreover, MSMEs are critical to driving industrialization, value addition, and economic diversification key elements for regional integration and sustainable development. Strengthening EO across the sector can further enable MSMEs to access new markets, leverage digital technologies, and integrate into global value chains, provided that supportive ecosystems such as affordable financing, incubation centers, and innovation networks are established to translate entrepreneurial behavior into sustained growth.

In summary, while the theoretical foundations of EO are well established globally, their contextual application within Kenya's MSME sector remains limited and fragmented. Most local studies have concentrated on specific industries or on three EO dimensions (innovativeness, risk-taking, and proactiveness), overlooking autonomy and competitive aggressiveness. Furthermore, few have combined quantitative and qualitative perspectives to capture the lived experiences of MSME owners and managers. This study, therefore, adopts a multidimensional view of EO (Lumpkin & Dess, 1996) to

examine how its five dimensions individually and collectively influence MSME growth in Kenya.

In summary, while EO's theoretical foundations are well-established globally, their contextual application within Kenya's MSME sector remains limited and fragmented. Most local studies have concentrated on specific industries or three EO dimensions (innovativeness, risk-taking, and proactiveness), overlooking autonomy and competitive aggressiveness. Moreover, few have integrated quantitative and qualitative perspectives to capture the lived experiences of MSME owners and managers. This study, therefore, adopts a multidimensional EO framework (Lumpkin & Dess, 1996) and a sequential mixed-methods design to examine how EO dimensions individually and collectively influence the growth of MSMEs in Kenya.

### **1.3 Statement of the Problem**

Despite the proliferation of Micro, Small, and Medium Enterprises (MSMEs) in Kenya, their growth and survival remain severely constrained. Recent statistics indicate that up to three out of five MSMEs fail within their first three years of operation (Kenya National Bureau of Statistics [KNBS], 2016; Ministry of Industrialization, Trade and Enterprise Development, 2020; Gitonga & Musamali, 2021; Republic of Kenya et al., 2024). This high rate of business mortality results in significant losses of investment, time, and entrepreneurial effort, thereby undermining Kenya's broader goals of employment creation and economic transformation.

Entrepreneurial Orientation (EO) comprising innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness has been widely recognized as a critical determinant of firm growth and performance across diverse contexts. However, in Kenya, the empirical relationship between EO and MSME growth remains inadequately explored and poorly understood. Existing studies present mixed or inconclusive findings,

particularly within Nairobi City County, where MSMEs operate in a highly dynamic and competitive environment. This uncertainty limits understanding of how EO can effectively enhance MSME sustainability and growth in emerging economies.

Most Kenyan studies conceptualize EO narrowly as a unidimensional construct, focusing mainly on innovativeness, risk-taking, and proactiveness while neglecting autonomy and competitive aggressiveness (Lumpkin & Dess, 1996). This limited approach may obscure the distinct and interactive effects of all five EO dimensions on the growth of MSMEs. Consequently, it remains unclear whether the inadequate adoption or inconsistent application of EO among MSME owners and managers contributes to their limited growth and high failure rates. Addressing these conceptual and contextual gaps, this study adopts a multidimensional perspective on EO to examine its influence on MSME growth in Kenya, thereby contributing to both theoretical understanding and practical policy formulation for sustainable enterprise development.

## **1.4 Objectives of the Study**

### **1.4.1 General Objective of the Study**

The primary objective of this study is to investigate the impact of Entrepreneurial Orientation (EO) on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya.

### **1.4.2 Specific Objectives of the Study**

The specific objectives of the research are to:

- i. To determine the effect of innovativeness on the growth of Micro, Small, and Medium Enterprises in Kenya.
- ii. To evaluate the effect of risk-taking on the growth of Micro, Small, and Medium Enterprises in Kenya.

- iii. To assess the influence of proactiveness on the growth of Micro, Small, and Medium Enterprises in Kenya.
- iv. To determine the role of autonomy in influencing the growth of Micro, Small, and Medium Enterprises in Kenya.
- v. To examine the effect of competitive aggressiveness on the growth of Micro, Small, and Medium Enterprises in Kenya.

### **1.5 Research Questions**

To complement the quantitative analysis, the following research questions guided the qualitative inquiry:

- i. How do MSME owners and managers perceive and implement innovativeness in their operations, and how does this influence enterprise growth?
- ii. How do MSME owners and managers experience and respond to risk-taking, and how do these actions shape business outcomes?
- iii. How do MSME owners and managers identify and act upon business opportunities, demonstrating proactiveness?
- iv. How is autonomy practiced within MSMEs, and how does it influence decision-making and enterprise growth?
- v. How do MSMEs engage in competitive strategies, and how do owners and managers perceive the effects of competitive aggressiveness on enterprise growth?

### **1.6 Research Hypotheses**

The following null hypotheses guided the quantitative strand of the research:

- H<sub>01</sub>: Innovativeness has no statistically significant effect on the growth of Micro, Small, and Medium Enterprises in Kenya

H<sub>02</sub>: Risk-taking has no statistically significant effect on the growth of Micro, Small, and Medium Enterprises in Kenya

H<sub>03</sub>: Proactiveness has no statistically significant effect on the growth of Micro, Small, and Medium Enterprises in Kenya

H<sub>04</sub>: Autonomy has no statistically significant effect on the growth of Micro, Small, and Medium Enterprises in Kenya

H<sub>05</sub>: Competitive aggressiveness has no statistically significant effect on the growth of Micro, Small, and Medium Enterprises in Kenya

### **1.7 Significance of the Study**

This study makes significant empirical, theoretical, methodological, practical, and policy contributions to the fields of entrepreneurship and small business research. Empirically, it broadens the limited body of literature by examining all five dimensions of Entrepreneurial Orientation (EO)—innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness—and assessing their collective and individual effects on MSME growth in Kenya. The findings reveal that innovativeness, proactiveness, and competitive aggressiveness are the strongest predictors of growth, while autonomy and risk-taking exhibit context-dependent effects, particularly within manufacturing and innovation-driven enterprises. These insights enrich the understanding of EO dynamics in resource-constrained environments and provide a comparative empirical base for scholars and practitioners in developing economies.

Theoretically, the study extends the Lumpkin and Dess (1996) multidimensional EO framework to the Kenyan MSME context, demonstrating how EO dimensions jointly drive enterprise growth and sustainability. By integrating positivist and pragmatic paradigms within a sequential mixed-methods design, it bridges theoretical constructs

and real-world application, thereby advancing EO theory in emerging economies. The study further illuminates how contextual factors such as institutional support, market uncertainty, and cultural norms shape the relationship between EO and firm performance.

Methodologically, the research underscores the value of a sequential mixed-methods approach in entrepreneurship studies. The integration of quantitative and qualitative methods captures both measurable and contextual dimensions of EO, offering a replicable and robust model for future MSME research in similar environments. This approach enhances the explanatory power of EO studies by combining empirical precision with contextual insight.

Practically, the findings offer actionable guidance to entrepreneurs on embedding innovation, managing risk, striking a balance between autonomy and accountability, and leveraging digital tools to enhance competitiveness. These insights can inform training programs, incubation initiatives, and managerial practices that strengthen MSME performance and sustainability. Understanding which EO dimensions most strongly drive growth enables entrepreneurs to make informed strategic choices that foster innovation and resilience.

From a policy perspective, the study offers evidence-based recommendations for incorporating EO principles into Kenya's key frameworks, including Vision 2030, the Bottom-up Economic Transformation Agenda (BETA, 2023–2027), and the Draft MSME Policy (2025). It supports the establishment of Monitoring, Evaluation, and Learning (MEL) systems to track EO adoption and calls for inclusive mechanisms that promote gender, youth, and disability participation in MSME development. Institutions such as the Micro and Small Enterprises Authority (MSEA), the Kenya Industrial Research and Development Institute (KIRDI), and county governments can use these

insights to design targeted programs such as funding models, mentorship schemes, and innovation hubs that enhance entrepreneurial orientation and drive sustainable enterprise growth.

In summary, this study contributes to the development of EO theory in emerging economies, demonstrates methodological innovation through a mixed-methods design, and provides practical and policy-relevant insights that bridge academic research with strategies for enterprise growth and national development.

### **1.8 Justification for the Study**

Micro, Small, and Medium Enterprises are widely recognized as critical engines of employment creation and economic development in Kenya. Despite their significance, many MSMEs struggle to survive and grow due to deficiencies in key entrepreneurial dimensions such as innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness.

This study is theoretically justified as it seeks to enhance conceptual understanding of Entrepreneurial Orientation within the Kenyan MSME context. Although research in both developed and emerging economies affirms EO as a determinant of business growth, its application and impact among Kenyan MSMEs remain underexplored. The study bridges this gap by examining the relationship between all five EO dimensions and MSME growth, contributing to theory building in a context-specific manner.

While interest in EO research is increasing, most Kenyan studies employ a unidimensional framework, focusing primarily on innovativeness, risk-taking, and proactiveness. Limited attention has been given to the multidimensional model proposed by Lumpkin and Dess (1996), which also includes autonomy and competitive

aggressiveness. This restricted approach risks overlooking critical EO components that may significantly influence business outcomes.

Given these conceptual and contextual gaps, it is essential to investigate whether the inadequate adoption or absence of EO practices among MSME owners and managers contributes to stagnant growth and high failure rates. This study is therefore justified in assessing EO as a multidimensional construct and investigating its influence on MSME growth in Kenya. By addressing these gaps, the research generates empirical insights that are both academically relevant and practically valuable to entrepreneurs, policymakers, and institutional stakeholders.

### **1.9 Scope of the Study**

This study focused on two categories of MSMEs in Kenya—the first comprised manufacturing enterprises registered with the Kenya Association of Manufacturers (KAM). The second included startups that had received financial grants from the former National Council for Science and Technology (NCST), now known as the National Commission for Science, Technology, and Innovation (NACOSTI). Respondents were owners or managers directly involved in strategic decision-making and enterprise operations.

The study's scope aligned with its objectives, which sought to determine the effects of innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness on the growth of MSMEs. The theoretical scope drew from the Schumpeterian Entrepreneurship Theory, the Risk-Taking Theory of Entrepreneurship, and the Theory of Competitive Advantage. Methodologically, the study was guided by a sequential mixed-methods design, underpinned by positivist and pragmatic paradigms, which allowed quantitative findings to inform and shape the qualitative phase for a comprehensive understanding of EO–growth relationships.

### **1.10 Limitations and Delimitations of the Study**

Despite the contributions of this study to understanding the relationship between Entrepreneurial Orientation and MSME growth in Kenya, certain limitations may have influenced the findings and indicate areas for future research. First, data were collected from a limited number of sectors within Nairobi City County. It is therefore uncertain whether the findings can be generalized to MSMEs operating in other regions or sectors, such as the services or agribusiness sectors. Future studies could extend this research to other sectors and countries to enhance external validity.

Second, some respondents were reluctant to share sensitive business information, fearing competitive exposure. To address this, participants were assured of confidentiality and informed of the voluntary nature of their participation. Research authorization letters from the university accompanied all questionnaires distributed by research assistants. Nevertheless, because participation depended on the willingness and availability of owners or managers, selection bias may have occurred, potentially affecting the representativeness of the data.

Finally, although the study employed a sequential mixed-methods design that integrated positivist and pragmatic paradigms, several methodological and logistical challenges were encountered. Conducting data collection in distinct phases required substantial coordination and time, which constrained the depth of qualitative follow-up and the iterative integration of findings between phases. Although this design allowed for methodological triangulation and complementarity, the research remained cross-sectional, capturing EO–growth relationships at a single point in time. Consequently, it does not account for how these relationships may evolve longitudinally.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a critical review of theoretical and empirical literature related to the study. It defines the key variables underpinning the research and examines previous studies to identify existing knowledge gaps. The chapter concludes by outlining the study's conceptual framework, which integrates relevant theoretical and empirical insights.

#### **2.2 Theoretical Framework**

This section discusses the theoretical foundations of the study. It reviews key theories that explain the relationships among the study variables, highlighting their origins, development, and major critiques. The section also evaluates the applicability and relevance of each theory to the research context. The study is anchored on the Schumpeterian Theory of Entrepreneurship, the Risk-Taking Theory of Entrepreneurship, and the Theory of Competitive Advantage.

The selection of these theories is guided by their collective ability to explain entrepreneurial behavior and firm performance in dynamic and resource-constrained environments. Together, they provide a multidimensional understanding of how EO contributes to enterprise growth and competitiveness. Each theory offers a distinct yet complementary perspective that anchors the study's conceptual framework and strengthens its explanatory power. The key theories are discussed in the subsequent subsections.

### **2.2.1 Schumpeterian Entrepreneurship Theory**

The Schumpeterian Theory of Entrepreneurship, propounded by Joseph Alois Schumpeter (1911, 1934), provides the foundational basis for this study. Schumpeter conceptualized the entrepreneur as a change agent who introduces “new combinations” that disrupt existing market structures and stimulate economic development. Innovation lies at the core of this framework, manifesting in five key forms: the introduction of new products, new methods of production, new markets, new sources of supply, and new organizational structures. These forms collectively constitute the mechanism of creative destruction, through which outdated firms, products, and technologies are replaced by superior alternatives (Kalantaridis, 2004; Kirchoff, 1997).

Unlike the classical risk-bearing view of entrepreneurship, Schumpeter distinguished the entrepreneur who commercializes innovation from the capitalist, who provides finance, and the inventor, who develops new technologies. The entrepreneur’s role is therefore functional rather than personal, characterized by initiating change, disrupting equilibrium, and advancing economic progress (McCraw, 2007). In this sense, entrepreneurship is a dynamic force that continually renews economic structures and drives long-term growth.

Although Schumpeter’s framework has profoundly shaped entrepreneurship theory, its applicability in developing-country contexts presents several limitations. The model presumes a mature institutional environment that supports radical innovation and efficient market entry conditions that are often absent among African MSMEs. Many Kenyan enterprises operate under severe resource and financial constraints, facing regulatory barriers that limit high-risk, radical innovation (Central Bank of Kenya, 2023; FSD Kenya, 2024; KIPPRA, 2023). Moreover, pervasive informal or “copycat” competition undermines incentives to invest in technology, contributing to low credit

demand and limited upgrading among formal firms (Brancati, Di Maio, & Rahman, 2024; Avenyo, Konte, & Mohnen, 2021).

Consequently, innovation among Kenyan MSMEs tends to be incremental, frugal, and adaptive driven by resource scarcity and institutional limitations rather than radically disruptive, as envisioned by Schumpeter (Leliveld & Knorringa, 2018; Mugwika, 2024; Njiraini, 2018). These contextual realities suggest that, while creative destruction remains theoretically compelling, MSMEs in Kenya often engage in small-scale experimentation, process improvements, and product modifications to maintain competitiveness under constraint. Such adaptive innovation, although modest in scale, aligns with Schumpeter's broader view of innovation as the engine of economic change (Hossain, 2017; Disrupt Africa, 2025). The enduring challenge, therefore, lies in reconciling the radical innovation ideal with the incremental innovation reality that defines much of Africa's MSME landscape where firms innovate within constraints rather than through disruption.

Despite these contextual limitations, the Schumpeterian Theory of Entrepreneurship provides a robust conceptual foundation for examining the innovativeness dimension of Entrepreneurial Orientation (EO). Within the EO framework, innovativeness reflects a firm's willingness to support creativity, experimentation, and the pursuit of novel solutions for growth (Lumpkin & Dess, 1996). By linking Schumpeter's concept of creative destruction with the innovation practices of Kenyan MSMEs, this study positions innovativeness as a strategic driver of enterprise growth. The theory thus underpins the argument that even modest innovations—whether product improvements or process refinements contribute meaningfully to firm performance and economic dynamism in resource-constrained environments.

### **2.2.2 Risk-Taking Theory of Entrepreneurship**

Building on Cantillon's ideas, Frank Knight (1921) distinguished between risk (measurable probability) and uncertainty (immeasurable probability), arguing that entrepreneurs are calculated risk-takers who earn profits as a reward for bearing uncertainty (Cameron & Massey, 1999; Casson, 2003). Later contributions extended this economic perspective through psychological and behavioral lenses. McClelland (1961) introduced the need for achievement (nAch) theory, positing that individuals with high nAch tend to pursue moderately risky activities that require personal responsibility and feedback. Similarly, Casson (1982) emphasized prudent judgment and resource coordination as central features of entrepreneurial risk behavior.

Contemporary scholarship frames risk-taking as a strategic and contextual behavior rather than a fixed personality trait. Tipu (2017) defines entrepreneurial risk-taking as the willingness to commit resources to opportunities with uncertain outcomes. Entrepreneurs, therefore, are not reckless but engage in calculated risk-taking, weighing potential losses against expected returns (Nieuwenhuizen & Groenewald, 2006). Cromie (2000) notes that effective risk management enables entrepreneurs to operate in volatile environments, while Sitkin and Pablo (1992) and Cho and Lee (2006) argue that cognitive and situational factors shape risk perception.

Within the Micro, Small, and Medium Enterprise (MSME) context, risk-taking influences innovation, investment, and market expansion. Firms that tolerate greater uncertainty are more likely to introduce new products, adopt emerging technologies, and explore untested markets (Bula, 2012). However, in developing economies such as Kenya, entrepreneurial risk-taking often occurs in resource-constrained and informal settings, where access to finance and formal insurance mechanisms is limited. Many MSME owners rely on personal savings, informal lending groups, and social capital

rather than formal credit institutions (Central Bank of Kenya [CBK], 2023; FSD Kenya, 2024). This has given rise to a form of adaptive risk-taking, characterized by incremental experimentation and cautious pursuit of opportunities (Urban & Galawe, 2020; Amankwah-Amoah, 2021).

Despite its relevance, the Risk-Taking Theory faces several critiques. Scholars argue that it overemphasizes individual traits while overlooking the institutional, cultural, and structural factors that influence entrepreneurial behavior (North, 1990; Bruton, Ahlstrom, & Obloj, 2008). In Kenya, risk-taking is shaped by credit constraints, volatile markets, and limited policy support for MSMEs. The theory also suffers from conceptual ambiguity, particularly in distinguishing measurable risk from unquantifiable uncertainty (Keh, Foo, & Lim, 2002). Furthermore, its Western orientation neglects the collective norms and social networks that characterize entrepreneurship in African contexts (Hofstede, 2001; Welter, 2011).

Nevertheless, the theory remains foundational to the risk-taking dimension of Entrepreneurial Orientation (EO). Within the EO framework, risk-taking denotes a firm's propensity to pursue bold initiatives despite uncertainty, such as entering new markets or investing in untested technologies (Lumpkin & Dess, 1996). Drawing on this theoretical lens, the present study examines the relationship between MSME owners' willingness to assume calculated risks and firm growth and sustainability in Kenya's competitive and uncertain business environment.

### **2.2.3 Theory of Competitive Advantage**

The Theory of Competitive Advantage, introduced by Porter (1985), posits that firms achieve superior performance by developing and leveraging unique resources, capabilities, or strategies that differentiate them from competitors. Competitive advantage arises from a firm's ability to deliver greater value to customers—either

through cost efficiency or product differentiation than its rivals (Wang, 2014). According to Dimitrova (2014), competitive advantage strengthens a firm's market position and long-term profitability, drawing from key sources such as technology, human capital, and organizational structure (Wang, Lin, & Chu, 2011).

A firm's competitive advantage manifests in outcomes such as profitability, market share, product quality, customer satisfaction, and technological leadership (Cegliński, 2017; Huff et al., 2009). The overarching goal is to create a sustainable competitive position that enables continuous superior performance over time (Sigalas, 2015). Firms possessing such advantages typically demonstrate distinctive capabilities that enhance service delivery, customer loyalty, and investor confidence (Negulescu, 2019; Yuleva, 2019; Majeed, 2011).

Recent scholarship highlights that in today's dynamic environment, sustainable advantage depends on agility, innovation, and responsiveness rather than solely on tangible assets (Kanbach & Kraus, 2025; Liang et al., 2022). For MSMEs in developing economies such as Kenya, sustaining an advantage is particularly challenging due to resource scarcity, market turbulence, and imitation-based competition (Kimutai & Maalu, 2021; Nyaga & Ndiritu, 2023). Under such conditions, a competitive advantage is often transient, requiring continuous strategic adaptation, proactive market engagement, and the pursuit of aggressive opportunities.

This theory underpins the competitive aggressiveness dimension of Entrepreneurial Orientation (EO). Competitive aggressiveness reflects a firm's willingness to directly and intensely challenge competitors to improve its market position (Lumpkin & Dess, 1996). From Porter's perspective, advantage is achieved when firms proactively respond to competition through strategic behaviors such as price adjustments, innovation, and market penetration. The theory, therefore, explains how EO's competitive-

aggressiveness dimension drives MSMEs' pursuit of superior performance and growth in Kenya's highly competitive markets.

Despite its theoretical strengths, the Theory of Competitive Advantage faces criticism. Barney (1991) argues that firms may achieve profitability through market control or regulatory privilege, even without distinct cost or differentiation strategies. McGrath (2013) further contends that in dynamic markets, advantage has become increasingly temporary. Other scholars identify conceptual weaknesses such as causal ambiguity, tautological definitions, and challenges in empirically isolating sources of advantage (Johnson & Scholes, 1999; Klein, 2001; Mekić & Mekić, 2014).

These critiques are particularly relevant in Kenya's MSME context, where firms operate in volatile and institutionally constrained markets. Advantage is often short-lived due to policy shifts, regulatory uncertainty, and limited access to finance (FSD Kenya, 2024). Many MSMEs compete primarily on price or social ties rather than differentiated value propositions (Kawira, 2021). Weak enforcement of intellectual-property rights further discourages innovation, allowing imitation to persist and reducing incentives for sustained creativity (Mudinyu, 2024). This environment exemplifies McGrath's (2013) concept of transient advantage, where firms must constantly adapt and reconfigure capabilities to survive. Consequently, Kenyan MSMEs tend to exhibit defensive competitiveness, reactively adjusting to market changes rather than developing strategic differentiation and dynamic capabilities (International Labour Organization, 2021; KIPPRA, 2023b; Gitari et al., 2024).

Nonetheless, the Theory of Competitive Advantage remains a valuable framework for understanding how firms strive to achieve and sustain superior performance under evolving market conditions. For Kenyan MSMEs, its relevance lies in emphasizing the

need for continuous renewal of resources, innovation, and strategic agility to maintain competitiveness within an unpredictable and rapidly changing business environment.

## **2.3 Empirical Review of Literature**

This section reviews the existing literature on entrepreneurial orientation and the growth of micro, small, and medium-sized enterprises (MSMEs). The empirical studies are systematically organized in line with the study's objectives to examine how entrepreneurial orientation influences the growth and development of MSMEs.

### **2.3.1 Innovativeness and Growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya**

The innovativeness dimension of entrepreneurial orientation (EO) refers to a firm's willingness to engage in and support the generation of new ideas, and to explore and experiment with them creatively (Lumpkin & Dess, 1996). Innovativeness is demonstrated through the discovery of novel solutions to problems and needs, the development of creative approaches, and the creation of new products and services (Lumpkin & Dess, 2001). According to Lumpkin and Dess, innovativeness encompasses the development or adoption of new products, services, or processes, as well as technological leadership and research and development (R&D). They further emphasize that innovativeness is a key component of EO because it enables firms to pursue new opportunities.

Numerous empirical studies (Hossain et al., 2022; Isichei, Emmanuel, & Odiba, 2020; Górska-Warsewicz, 2024; Rezaei & Ortt, 2018) have investigated the relationship between innovativeness and firm performance. For instance, Rezaei and Ortt (2018), using a sample of 279 Dutch high-tech small-to-medium-sized enterprises (SMEs), found a positive relationship between EO and firm performance, particularly between innovativeness and R&D intensity. However, since this study was conducted in the

Netherlands, its applicability to the Kenyan context may be limited. Therefore, the current study examines the influence of EO dimensions on MSME growth in Kenya.

Hossain et al. (2022) explored the effects of EO dimensions innovativeness, proactiveness, and risk-taking on export performance in Bangladeshi apparel manufacturing companies. Using qualitative face-to-face interviews and content analysis, the study found that innovativeness and proactiveness had a significant influence on export performance. Similarly, Oni, Agbobli, and Iwu (2019) investigated EO dimensions among SMEs in South Africa's North West Province and revealed that innovativeness, risk-taking, and proactiveness positively affected business performance, with a significant Pearson correlation ( $r = 0.4986$ ) between innovativeness and performance. However, because the study focused on a single province and industry, its findings may not be generalizable, thus underscoring the need to explore broader contexts.

Erista et al. (2020) examined EO dimensions in Indonesia's Salatiga food industry using multiple regression analysis on data from 40 entrepreneurs. The results showed that risk-taking and innovativeness were key drivers of performance, with innovativeness exerting a stronger influence. However, the small sample size and single-industry focus limit the study's generalizability, highlighting the need for research using larger and more diverse samples, such as the Kenyan MSME sector.

Supeni et al. (2023) investigated the role of innovativeness among Javanese businesswomen in Indonesia. Based on data from 150 respondents analyzed using structural equation modeling, the study confirmed that entrepreneurial innovativeness has a positive influence on financial performance. Likewise, Isichei et al. (2020) found, in a study of 377 Nigerian SMEs, that innovativeness significantly affected firm performance, and that structural infrastructure capability mediated the EO–EO

performance relationship. Despite its strong methodological approach, the study focused on the mediating variable rather than the direct relationship between innovativeness and firm growth, leaving room for further contextual exploration.

In Tanzania, Ringo, Tegambwage, and Kazungu (2022) applied the resource-based view (RBV) to assess how innovativeness and proactiveness affect export performance, finding innovativeness to be a significant predictor ( $\beta = 0.3854$ ,  $p < 0.001$ ). While the study provides valuable regional insights, its geographical context limits the applicability of its findings to Kenya. Addressing this gap, the current study examines whether EO dimensions have a similar impact on MSME growth within the Kenyan context.

In Kenya, Waithaka (2017) examined EO and SME performance in the agro-based manufacturing sector in Kiambu County using mixed methods and stratified sampling. The results revealed that innovativeness was the most influential EO dimension, accounting for 69.4% of the variance in performance. Likewise, Gathoni, Gichunge, and Mutegi (2021) found that innovation and risk-taking significantly affected the growth of micro and small enterprises in the same region. Bridget (2022), focusing on women-owned enterprises in Nigeria, similarly observed that innovativeness, risk-taking, and proactiveness positively influenced business performance and recommended that firms adopt new products, technologies, and markets.

Recent Kenyan evidence by Kiiru, Mukulu, and Ngatia (2023) reinforces the positive impact of innovativeness on SME performance in the animal feed manufacturing sector, with innovativeness explaining 36.7% of the variance in performance ( $\beta = 0.295$ ,  $t = 8.501$ ,  $p < 0.05$ ). The authors recommend fostering a culture of innovation supported by policy frameworks that encourage innovative initiatives. Similarly, Musyoka and Kyule (2024) found a strong and statistically significant relationship between innovativeness and SME performance ( $r = 0.866$ ,  $p = 0.002$ ) among firms in Machakos County.

However, their use of purposive sampling and limited focus on two EO dimensions reduce the generalizability of their findings. To overcome these limitations, the current study employs a stratified sampling approach. It investigates all five EO dimensions to determine their collective and individual influence on MSME growth in Kenya, offering a more comprehensive understanding of EO's impact in diverse business contexts.

### **2.3.2 Risk-taking and Growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya**

Risk-taking has long been recognized as a fundamental characteristic of entrepreneurship (Lumpkin & Dess, 2001). Miller and Friesen (1978) define it as “the degree to which managers are willing to make large and risky resource commitments—i.e., those which have a reasonable chance of costly failures” (p. 923). Subsequent scholars, including Lumpkin and Dess (1996), Lee et al. (2001), and Miller (1983), emphasize that risk-taking encompasses the willingness to commit resources under uncertainty, pursue opportunities with unpredictable outcomes, and balance potential losses against expected returns. Lumpkin and Dess (1996) further explain that all business undertakings involve varying degrees of risk from relatively “safe” decisions with limited uncertainty and minimal resource commitments to highly uncertain ventures demanding substantial financial and operational investments. They underscore that the risk-taking dimension of entrepreneurial orientation (EO) reflects a firm's readiness to engage in uncertain ventures, allocate significant resources to new opportunities, and, when necessary, secure external financing to sustain growth.

Suder (2023) examined the impact of entrepreneurial orientation (EO) on firm performance under turbulent market conditions and the moderating role of entrepreneurs' crisis perceptions. Using partial least squares structural equation modeling (PLS-SEM), multiple linear regression (MLR), and fuzzy-set qualitative comparative analysis

(fsQCA) on data from 117 one- and two-star hotels in Poland, the study found that risk-taking is a significant predictor of firm performance. The fsQCA results also identified innovativeness and risk-taking as necessary conditions for achieving strong performance. However, because the research was conducted in Poland, its contextual relevance to Kenya remains limited, underscoring the need for further investigation—an aspect addressed by the current study.

Focusing on agro-dealers in Dodoma City, George (2025) applied a quantitative survey of 154 randomly selected participants to examine the influence of EO dimensions on firm performance. The results revealed that risk-taking had a significant positive effect on performance, suggesting that agro-dealers willing to take calculated risks despite financial and market uncertainties achieved superior outcomes. The study recommended financial mechanisms, such as credit guarantees, risk-sharing tools, and accessible business insurance, to encourage entrepreneurs to engage in calculated risks, explore new markets, and expand operations with confidence.

Adim and Bassey (2022) conducted a cross-sectional survey of 300 SMEs in Bayelsa State, Nigeria, to determine how entrepreneurial risk-taking influences sales growth. Using Pearson's product-moment correlation, one-way analysis of variance (ANOVA), and simple regression, they found that risk-taking had a significant positive effect on sales growth.

Okangi (2019) investigated the EO dimensions of innovativeness, proactiveness, and risk-taking in relation to the profitability of Tanzanian construction firms. Based on data from 132 firms and analyzed using multiple regression, the study established that innovativeness and risk-taking significantly enhanced profitability. Although these findings provide valuable contextual insights, their applicability to Kenya is uncertain. The current research addresses this gap by focusing on MSMEs in Kenya and comparing

results across contexts. Future research could extend this analysis to other sectors or conduct cross-country comparisons to explore the contextual influences on EO–EO performance relationships.

Okangi's study also highlights the importance of broad performance metrics. Expanding beyond a single growth measure enhances understanding of EO's impact. Accordingly, the present research employs multiple growth indicators sales, asset base, and number of employees to comprehensively capture firm performance. Future studies could include additional measures such as profitability, market share, and customer satisfaction to test the consistency of results across performance dimensions.

Ringo, Tegambwage, and Kazungu (2022) employed the resource-based view (RBV) to investigate the relationship between innovativeness and proactiveness in terms of export performance, as well as the moderating effect of risk-taking. Their cross-sectional survey of 250 managers of manufacturing-exporting SMEs in Tanzania employed confirmatory factor analysis (CFA) and structural equation modeling (SEM). The findings revealed that innovativeness significantly predicted export performance, while proactiveness had a negative effect. The authors recommend that SME owners maintain a positive attitude toward risk-taking to enhance export performance.

However, not all studies report a positive association between risk-taking and performance. Górska-Warsewicz (2024) analyzed data from 266 Polish owner-managers using PLS-SEM and found that while innovativeness, proactiveness, and competitive aggressiveness positively influenced business performance, risk-taking and autonomy showed no significant effects. Similarly, Yunusa et al. (2022) surveyed 440 SMEs in Gombe State, Nigeria, using PLS-SEM path modeling. Their results indicated a strong link between innovation and performance but no significant relationship between risk-taking and performance ( $t = 0.90, p > 0.37$ ). These findings align with those of Isichei et

al. (2020), who also found risk-taking to be insignificant in the Nigerian context, and with Rezaei and Ortt (2018), whose study of Dutch SMEs revealed a negative association between risk-taking and production performance.

In Botswana, Khwae (2024) investigated the role of EO in enhancing SME performance through the lens of the resource-based view and dynamic capability theory. Using a quantitative survey of 368 SME owners and managers in Gaborone, analyzed via PLS-SEM, the study concluded that risk-taking was not a statistically significant predictor of performance. The findings suggest that contextual factors may shape the relationship between EO and performance. Given that the research was confined to Gaborone, its generalizability to the Kenyan context is limited, emphasizing the need for localized studies such as the present one.

Grounded in relativism, Hossain et al. (2022) qualitatively explored the influence of EO specifically risk-taking, innovativeness, and proactiveness on export performance in Bangladeshi apparel manufacturing firms. Using purposive sampling with 20 experienced participants and semi-structured interviews, the researchers found strong links between innovativeness and proactiveness, as well as improved export outcomes, whereas risk-taking showed no significant effect. Although the study's relativist foundation aligns with qualitative inquiry, it placed excessive emphasis on outcomes rather than the subjective meanings behind entrepreneurs' experiences, limiting the depth of qualitative insight.

Machuki (2021) examined the impact of EO on the performance of small-scale farming businesses in Kisii County, Kenya, using a sample of 400 respondents. Analysis using SPSS revealed that risk-taking had a significant influence on performance. The study recommended that the government implement knowledge-based training programs to enhance creativity and technology sharing among entrepreneurs. However, the absence

of advanced statistical techniques, such as multiple regression and factor analysis, limits the robustness of the findings a gap that the current research addresses.

Gathoni et al. (2021) surveyed 304 micro and small enterprises (MSEs) using stratified random and simple sampling techniques and confirmed that risk-taking had a positive and significant effect on growth. Nevertheless, the study lacked geographical diversity, limiting the external validity of its conclusions.

Kariuki and Mungai (2024) explored the effects of risk-taking ability and competitive aggressiveness on SME performance in Nairobi City County, Kenya. Using purposive sampling of 100 owners and managers, the study found both dimensions to have significant positive effects on performance ( $\beta = 0.357$ ,  $p = 0.002$ ). The authors emphasize the importance of embracing calculated risks to enhance business outcomes, but note that their study lacked a theoretical foundation. The present research addresses this by drawing on the Schumpeterian entrepreneurship theory, the risk-taking theory of entrepreneurship, the theory of competitive advantage, the resource-based view, and the life-cycle theory to provide a stronger conceptual foundation.

### **2.3.3 Proactiveness and Growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya**

Rauch et al. (2009, p. 763) view *proactiveness* as an “opportunity-seeking, forward-looking perspective characterized by the introduction of new services and products ahead of the competition and acting in anticipation of future demand.” Similarly, Lumpkin and Dess (1996) relate the proactiveness dimension to the propensity to take initiative and pursue new market opportunities in anticipation of future demand through involvement in emerging markets. Proactiveness also involves recognizing changes and acting upon them before competitors (Dess & Lumpkin, 2005).

Proactive firms engage in organizing and monitoring market trends, identifying the future needs of existing customers, and anticipating changes in demand to create new venture opportunities (Dess & Lumpkin, 2005). Proactiveness is essential for creating competitive advantage, as competitors are often compelled to respond to successful initiatives (Dess & Lumpkin, 2005). Dess and Lumpkin further emphasize that a forward-looking perspective is key for companies aspiring to become industry leaders. As market pioneers, proactive firms enjoy first-mover advantages, which include higher profits and enhanced brand recognition. To act proactively, firms should focus on introducing new products or technologies ahead of competitors and consistently developing new offerings (Dess & Lumpkin, 2005).

Górska-Warsewicz (2024) employed a quantitative survey approach using online questionnaires. Primary data were collected from 266 Polish respondents (owner-managers of firms) and analyzed using structural equation modeling with partial least squares (PLS-SEM). Business performance was measured using both subjective and objective indicators, including profitability, sales growth, market share growth, and return on investment. The findings demonstrated that proactiveness has a significant impact on business performance.

Onyango, Ngugi, and Nyang'au (2024) examined the role of proactiveness in the growth of public transport enterprises in Kenya. Adopting a descriptive-correlational design, the study used simple random sampling to select 261 public transport enterprises and collected primary data from their managers or owners. The results indicated that proactiveness had a statistically significant positive impact on business growth, although the use of proactive strategies among respondents was limited. The study therefore recommends adopting a more forward-looking and opportunity-driven approach among

entrepreneurs in the public transport sector to enhance resilience, competitiveness, and sustainable growth.

Syed, Asad, and Fatima (2017) investigated the impact of three dimensions of Entrepreneurial Orientation (EO) innovativeness, proactiveness, and risk-taking on the business performance of manufacturing SMEs in Punjab, Pakistan. Using a sample of 384 SMEs, the study collected primary data through questionnaires and applied quantitative analytical techniques. The findings revealed that all three EO dimensions significantly influenced business performance, showing positive correlations between innovativeness, proactiveness, risk-taking, and SME performance.

Rezaei and Ortt (2018), based on a sample of 279 SMEs in the Netherlands, confirmed a positive relationship between proactiveness and marketing and sales performance. Conversely, their findings indicated a negative association between risk-taking and production performance. Similarly, Suder (2023) examined the impact of EO on firm performance under turbulent market conditions and the moderating role of entrepreneurs' crisis perceptions. Using partial least squares structural equation modeling (PLS-SEM), multiple linear regression (MLR), and fuzzy-set qualitative comparative analysis (fsQCA), data from 117 one- and two-star hotels in Poland revealed that proactiveness was a key and significant predictor of firm performance.

In South Africa, Oni et al. (2019) explored the effects of EO dimensions autonomy, innovativeness, proactiveness, and risk-taking on SME performance in the North West Province. Using simple random sampling, data were collected from 268 SME owners and managers. The findings showed that innovativeness, risk-taking, and proactiveness had a positive impact on business performance. Specifically, the Pearson correlation between business performance and proactiveness was significant ( $p = 0.02$ ) with a value of 0.4705.

In Nigeria, Yunusa et al. (2022) examined the moderating effect of the need for achievement on the relationship between EO and SME performance in Gombe State. Using a survey research design and a sample of 440 SMEs, data were analyzed through PLS-SEM path modeling. The study found a significant positive relationship between proactiveness, innovation, and performance. However, risk-taking had an insignificant effect on performance ( $t = 0.900383$ ,  $p > 0.37$ ).

Ringo, Tegambwage, and Kazungu (2022) applied the Resource-Based View (RBV) theory to examine the effects of innovativeness and proactiveness on export performance, as well as the moderating role of risk-taking, among Tanzanian manufacturing-exporting SMEs. Employing a cross-sectional design and stratified random sampling, data were collected from 250 managers and analyzed using confirmatory factor analysis (CFA) and the PROCESS macro test. The findings revealed that while innovativeness significantly predicted export performance, proactiveness had a negative effect on export performance ( $\beta = -0.1748$ ,  $p < 0.001$ ). This negative correlation is intriguing and warrants further research to uncover the underlying factors, which could inform adaptive entrepreneurial strategies in similar contexts.

Cheruiyot and Mang'ana (2023) investigated the influence of EO on the performance of micro and small enterprises (MSEs) in Eldoret, Kenya. Using a descriptive research design, 382 questionnaires were distributed, and 300 valid responses were obtained (80% response rate). Descriptive and inferential analyses revealed that most respondents viewed their businesses as proactive, innovative, and willing to take calculated risks. Regression analysis revealed a significant positive relationship between EO and organizational performance ( $\beta = 0.979$ ,  $p < .001$ ), with EO accounting for 48.8% of the variance in performance. The study concluded that being proactive and taking calculated

risks enhances profitability, while aggressively exploiting new opportunities improves competitiveness and growth.

However, Cheruiyot and Mang'ana's (2023) study presents several limitations. First, its generalizability is limited as it focuses solely on Eldoret. Second, it relied exclusively on a cross-sectional design for quantitative data collection. The current study mitigates these limitations by employing a mixed-methods design. Third, the study treated EO as a composite construct, thereby overlooking the distinct effects of individual dimensions. The present research addresses this gap by adopting a multidimensional view of EO, allowing for a deeper understanding of how each dimension contributes to MSME growth.

Kivuitu and Karugu (2020) examined the relationship between EO and SME performance in Nairobi County, focusing on innovation, risk-taking, and proactiveness. The study, which used a descriptive design and a stratified sample of 230 SMEs, found that proactiveness had a significant positive influence on performance. However, the analysis relied solely on descriptive statistics such as mean scores and standard deviations, without employing inferential tests like correlation or regression analysis. Furthermore, measurement validity was not assessed through factor analysis, weakening the study's reliability and generalizability. To address these methodological gaps, the current study employs inferential statistics, including correlation and multiple regression analyses, to determine the strength, direction, and significance of relationships between EO dimensions and MSME growth. Factor analysis is also used to test construct validity. Variance Inflation Factor (VIF) tests for multicollinearity, and normality tests ensure that regression assumptions are met, thereby enhancing the robustness and credibility of the findings.

In Machakos County, Kenya, Musyoka and Kyule (2024) explored how EO influences the performance of small and micro-enterprises (SMEs). Using a descriptive approach and purposive sampling, data were gathered from 100 SMEs through structured questionnaires. Combining descriptive and inferential tools, including Pearson correlation and multiple regression, the study found that both innovativeness and proactiveness had a significant and positive influence on SME performance. The correlation between proactiveness and firm performance was strong ( $r = 0.874$ ,  $p = 0.002$ ), emphasizing the importance of forward-thinking and anticipatory strategies in driving success among Kenyan SMEs.

In Tanzania, George (2025) conducted an empirical study involving 154 randomly selected agro-dealers in Dodoma City to assess the influence of EO on business performance. Using structured questionnaires and quantitative regression analysis, the findings revealed that proactiveness was a strong predictor of business performance, supported by a significant regression coefficient and strong positive correlation. The study concluded that agro-dealers who adopt anticipatory and forward-looking behaviors achieve better business outcomes, underscoring the value of proactive market engagement in dynamic environments. Consequently, the study recommends capacity-building initiatives, such as workshops and mentorship programs on market analysis, strategic planning, and early risk detection, to strengthen proactive capabilities and ensure long-term sustainability.

More recently, M'mboga, Kinyua, and Kung'u (2025) explored the effect of EO on the performance of state corporations. Grounded in the Resource-Based View, Dynamic Capabilities Theory, and the Balanced Scorecard framework, the study adopted a positivist philosophy and a cross-sectional quantitative design involving 285 managers across 11 state corporations. The data were analyzed using both descriptive and

inferential statistics. The results revealed a significant positive relationship between EO and organizational performance, indicating that EO through dimensions such as innovation, risk-taking, and proactiveness enhances adaptability and strategic outcomes in public sector organizations. However, the study treated EO as a composite construct and examined only three of its dimensions. The current study addresses these limitations by adopting a multidimensional view of EO, recognizing that each of the five dimensions uniquely contributes to MSME growth in Kenya.

### **2.3.4 Autonomy and Growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya**

Autonomy refers to the independent actions undertaken by individuals or teams that are self-directive in developing and implementing new ideas aimed at achieving a business concept or vision (Lumpkin & Dess, 1996). Individuals or teams exhibiting autonomy are highly motivated to realize their ideas and visions by expressing individuality and exercising creative freedom (Krauss et al., 2005). Such individuals tend to dislike receiving orders from others and value independent decision-making. Autonomy thus enables individuals or teams to undertake entrepreneurial initiatives (Lumpkin et al., 2009).

According to Lumpkin et al. (2009), autonomy plays a crucial role in enabling firms to identify and launch new ventures by allowing decision-makers to focus on key aspects, such as customer demand and industry changes. The authors further note that autonomy provides organizational members with the freedom and opportunities required to pursue entrepreneurial activities, thereby enhancing innovation and competitiveness within firms.

Górska-Warsewicz (2024) examined the relationship between entrepreneurial orientation, innovative co-branding partnerships, and business performance. The study

found that three EO dimensions innovativeness, proactiveness, and competitive aggressiveness significantly influenced business performance, while risk-taking and autonomy had no measurable effect. Data were collected from 266 Polish owner-managers through an online quantitative survey and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). However, the study did not provide a strong theoretical foundation. The current research addresses this by drawing upon Schumpeterian entrepreneurship theory, the risk-taking theory of entrepreneurship, the theory of competitive advantage, the resource-based view (RBV), and life-cycle theory.

In Indonesia, Pratono, Ratih, and Arshad (2018) examined the moderating role of technological turbulence in the relationship between entrepreneurial autonomy, pricing capability, and firm performance among 390 SMEs. Using structural equation modeling, the study confirmed that autonomy has a significant influence on firm performance through the mediating effect of pricing capability. Specifically, autonomy exhibited a direct, positive, and significant effect on firm performance ( $SE = 0.039$ ,  $t = 3.723$ ) and a strong influence on pricing capability ( $SE = 0.042$ ,  $t = 11.71$ ), which in turn affected performance ( $SE = 0.05$ ,  $t = 14.58$ ). However, the study did not conduct critical diagnostic tests such as linearity, normality, heteroscedasticity, and multicollinearity checks tests that are applied in the current study to enhance robustness.

Using a survey design, Usoroh (2021) collected primary data from 388 SMEs in North-Central Nigeria to examine the influence of autonomy and competitive aggressiveness on SME growth. Data analysis using PLS-SEM revealed that both autonomy and competitive aggressiveness had a positive influence on SME growth, although the effects were statistically insignificant. Specifically, the direct relationship between autonomy and SME growth yielded a t-value of 1.634, indicating a positive but non-significant effect.

Messikh (2023) examined the relationship between entrepreneurial orientation and the performance of Algerian family firms, employing descriptive, correlational, and regression analyses on a sample of 103 firms. The findings revealed that entrepreneurial autonomy had a significant positive impact on performance, explaining 12.6% of the variance in firm outcomes. However, generalizing these results beyond the Algerian context, particularly to Kenya, is limited an issue addressed by the current study through broader geographical and contextual coverage.

In South Africa, Oni et al. (2019) investigated the effects of EO dimensions—autonomy, innovativeness, proactiveness, and risk-taking on SME performance in the North West Province. Using a sample of 268 SMEs, the study employed both descriptive and inferential analyses to measure performance through indicators such as sales growth, gross profit, employment, and return on investment. Results revealed that innovativeness, risk-taking, and proactiveness positively influenced performance, while autonomy was not significantly associated ( $p = 0.24$ ). The researchers, therefore, failed to accept the hypothesis that autonomy positively influences business performance. Because the study relied on cross-sectional data, it was limited in its ability to infer causality. The current research addresses this limitation by employing multiple regression models to enhance reliability and validity.

Kapaya et al. (2018) conducted a study in Dar es Salaam using a sample of 143 SMEs to assess the impact of EO on business performance. The study analyzed five EO dimensions product innovation, risk-taking, proactiveness, competitive aggressiveness, and autonomy using SEM, path analysis, and confirmatory factor analysis. Results indicated that, among all dimensions, autonomy was the only factor that significantly influenced SME performance, contributing 6.1% to the overall model. Although innovation, risk-taking, and aggressiveness were positively related to performance, these

effects were not statistically significant. The findings suggested that EO dimensions may not operate independently in driving business success among Tanzanian SMEs, with autonomy emerging as a key yet contextually sensitive factor. However, since the research was limited to Tanzania, generalization to other settings is constrained.

In Kenya, Waithaka (2017) examined the relationship between EO and SME performance in the agro-based manufacturing sector in Kiambu County, using a mixed-method approach and stratified random sampling on a sample of 69 SMEs. The findings showed a strong positive correlation between autonomy and performance ( $r = 0.652$ ), with regression analysis revealing that autonomy explained 42.5% of the variation in performance. The study concluded that practicing autonomy enhances performance among agro-based manufacturing SMEs.

Similarly, Osore, Ngugi, and Ogollah (2020) assessed the influence of EO on the performance of conventional and Islamic banks in Kenya. Conducting a census of 43 commercial banks, they used questionnaires and quantitative analysis to determine that EO dimensions autonomy, risk-taking, proactiveness, and competitive aggressiveness significantly influenced bank performance.

Kiwara, Gathungu, Ogutu, and Njihia (2023) examined EO's effect on the performance of dairy micro and small enterprises (MSEs) in Kiambu County. Anchored on a positivist paradigm, the cross-sectional survey targeted 175 licensed dairy MSEs, collecting 120 valid responses from owners or managers. Data were analyzed using simple regression analysis, revealing that EO significantly influenced MSE performance. However, the study faced limitations, including its narrow geographic scope, cross-sectional design, and exclusive reliance on quantitative data, which limited causal inference and depth of insight. Furthermore, Kiwara et al. (2023) examined EO as a composite construct rather than disaggregating its dimensions, thereby overlooking the specific effects of

innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness. The current study addresses this gap by analyzing all five EO dimensions individually, providing a more nuanced understanding of MSME growth dynamics.

In Tanzania, George (2025) conducted an empirical study on 154 randomly selected agro-dealers in Dodoma City to assess the influence of EO on business performance. Using a quantitative design and structured questionnaires, the results showed that autonomy had no statistically significant effect on performance ( $\beta = 0.015$ ), though correlational analysis indicated a weak but positive relationship ( $p < 0.05$ ). This suggests that while autonomy exists within the sector, its influence on performance is limited. The study recommends delegating responsibilities among agro-business owners to cultivate a more dynamic and accountable work environment.

### **2.3.5 Competitive Aggressiveness and Growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya**

Competitive aggressiveness refers to the intensity with which a firm directly confronts and outperforms industry rivals, characterized by a strong offensive stance and vigorous responses to competitors' actions (Lumpkin & Dess, 2001). Firms exhibiting an aggressive orientation actively strive to outperform competitors (Dess & Lumpkin, 2005). This posture often manifests through price cutting, temporary profit sacrifices to gain market share, and substantial investments in production or manufacturing capacity (Dess & Lumpkin, 2005). Moreover, competitively aggressive firms tend to strengthen their entrepreneurial position by entering markets with low prices and emulating the successful strategies of rivals. Certo et al. (2009) further contend that, given the high likelihood of new firm failure, adopting an aggressive posture is essential for achieving market penetration.

Using a cross-sectional design and data collected through structured questionnaires from 154 agro-dealers in Dodoma City, George (2025) employed multiple regression analysis to assess the impact of EO dimensions on business performance. The findings revealed that competitive aggressiveness had a statistically significant positive effect on business performance ( $\beta = 0.513$ ,  $p < .001$ ), though its influence was slightly weaker compared to innovativeness ( $\beta = 0.561$ ) and proactiveness ( $\beta = 0.540$ ). Correlation analysis further supported this finding, showing a positive but comparatively weaker relationship between competitive aggressiveness and performance ( $p < .05$ ). The study recommended strengthening competitive positioning through business networking such as forming agro-dealer associations and clusters to enhance bargaining power, market access, and linkages with major distributors and suppliers.

In Indonesia, Tumiwa (2023) employed a quantitative cross-sectional survey to investigate the influence of entrepreneurial orientation factors on the performance of MSMEs in the culinary sector in Jakarta. Using a sample of 240 enterprises, the findings indicated a significant positive relationship between competitive aggressiveness and business performance. However, the cross-sectional nature of the research limited causal inference, highlighting the need for longitudinal studies. Furthermore, because the study focused exclusively on the culinary sector, its generalizability to other industries is limited.

Similarly, Aigboje (2018) conducted a cross-sectional survey involving 326 SMEs in the hospitality sector in Port Harcourt, Nigeria, to examine the relationship between competitive aggressiveness and organizational profitability. The results showed a strong, positive, and statistically significant relationship ( $r = 0.703$ ) between competitive aggressiveness and profitability. Based on these findings, the study recommended that hotels leverage their unique competitive advantages to enhance their aggressive market

positioning. However, the study lacked a clear theoretical foundation—a limitation addressed in the current research through the integration of key entrepreneurship theories.

Usoroh (2021) analyzed data from 388 Nigerian SMEs to explore the relationship between entrepreneurial orientation and SME growth. The results revealed a positive but statistically insignificant relationship between both autonomy and competitive aggressiveness, with the latter producing a t-value of 1.059. Although the findings suggested that competitive aggressiveness may contribute to growth, the effect was weak. The study recommended that SME owners continue to exercise strategic autonomy to improve decision-making and competitiveness.

Abdullahi et al. (2019) examined the effect of adopting competitive aggressiveness on the performance of small and medium construction enterprises in Nigeria. Using a sample of 139 owners and managers, the study applied Structural Equation Modeling (SEM) and SPSS for hypothesis testing. The findings demonstrated a significant positive relationship between competitive aggressiveness and financial performance, indicating that firms displaying aggressive market behaviors achieved superior outcomes. However, the study did not perform key diagnostic tests such as linearity, normality, heteroscedasticity, and multicollinearity an omission addressed in the current research to enhance methodological rigor.

Kapaya et al. (2018) investigated the effects of entrepreneurial orientation on SME performance in Tanzania, using a sample of 143 SMEs. The study analyzed five EO dimensions product innovation, risk-taking, proactiveness, competitive aggressiveness, and autonomy through SEM and multiple regression techniques. The findings revealed a positive but statistically insignificant relationship between competitive aggressiveness and performance. Because the study focused on a specific geographic location, the

generalizability of its findings was limited, underscoring the need for similar research in broader contexts such as Kenya.

Waithaka (2017) examined the relationship between EO and SME performance in the agro-based manufacturing sector in Kiambu County, Kenya. Using a mixed-method approach and stratified random sampling with 69 SMEs, the study established a strong positive correlation between competitive aggressiveness and performance ( $r = 0.512$ ). Regression analysis indicated that competitive aggressiveness accounted for 69.3% of the variance in performance. The study concluded that adopting a competitively aggressive posture enhances performance among agro-based manufacturing SMEs.

In a related study, Kariuki and Mungai (2024) explored the effects of entrepreneurial orientation on the performance of SMEs in Nairobi City County. Using purposive sampling, they collected data from 100 SME owners and managers, focusing on risk-taking and competitive aggressiveness. The findings indicated that both dimensions significantly influenced SME performance. Regression analysis revealed that risk-taking had a significant positive effect on performance ( $\beta = 0.357$ ,  $p = .002$ ), while competitive aggressiveness was also a significant predictor ( $\beta = 0.376$ ,  $p = .001$ ). Although insightful, the study excluded other EO dimensions such as innovativeness, proactiveness, and autonomy. The current research addresses this limitation by examining all five EO dimensions to provide a comprehensive understanding of how EO influences the growth of MSMEs.

Finally, Osore et al. (2020) examined the impact of entrepreneurial orientation on the performance of conventional and Islamic banks in Kenya, using a census of 43 commercial banks. Primary data were collected through questionnaires and analyzed using quantitative methods. The results indicated that all EO dimensions autonomy, risk-taking, proactiveness, and competitive aggressiveness had a significant influence on

performance. Although the study offered valuable insights across Kenya's banking sector, its findings may not be generalizable to MSMEs in other industries or regions.

## **2.4 Conceptual Framework**

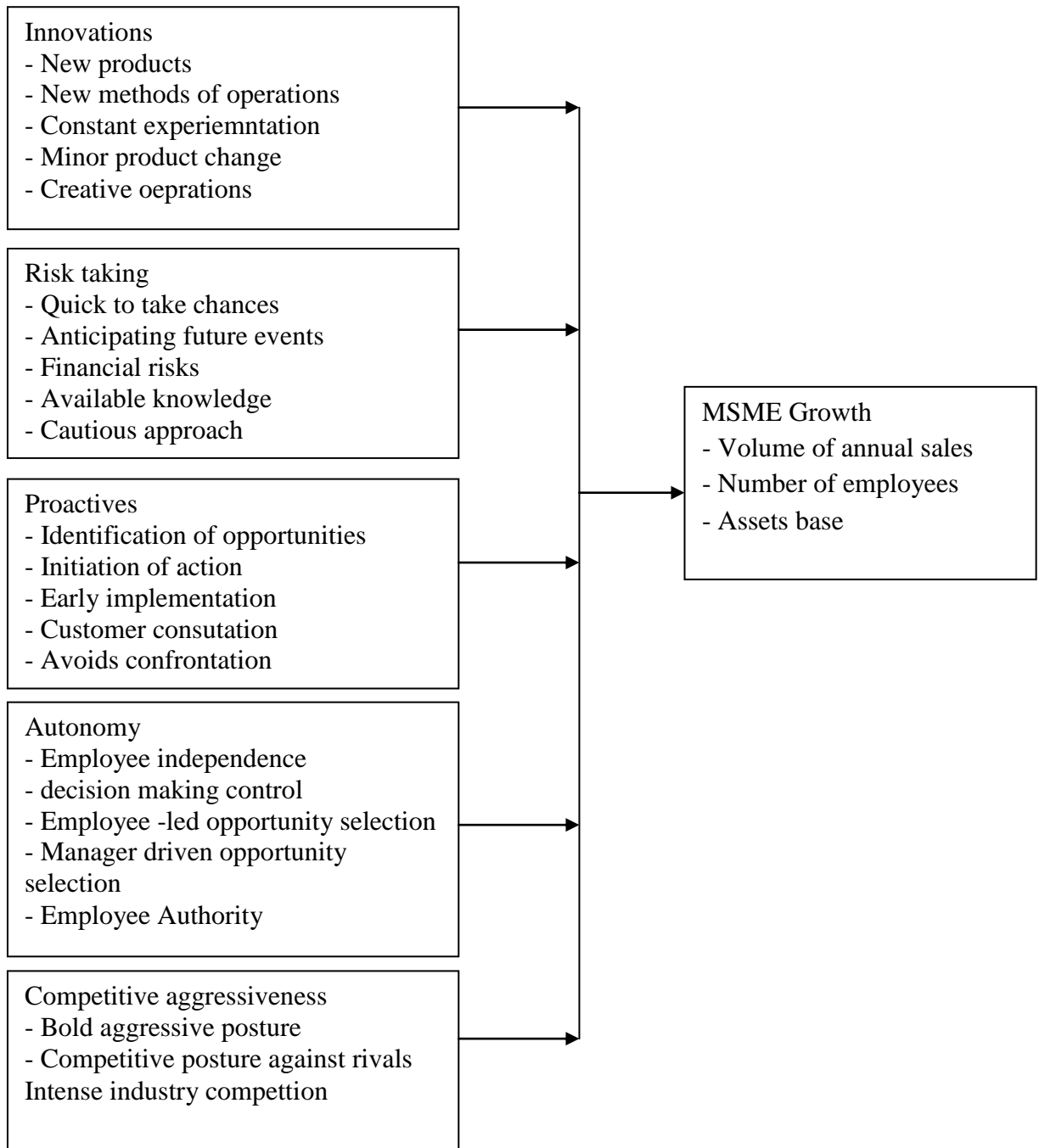
Based on the foregoing literature review, this study is anchored on the conceptual framework illustrated in Figure 1. In this framework, a direct relationship is hypothesized between the entrepreneurial orientation (EO) dimensions—innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness—and the growth of micro, small, and medium enterprises (MSMEs). Specifically, the EO dimensions constitute the independent variables, while MSME growth represents the dependent variable, as depicted in Figure 1.

Figure 1

*Conceptual Framework*

Independent Variables

Dependent Variables



*Source: Authour, 2025*

## **2.5 Summary of Research Gaps**

A review of the extant literature on the relationship between entrepreneurial orientation (EO) and MSME growth reveals mixed findings. Some studies (Osore et al., 2020; Waithaka, 2017) have established a positive relationship between all EO dimensions and firm growth, whereas others (Kapaya et al., 2018; Oni et al., 2019; Yunusa et al., 2022) reported significant positive associations only in selected dimensions. Contextually, the reviewed literature indicates that many studies on EO and SME growth have been conducted outside Kenya (Kapaya et al., 2018; Pratono et al., 2018; Tumiwa, 2023) and within specific industries (Osore et al., 2020; Messikh, 2023), thereby limiting the generalizability of the findings. This underscores the need to broaden the research scope by examining the relationship between EO and MSME growth in the Kenyan context to determine whether similar patterns hold across regions.

The review further reveals that existing studies have conceptualized EO either as a unidimensional or multidimensional construct. For example, the unidimensional perspective considers EO in terms of innovativeness, risk-taking, and proactiveness (e.g., Simiyu, 2018; Ringo et al., 2022), while the multidimensional view expands EO to include five dimensions: innovativeness, risk-taking, proactiveness, competitive aggressiveness, and autonomy (e.g., Kiyabo & Isaga, 2020; Waithaka, 2017). Research by Simiyu (2018), Mwaura (2018), and Mburu (2019) primarily adopted the unidimensional view, focusing on three EO dimensions. However, few studies in Kenya have explored EO from a multidimensional perspective. The current study addresses this gap by adopting Lumpkin and Dess's (1996) multidimensional conceptualization, encompassing all five dimensions. Conceptually, this approach is expected to provide a more comprehensive understanding of how EO dimensions interact to influence the growth of MSMEs.

Finally, the literature reveals variations in methodological approaches, often driven by specific research objectives. Most studies employed cross-sectional designs (Kiwara et al., 2023; Oni et al., 2019; Tumiwa, 2023), which limit the ability to infer causal relationships. Recognizing these limitations, the present study adopts a more robust methodological approach to strengthen validity and provide deeper insights into the relationship between EO dimensions and MSME growth.

## 2.6 Summary of Empirical Studies and Knowledge Gaps

The key empirical literature reviews that were presented in this chapter are summarized in Table 1.

**Table 1**

*Summary of Empirical Studies and Knowledge Gaps*

Author(s)	Study Title	Methodology	Findings	Knowledge Gap and Focus of this Study
Kiyabo, and Isaga, (2020).	Entrepreneurial orientation, competitive advantage, and SMEs' performance: application of firm growth and personal wealth measures	A cross-sectional survey method was employed to gather data from 300 owner-managers of welding industry SMEs in Tanzania. Using AMOS software, the data analysis involved creating measurement and structural models through structural equation modeling.	The findings demonstrate that competitive advantage mediates the relationship between EO and SMEs' performance, as measured by both firm growth and personal wealth. This mediation suggests that SMEs with a strong EO can enhance their performance by developing a competitive advantage, which in turn leads to better outcomes in terms of both business growth and personal financial success for the owners.	There was a contextual gap given that the study was limited geographically and in terms of sector.  The current study assesses the influence of EO dimensions on SME growth in Nairobi County in order to broaden geographic focus.
Waithaka (2017)	Relationship between entrepreneurial orientation and performance of small and medium enterprises in the agro-based manufacturing sector in Kenya	Mixed methods approach and stratified random sampling used to select 69 enterprises from 250 registered agro-based manufacturing SMEs in the food subsector in Kiambu County	Strong positive correlation between EO dimensions (autonomy, innovativeness, proactiveness, risk-taking, and competitive aggressiveness) and SME performance. Innovativeness was established as the most influential dimension explaining 69.4% of the performance variance.	The study is specific to the agro-based manufacturing sector in Kiambu County hence limiting its generalization to other sectors or regions. Methodologically, the small sample size used could have affected statistical validity

Kapaya et al. (2018)	The role of entrepreneurial orientation on business performance: Empirical evidence from selected Tanzanian SMEs	Sample of 143 SMEs, used. Structural Equation Modeling (SEM) was applied to fit the model, where EO dimensions were independent variables and SME performance was the dependent variable. Cluster analysis (CA), multiple discriminant analysis (DA) and factor analysis (FA) and MANOVA applied in data analysis	The study's path analysis and regression results revealed that, among the EO dimensions, only autonomy significantly impacted SME performance, contributing 6.1% to the overall model. Other dimensions like innovation, risk-taking, and aggressiveness were positively related to performance, but these relationships were not statistically significant. The other dimensions did not independently affect performance.	The study being limited to SMEs in Tanzania may not apply universally, hence the need for broadening scope done undertaken by the current study.
Ringo, D. S., Tegambage, A., & Kazungu, I. (2022).	The effect of entrepreneurial orientation on export performance: Evidence from manufacturing SMEs in Tanzania	The research employed a cross-sectional survey design utilizing a stratified random sampling method to collect primary data from 250 managers of manufacturing-exporting SMEs. The study used Confirmatory factor analysis (CFA) in the structural equation model (SEM) to assess model measurements like model fit indices, reliability, and validity. The hypotheses were tested using the PROCESS macro test	The findings demonstrate that while innovativeness is a significant predictor of export performance, proactiveness exhibits negative effect on export performance revealed ( $\beta = -0.1748$ and $p < 0.001$ ). The findings demonstrate that innovativeness is a significant predictor of export performance ( $\beta = 0.3854$ and $p < 0.001$ ). The negative effect of proactiveness on export performance was revealed ( $\beta = -0.1748$ and $p < 0.001$ ). Risk-taking was found to be a significant moderator of the relationships between innovativeness and export performance ( $\beta = 0.2234$ and $p = 0.0009$ ) as well as proactiveness and export performance ( $\beta = 0.1041$ and $p = 0.0271$ ).	These findings provide context specificity in the context of Tanzania. This geographical context of this research limits the generalization of the findings to Kenya. This is mitigated by current study that examines the relationship between EO and growth of MSMEs in Kenya. This is aimed at establishing whether the findings will be similar across regions.

Okangi (2019)	The effect of entrepreneurial orientation (EO) dimensions of innovativeness, proactiveness, and risk-taking on the profitability growth of construction firms in Tanzania.	Descriptive survey design was used to collect primary data from a sample of 132 Tanzanian construction firms. Multiple regression analysis was utilized to test hypotheses a	Results indicated that innovativeness and risk-taking dimensions have a significantly positive effect on the growth of profitability. The hypotheses were tested using the PROCESS macro test.	There was a contextual gap given that the study was limited geographically. Conceptually, entrepreneurial orientation dimensions of competitive aggressiveness and autonomy are not explored. The current research addresses all the five entrepreneurial orientation dimensions
Erista et al. (2020)	The influence of entrepreneurship orientation on firm performance: A case study of the Salatiga food industry	Primary data was collected from a sample of 40 food firm entrepreneurs. The study applied multiple regression analysis to determine which EO dimensions most significantly impact firm performance.	The findings demonstrate that risk-taking and innovativeness are the key drivers of performance, with innovativeness having a more substantial effect.	Contextually, the research is limited to one industry and specific region hence generalizability of the findings. Methodologically, the findings could not be generalized. The current study uses mixed-method design in order to establish deeper understanding on the relationship between entrepreneurial orientation dimensions and MSME growth.
Oni, Agbobi, and Iwu (2019)	Entrepreneurial Orientation and Performance of Small Business in Vryburg Region North West Province South Africa	Simple random sampling from a sample of 268 SMEs to gather primary data from owners/managers of the SMEs. Data analysis for this study was done by descriptive and inferential statistics.	The research findings demonstrated that innovativeness, risk-taking and proactiveness positively affected business performance. Specifically, Pearson correlation between business performance and innovativeness was significant at 0.4986.	There was a contextual gap in that the study was carried out in a specific geographic location and industry necessitating the need for broadening context. Conceptually, the research the study focuses on four entrepreneurial orientation (EO) dimensions of innovativeness, risk-taking, proactiveness, and autonomy and fails to include competitive aggressiveness. The current research addresses all the five entrepreneurial orientation dimensions
Gathoni, Gichunge, and Mutegi (2021)	Entrepreneurial competence and growth of micro-small enterprises in Kiambu County, Kenya	A descriptive research design study sampled 304 MSE owners/managers through stratified random and simple sampling techniques.	Innovation and risk-taking had a positive and significant effect on MSE growth	Conceptually, the research focuses on innovation and risk-taking as competencies and not EO dimensions. The current study addresses all five EO dimensions. Methodologically, use of online questionnaires could have led to possible sample bias.

Musyoka & Kyule (2024)	Entrepreneurial Orientation and Performance of Small and Medium Size Enterprises (SMEs) in Machakos County, Kenya	Descriptive design; purposive sampling of 100 SMEs; regression analysis	Innovativeness and proactiveness had significant effect on SME performance.	Did not all five EO dimensions (risk-taking, autonomy, competitive aggressiveness). This study includes all EO dimensions and tests their influence.
Onyango, Ngugi, P. and yang'au S. (2025)	Proactiveness and Growth of Public Transport Enterprises in Kenya	Descriptive research; sample of 261 transport SMEs; regression analysis	Proactiveness contributes significantly to enterprise growth.	Focused solely on proactiveness in transport sector. This study explores all EO dimensions across diverse
George (2025)	Entrepreneurial Orientation and Business Outcomes: Evidence from Agro-Dealers in Dodoma City, Tanzania	Quantitative study; data collected from 154 agro-dealers using random sampling; multiple regression analysis	Proactiveness, risk-taking, and innovativeness had significant positive effects on performance; competitive aggressiveness had moderate influence; autonomy had no significant impact	Focused only on agro-dealers in a single Tanzanian city; findings may not generalize to broader SME contexts or Kenyan MSMEs. This study expands the geographic and sectoral scope to include diverse MSMEs in Kenya
Khwae (2024)	The Role of Entrepreneurial Orientation in Enhancing the Performance of SMEs in Botswana	Quantitative survey design; data collected from 368 SME owners/managers in Gaborone; analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM)	All EO dimensions showed a positive effect on SME performance except risk-taking, which showed no statistically significant positive relationship;	The study was geographically limited to Gaborone, Botswana, and may not be generalizable to Kenya's diverse MSME context. Additionally, the dimension of risk-taking did not exhibit a statistically significant relationship with SME performance, suggesting the need for further investigation. The current study addresses this by analyzing EO dimensions in Kenyan MSMEs

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the methodological framework employed to investigate the influence of Entrepreneurial Orientation on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. The methodological choices were informed by the study's objectives, which required examining the relationships among entrepreneurial orientation dimensions and exploring the contextual factors shaping MSME growth.

The chapter outlines the philosophical foundations guiding the research and justifies the adoption of a positivist–pragmatic stance, which integrates quantitative and qualitative approaches to capture both measurable relationships and contextual insights. It further details the research design, target population, sampling procedures, data collection instruments, data analysis techniques, and ethical considerations. Each methodological component is explicitly aligned with the study's objectives, particularly in evaluating how innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness contribute to the growth of MSMEs.

#### **3.2 Research Paradigm**

A research paradigm provides the philosophical foundation that guides a study's assumptions about reality, knowledge, values, and methodological choices (Creswell & Poth, 2018; Lincoln, Lynham, & Guba, 2018). It shapes how researchers view the world, formulate research questions, and determine appropriate strategies for data collection and analysis. The present study adopts a positivist–pragmatic paradigm, acknowledging the value of both objective measurement and contextual understanding in addressing the complex phenomenon of MSME growth. The following subsections provide a brief

outline of the four key philosophical dimensions ontology, epistemology, axiology, and methodology that underpin this stance.

### ***Ontology***

Ontology concerns the nature of reality and what can be known about it (Guba & Lincoln, 1994; Crotty, 1998). Within the social sciences, objectivism assumes that phenomena exist independently of human perception, whereas constructivism views reality as socially constructed. This study adopts a realist ontology, consistent with a positivist orientation, in which MSME growth and entrepreneurial orientation dimensions (innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness) are treated as measurable constructs that exist in the external world. However, the study also acknowledges that perceptions of these constructs may vary across contexts, consistent with a pragmatic acknowledgment of multiple, context-dependent realities.

### ***Epistemology***

Epistemology addresses how knowledge is generated and what constitutes valid evidence (Crotty, 1998). From a positivist epistemological perspective, knowledge is obtained through systematic observation and empirical testing of hypotheses, emphasizing objectivity, measurement, and generalization (Bryman & Bell, 2015). At the same time, the pragmatic dimension of this study recognizes that meaning and understanding may also emerge from participants' subjective experiences. Thus, the research incorporates qualitative inquiry to complement quantitative analysis, facilitating a richer interpretation of findings within the social and economic context.

### ***Axiology***

Axiology refers to the researcher's values and their influence on the research process (Saunders, Lewis, & Thornhill, 2019). Positivism traditionally assumes a value-free form of inquiry, where the researcher seeks neutrality and minimizes bias. Pragmatism, however, recognizes that values inform methodological decisions and interpretations. This study therefore, maintains objectivity during quantitative data collection and analysis, but acknowledges that the researcher's values inevitably shape qualitative interpretation particularly when exploring the experiences and perspectives of MSME owners. The study's axiological stance thus combines scientific rigor with practical relevance.

### ***Methodology***

Methodology represents the strategic approach linking philosophical assumptions to data collection and analysis (Creswell & Creswell, 2018). Guided by positivism and pragmatism, this research employs a sequential multi-method design: a quantitative phase to test hypothesized relationships, followed by a qualitative phase to explore and interpret contextual factors. This methodological pluralism ensures that both statistical generalization and contextual understanding contribute to a comprehensive understanding of the dynamics of MSME growth.

**Table 2**  
*Summary of Philosophical Foundations*

Philosophical Dimension	Position Adopted	Application in This Study
Ontology	Realist–Pragmatic	Assumes MSME growth and entrepreneurial orientation dimensions exist as observable realities but are interpreted within contextual settings.
Epistemology	Positivist with pragmatic flexibility	Emphasizes objective measurement while allowing meaning to emerge from participants’ experiences.
Axiology	Value-aware objectivity	Recognizes researcher neutrality in quantitative analysis and reflexivity in qualitative interpretation.
Methodology	Multi-method sequential explanatory design	Combines quantitative and qualitative approaches to address both measurable relationships and contextual understanding.

***Integration of Philosophical Dimensions***

The alignment of ontology, epistemology, axiology, and methodology ensures philosophical coherence, enhancing the internal consistency between the study’s worldview and its practical implementation. A realist ontology assumes that Entrepreneurial Orientation and MSME growth are observable phenomena that exist independently of perception. Building on this foundation, the positivist epistemology legitimizes the use of quantitative methods to test hypothesized relationships and produce generalizable insights. Pragmatism, in turn, introduces methodological flexibility, allowing qualitative inquiry to contextualize and enrich the interpretation of quantitative findings. The axiological stance further strengthens this alignment by recognizing that, although objectivity is sought, the researcher values and practical considerations inevitably influence methodological choices. Collectively, these

philosophical dimensions establish a coherent and integrated foundation for the study's positivist pragmatic paradigm, ensuring that methodological decisions are philosophically grounded, practically relevant, and conducive to credible and meaningful research outcomes.

### **3.3 Research Design**

A research design provides a structured framework that guides the collection, analysis, and interpretation of data to address the research objectives (Bell, Harley, & Bryman, 2022; Creswell & Creswell, 2018). It links the study's philosophical assumptions to its practical execution, ensuring methodological coherence and internal consistency (Saunders, Lewis, & Thornhill, 2019).

Consistent with the study's positivist–pragmatic paradigm, a sequential explanatory multi-method design was adopted. This design comprises distinct quantitative and qualitative phases, each addressing different yet complementary aspects of the research problem (Creswell & Plano Clark, 2018). The first phase, grounded in positivist principles, employed a quantitative approach to measure the relationships between the dimensions of entrepreneurial orientation—innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness—and the growth of MSMEs in Kenya. The second phase, reflecting a pragmatic orientation, utilized qualitative methods to explore how contextual factors and participant experiences explain or elaborate on the quantitative results.

The rationale for selecting this design stems directly from the research objectives. Objectives (i) to (v) focus on determining measurable relationships between entrepreneurial orientation dimensions and MSME growth, which necessitate a quantitative survey approach for hypothesis testing and statistical inference. Complementary to this, understanding how these relationships manifest in practice and

why certain patterns occur requires qualitative exploration through interviews with MSME owners and managers. The integration of these two phases, therefore, provides a holistic understanding of both the extent and contextual meaning of entrepreneurial orientation's influence on firm growth.

Before proceeding, it is important to distinguish between multi-method and mixed-method research designs. In a multi-method design, quantitative and qualitative methods are applied independently to different components or stages of the study, and findings are interpreted side by side without necessarily merging data sets (Greene, 2007; Johnson, Onwuegbuzie, & Turner, 2007). In contrast, mixed-methods research involves the deliberate integration or triangulation of quantitative and qualitative data within a single analytical framework to produce unified interpretations (Creswell & Plano Clark, 2018). Accordingly, this study's design is multi-method rather than mixed-method, as each phase was conducted and analyzed separately before the results were compared and synthesized during the interpretation phase.

The research proceeded in two sequential phases. In Phase I, a quantitative study grounded in a positivist orientation was undertaken. Structured questionnaires were administered to a representative sample of MSME owners and managers to collect numerical data on entrepreneurial orientation and firm growth. The responses were analyzed using statistical techniques to test the proposed hypotheses and to examine the effects of the five dimensions of entrepreneurial orientation on firm growth. This phase generated empirical evidence and revealed key patterns and relationships warranting further exploration.

Phase II employed a qualitative approach within a pragmatic orientation, building upon the findings from Phase I. From the larger survey pool, 15 MSME owners and managers were purposively selected for in-depth, semi-structured interviews. The purpose of this

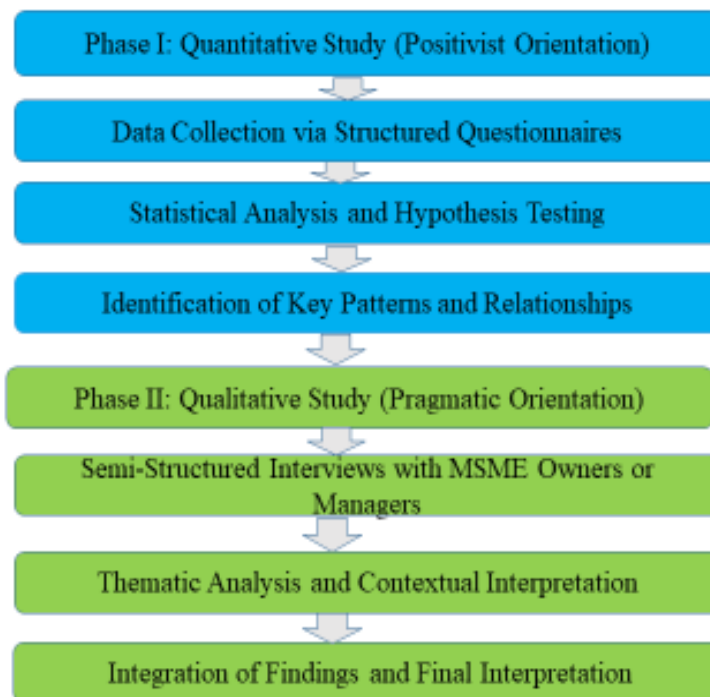
phase was to gain a deeper understanding of how and why the relationships identified in the quantitative analysis occurred. Through rich, descriptive data, this phase uncovered the contextual nuances, experiences, and meanings that underpinned the statistical trends observed in Phase I.

The sequential explanatory structure ensured that insights from the quantitative phase informed the design and focus of the qualitative phase, thereby deepening interpretation and enhancing the study's explanatory power. This two-phase structure also reflects the study's philosophical alignment: positivism guided empirical testing, while pragmatism allowed flexible adaptation and contextual explanation.

Figure 2 below conceptually illustrates the sequential explanatory process adopted in this study.

**Figure 2**

*Sequential Explanatory Multi-Method Design of the Study*



This sequential design ensured that each phase contributed uniquely to addressing the study's overarching objective to examine the influence of entrepreneurial orientation

onMSME growth in Kenya by combining empirical measurement with contextual understanding. The approach thus enhanced methodological rigor, explanatory depth, and the alignment between philosophical stance and practical application, strengthening the validity and relevance of the study's findings.

### **3.4 Location of the Study**

This study was conducted in Nairobi City County, the capital and economic nerve centre of Kenya. The research focused on two categories of Micro, Small, and Medium Enterprises (MSMEs): (i) manufacturing firms registered with the Kenya Association of Manufacturers (KAM) and (ii) innovation-driven startups that had previously received research or innovation grants from the former National Council for Science and Technology (NCST), now the National Commission for Science, Technology and Innovation (NACOSTI).

Nairobi City County was purposively selected due to its distinctive economic profile and strategic relevance to the study's objectives. As Kenya's principal business hub, the county contributes approximately 27.5% of the nation's gross value added and around 22% of the gross domestic product (GDP) (KNBS, 2024). It also hosts the highest concentration of MSMEs in the country over 300,000 registered enterprises, representing nearly 15 % of Kenya's total (KNBS, 2023a). The city's enterprise ecosystem encompasses established manufacturing firms, technology-based startups, and service-sector MSMEs that collectively reflect the country's broader business landscape (KNBS, 2023b). Nairobi's dynamic economic environment is further supported by advanced infrastructure, a robust financial sector, and innovation spaces such as iHub, alongside major development initiatives like Konza Technopolis, which foster entrepreneurship and enterprise growth (FSD Kenya, 2024).

Nairobi's economic dynamism, sectoral diversity, and concentration of innovation-driven enterprises make it not only an appropriate but also a representative context for examining how entrepreneurial orientation influences the growth of MSMEs in Kenya. The county's economic structure and entrepreneurial ecosystem mirror national trends, enabling insights derived from Nairobi to be meaningfully generalized to other regions with similar enterprise characteristics.

### **3.5 Population of the Study**

The target population for this study comprised Micro, Small, and Medium Enterprises (MSMEs) operating in Kenya, specifically focusing on two categories. The first category included MSMEs in the manufacturing sector that were registered with the Kenya Association of Manufacturers (KAM). The second category consisted of startup enterprises whose innovations had received financial grants from the former National Council for Science and Technology (NCST), now operating as the National Commission for Science, Technology and Innovation (NACOSTI). The study focused on manufacturing sector enterprises located in Nairobi City County and startups funded by NACOSTI. The respondents were either the owners or managers acting on behalf of the owners, selected due to their direct involvement in strategic decision-making and day-to-day operations of the enterprises.

As of December 2014, there were 853 MSMEs in the manufacturing sector registered with the Kenya Association of Manufacturers (KAM, 2015). Additionally, by July 2016, NACOSTI had provided innovation funding to 126 startup enterprises. The data on NACOSTI-funded startups was provided to the researcher in Microsoft Excel format and was part of NACOSTI's monitoring and evaluation records. Therefore, the total population for this study was 979 MSMEs.

In this study, the firm (MSME) served as the unit of analysis, consistent with the conceptualization of Entrepreneurial Orientation (EO) as an organizational-level construct. The units of observation were the owners or managers of the MSMEs, who participated in the study on behalf of their firms. These individuals were selected as respondents due to their direct involvement in the strategic and operational decision-making processes within their respective enterprises. Their insights were considered essential for providing accurate information regarding the enterprises' entrepreneurial practices and strategic behaviors.

### **3.6 Sampling Procedure and Sample Size**

#### **3.6.1 Sampling Procedure**

This study employed stratified random sampling and a census approach to ensure comprehensive and representative coverage of Micro, Small, and Medium Enterprises (MSMEs). The sampling frame for manufacturing firms was obtained from the Kenya Association of Manufacturers (KAM) membership register (2015). Although compiled earlier, it remains the most complete and verifiable list of sectoral distribution available and was cross-checked with updated KAM and company records (2024).

The population of 979 firms was divided into nine strata: eight representing manufacturing sub-sectors identified by KAM and one representing innovation-driven startups that had received funding from the former National Council for Science and Technology (NCST) now the National Commission for Science, Technology and Innovation (NACOSTI).

The number of firms selected from each manufacturing sub-sector was determined through proportional allocation, computed using the formula:

$$n_i = \frac{N_i}{N} * n$$

where  $n_i$  = sample size for stratum  $i$ ;  $N_i$  = population of stratum  $i$ ;  $N$  = total population (979); and  $n$  = overall sample size (284).

For example, in the Food and Beverage sub-sector,

$$n_i = \frac{187}{979} * 284 = 54.3 \approx 54$$

**Table 3**

*Sample Size*

	Sub Sector (Stratum)	Number of Firms ( $N_i$ )	Percentage (%)	Sample Size ( $n_i$ )
1	Food and Beverage	187	19.1	54
2	Leather and Footwear	83	8.5	24
3	Motor Vehicle Accessories	74	7.6	21
4	Textile and Apparel	112	11.4	32
5	Plastic and Rubber	122	12.5	36
6	Chemical and Allied	113	11.6	33
7	Metal and Allied	118	12.1	34
8	Others	44	4.5	13
9	NACOSTI-Funded MSMEs	126	12.9	46 (census)
	Total	979	100	284

**3.6.2 Sample Size**

The overall sample size of 284 enterprises was derived using Yamane's (1967) formula for finite populations, suitable when the total population is known:

$$n = \frac{N}{1 + Ne^2}$$

Where:

$n$  = Required Sample size;  $N$  = Target Population;  $e$  = Margin of error at 5% (95% Confidence level).

A total of 284 MSMEs was therefore selected, ensuring an adequate and statistically reliable representation of the study population.

### **3.7 Instrumentation**

This study employed two research instruments: a structured questionnaire and a semi-structured interview guide. The questionnaire served as the primary instrument for collecting quantitative data, while the interview guide provided complementary qualitative insights. Both instruments were designed in line with the study objectives to capture data on entrepreneurial orientation (EO) and MSME growth.

#### **3.7.1 Structured Questionnaire**

The questionnaire was developed from established instruments on EO and firm-growth research to ensure theoretical alignment and content validity (Covin & Slevin, 1989; Lumpkin & Dess, 1996; Hughes & Morgan, 2007).

*It consisted of three sections*

- *Section A:* Background information on the enterprise (ownership type, years in operation, size, activity, and sales turnover).
- *Section B:* Items measuring the five EO dimensions innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness assessed on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Several items were reverse-coded to minimize response bias (Pallant, 2007).
- *Section C:* Items measuring MSME growth using indicators such as changes in sales, employment, and asset value over the past three years. These were rated on a five-point semantic differential scale (1 = much worse to 5 = much better) following Neneh and van Zyl (2017) and Adomako (2016).

The questionnaire was self-administered to MSME owners and managers. Its structure ensured that each section corresponded directly to a research objective or hypothesis.

### **3.7.2 Semi-Structured Interview Guide**

The semi-structured interview guide was designed to obtain qualitative data on contextual and behavioural factors that could not be fully captured through the questionnaire. It contained open-ended questions focusing on innovation practices, managerial decision-making, and competitive strategies. The format allowed probing and clarification while maintaining alignment with the study variables. Its inclusion was justified by the pragmatic research paradigm, which integrates quantitative and qualitative evidence to enrich understanding.

### **3.7.3 Pilot Study**

A pilot study was conducted to test the clarity, validity, and reliability of the instruments prior to the main data collection. The pilot involved 26 MSME owners and managers in Kiambu County, chosen because the area closely resembles Nairobi City County in its economic activities and enterprise composition.

Participants in the pilot study were excluded from the final sample. The pre-test assessed the average completion time, clarity of wording, and logical flow of items. Feedback from respondents and expert reviewers was incorporated to refine the layout and sequencing. Preliminary reliability analysis using Cronbach's alpha produced coefficients above 0.70 for all constructs, confirming that the instruments were appropriate for the main study.

### **3.7.4 Validity of the Instrument**

Validity refers to the extent to which an instrument accurately measures what it is intended to measure and not something else (Sekaran & Bougie, 2019). In this study, validity was addressed through a combination of content, construct, and external validity procedures to ensure accuracy and generalizability of the findings.

Content validity was achieved by subjecting the questionnaire to expert review, involving supervisors, entrepreneurship scholars, and practitioners, to ensure that the items were representative of the concepts being measured (Bryman & Bell, 2011). Additionally, an extensive review of relevant literature informed the selection and wording of measurement items, ensuring comprehensive coverage of each construct.

Construct validity was enhanced by adopting measurement items from well-established studies on entrepreneurial orientation and MSME growth (Covin & Slevin, 1989; Lumpkin & Dess, 1996; Hair et al., 2010). Factor analysis conducted during the pilot phase confirmed that the items loaded appropriately on their respective theoretical dimensions, thereby strengthening the internal coherence of the constructs.

External validity was reinforced through the selection of a diverse sample of MSMEs drawn from multiple sub-sectors across Nairobi City County, enabling the findings to be generalised to other similar enterprise contexts in Kenya. Collectively, these procedures enhanced the accuracy, representativeness, and credibility of the research instrument.

### **3.7.5 Reliability of the Instrument**

The reliability of a measure refers to the stability and consistency with which the instrument measures the concept, helping to assess the goodness of the measure (Sekaran & Bougie, 2019). To enhance reliability, the questionnaires were tested for internal consistency using Cronbach's alpha coefficient, calculated in SPSS version 26. Cronbach's alpha is a reliability coefficient that summarizes how well items in a set are interrelated to each other (Hair et al., 2019). Cronbach's alpha is calculated based on the average interconnections among the items measuring the concept and ranges from 1 to 0 (Bryman & Bell, 2015). A value of 0.7 or less generally denotes unsatisfactory internal reliability, while a value of 0.8 or more indicates internal consistency reliability (Sekaran

&Bougie, 2019). Further, the adoption of constructs from the literature that have been tested for reliability enhanced the quality of the research instrument.

A reliability test was undertaken to assess the internal consistency of the questions in the research instruments. The Cronbach alpha coefficients are shown in Table 4. Competitive aggressiveness had the highest alpha coefficient of 0.854, while the risk-taking dimension had the lowest coefficient at 0.719. These coefficients suggest that the internal reliability of the entrepreneurial orientation items in the questionnaire is reasonable. The Cronbach alpha coefficients are within the acceptable limits (Zikmund, 2013).

**Table 4**

*Cronbach Alpha Coefficients for Entrepreneurial Orientation*

Variables	Number of Items	Cronbach Alpha Values
Innovativeness	5	.744
Risk-taking	5	.719
Proactiveness	5	.751
Autonomy	5	.854
Competitive Aggressiveness	3	.794

### **3.7.6 Operationalization of Research Variables**

The primary objective of this research was to investigate the impact of entrepreneurial orientation dimensions on the growth of MSMEs in Nairobi City County. Operationalization of variables involves the process of converting abstract constructs into measurable characteristics (Sekaran&Bougie, 2019). In this study, primary data were gathered from respondents using open and closed questions to obtain both quantitative and qualitative data. The dependent variable, MSME growth, was measured by employment, sales, and asset value. Subjective measurement was employed in this

study due to the challenges of obtaining objective measures from MSMEs. The aforementioned has been largely attributed to the reluctance of SMEs to disclose financial data to third parties (Lyon, Dess, & Lumpkin, 2000). The work of Stam and Elfring (2008), Naldi et al. (2007), and Neneh and Zyl (2017). was used as a guide in developing instruments for measuring MSME growth. Respondents used a scale ranging from 1, "much worse," to 5, "much better," to rate these items.

The independent variable, entrepreneurial orientation dimension, was measured by five subscales: innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness. The seminal works of Covin and Slevin (1989) and Lumpkin and Dess (1996) served as a guide in identifying EO measures for the current research. The EO measures, established for all items, were modified from several past studies, such as Kisumawardhani (2013) and Boso (2010), to generate a five-point semantic differential scale with a neutral midpoint. Five statements measuring entrepreneurial orientation were reverse-worded to prevent response bias, as identified by Pallant (2007). Twenty-three items measured the five subscales of entrepreneurial orientation dimension.

In this research, the structured questionnaire was developed based on a review of the literature on entrepreneurial orientation and enterprise growth. It comprised three main sections: background information of the business, entrepreneurial orientation, and MSME growth. The first section included seven open- and closed-ended questions aimed at gathering general enterprise-level information, such as type of ownership, business activities, years in operation, number of employees, and annual sales turnover. The second section focused on entrepreneurial orientation and captured five key dimensions: innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness. The final section addressed indicators of MSME growth, including changes in sales

volume, asset base, and number of employees over time. A summary of the operationalization of the variables applied in this study is shown in Table 5.

**Table 5**  
*Operationalization of Research Variables*

Variable	Operational Indicators	Measurements	Supporting Literature	Questionnaire Items
MSME general information	Mixed data included: Open-ended information Enterprise activities Years of operation	Mixed		Section A: 1-7
Entrepreneurial Orientation (Independent Variable )	Composite score made up of the following subscales assessed by various qualitative statements on: Innovativeness Risk-taking Proactiveness Competitive aggressiveness Autonomy	5-point Likert Scale	Hughes and Morgan (2007) Covin and Slevin (1989) Lumpkin and Dess (2001) Lumpkin et al. (2009)	Section B-F
MSME Growth (Dependent Variable)	Composite scores assessed by qualitative statements on: Volume of sale of products Asset base value Number of employees	5-point Likert Scale	Hughes and Morgan (2007) Neneh and Zyl (2017) Adomako (2016)	Section G: 1-3

### 3.8 Data and Data Collection Procedure

This study employed both quantitative and qualitative methods consistent with its mixed-method research design. The two strands were implemented sequentially: the quantitative phase involved the administration of structured questionnaires, followed by qualitative

semi-structured interviews. This combination enabled the measurement of statistical relationships and the exploration of contextual factors that shape MSME growth.

### **3.8.1 Quantitative Data Collection**

Quantitative data were collected using structured questionnaires (Appendix 2) administered to 284 MSME owners and managers. The drop-and-pick technique was adopted, whereby the researcher and two trained research assistants delivered the questionnaires in person and later collected them on agreed dates. This method enhanced response rates, allowed clarification of questions, and minimized non-response bias. Each questionnaire was accompanied by a research introduction letter from Kabarak University and a research authorization permit from the National Commission for Science, Technology, and Innovation (NACOSTI) (Permit No. NACOSTI/P/15/5756/6073).

Respondents were drawn from two categories: (i) MSMEs registered with the Kenya Association of Manufacturers (KAM), and (ii) innovation-driven enterprises funded by NACOSTI under its research endowment fund. The researcher ensured that the respondents were either business owners or senior managers responsible for strategic decisions. Data collection spanned twelve weeks. Research assistants were trained on instrument administration, participant communication, and confidentiality procedures.

To mitigate non-response, three strategies were employed: (1) multiple follow-up visits, (2) reminder phone calls and emails, and (3) replacement of non-responding firms within the same stratum after three unsuccessful contact attempts. Completed questionnaires were checked daily for completeness and accuracy before data entry. The quantitative phase generated data for statistical analysis to test the study's hypotheses on the influence of entrepreneurial orientation (EO) on the growth of MSMEs.

### **3.8.2 Qualitative Data Collection**

The qualitative phase was designed to complement the survey results by providing deeper insights into the experiences and perceptions of MSME owners and managers. Data were collected through face-to-face semi-structured interviews guided by an interview schedule (Appendix 3) that contained open-ended questions on entrepreneurial orientation and enterprise growth.

Participants for the qualitative phase were purposively selected from the pool of quantitative respondents who indicated willingness to participate in follow-up interviews. Judgmental sampling, following Miles and Huberman (1994), was used to identify MSMEs that had received NACOSTI innovation funding, as they were most suitable for providing detailed information on entrepreneurial practices. A total of fifteen interviews were conducted until data saturation was achieved, at which point no new themes emerged (Patton, 2015; Engel & Schutt, 2016).

Each interview lasted between 40 and 60 minutes and was conducted at a venue chosen by the participant to ensure comfort and privacy. Detailed field notes were taken, and participants consented to audio recording for accuracy. Interviews were transcribed verbatim immediately after completion and stored securely in password-protected digital folders. The qualitative data were not intended for generalization but to triangulate and contextualize the quantitative findings.

### **3.8.3 Data Security and Storage**

Data security was maintained throughout the research process. Hard copies of completed questionnaires were stored in locked cabinets accessible only to the researcher, while electronic data were saved on an encrypted external drive and cloud storage. All digital files were password-protected. Only aggregated, anonymized data were used for analysis and reporting. All records will be retained for five years, after which they will be

permanently deleted or shredded, in accordance with Kabarak University's research policy.

### **3.9 Data Analysis and Presentation**

This section presents the data analysis procedures employed in the study, from data preparation to interpretation, intending to generate credible and valid findings consistent with the overarching objective: to examine the influence of entrepreneurial orientation (EO) on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. Both quantitative and qualitative approaches were utilized in a complementary manner to provide a comprehensive and triangulated understanding of the research problem.

#### **3.9.1 Quantitative Data Analysis**

Quantitative data analysis was conducted using *SPSS* Version 26 and followed a systematic three-stage process involving data preparation, descriptive analysis, and inferential analysis. The procedure began with data cleaning, coding, and screening for completeness and consistency. Missing or inconsistent entries were corrected or removed, and outliers were examined to prevent distortion of statistical results. Once validated, descriptive statistics including frequencies, means, and standard deviations were computed to summarize respondents' demographic characteristics and the distribution of key study variables.

To verify the construct validity of the measurement scales and ensure that items represented their intended constructs, Exploratory Factor Analysis (EFA) was performed using Principal Component Analysis with Varimax rotation. The adequacy of the dataset for factor analysis was confirmed through the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity. A KMO value exceeding 0.60 and a significant Bartlett's test result ( $p < .05$ ) indicated that the data were suitable for factor

extraction. Items with factor loadings below 0.40 or those that cross-loaded on multiple factors were excluded from further analysis. The internal reliability of each construct was subsequently evaluated using Cronbach's  $\alpha$ , with values of 0.70 or greater deemed acceptable, thereby confirming measurement consistency.

Following scale validation, inferential analysis was conducted to test the study hypotheses and determine the nature and strength of relationships between the five dimensions of entrepreneurial orientation (EO) innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness and the growth of MSMEs. Pearson's product-moment correlation coefficients were first computed to examine the direction and magnitude of linear relationships among the study variables. Correlation results informed subsequent regression modeling.

To assess both the individual and collective effects of EO dimensions on MSME growth, a series of regression models was estimated. Five simple linear regressions were conducted separately for each of the five EO dimensions, corresponding to the five specific hypotheses. Thereafter, a multiple linear regression (MLR) model was fitted to evaluate the combined influence of all five dimensions on the dependent variable. Regression analysis was chosen for its suitability in quantifying and comparing the predictive power of multiple independent variables on a continuous dependent outcome (Hair et al., 2019; Sekaran & Bougie, 2019).

In the general multiple regression model, MSME growth was expressed as a function of the five EO dimensions. Specifically, MSME growth equaled the intercept ( $\beta_1$ ) plus the weighted contributions of innovativeness ( $\beta_1 X_1$ ), risk-taking ( $\beta_2 X_2$ ), proactiveness ( $\beta_3 X_3$ ), autonomy ( $\beta_4 X_4$ ), and competitive aggressiveness ( $\beta_5 X_5$ ), together with a random error term ( $\epsilon$ ). This specification allowed the study to determine both the individual and collective effects of EO dimensions on enterprise growth.

The following regression models were used:

Model 1:  $MSME\ Growth = \beta_1 + \beta_1 X_1\ (Innovativeness) + \varepsilon$

Model 2:  $MSME\ Growth = \beta_2 + \beta_2 X_2\ (Risk-Taking) + \varepsilon$

Model 3:  $MSME\ Growth = \beta_3 + \beta_3 X_3\ (Proactiveness) + \varepsilon$

Model 4:  $MSME\ Growth = \beta_4 + \beta_4 X_4\ (Autonomy) + \varepsilon$

Model 5:  $MSME\ Growth = \beta_5 + \beta_5 X_5\ (Competitive\ Aggressiveness) + \varepsilon$

More comprehensively, a multiple linear regression (MLR) model was employed to determine the collective influence of all five entrepreneurial orientation dimensions on enterprise growth. Multiple regression is a multivariate measure that involves the use of more than one variable to explain variance in the dependent variable (Sekaran & Bougie, 2019). The study adopted the following multiple regression model:

Model 6:  $MSME\ Growth = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$

In this model, MSME Growth is the dependent variable, measured by sales volume, asset base growth, and the number of employees. The independent variables are:

$X_1 =$  Innovativeness

$X_2 =$  Risk-taking

$X_3 =$  Proactiveness

$X_4 =$  Autonomy

$X_5 =$  Competitive aggressiveness

$\varepsilon =$  the error term

$\beta_1 - \beta_5 =$  coefficient of regression, which measures how strongly each independent variable influences the dependent variable MSME growth, and  $\varepsilon$  is the error term.

**Table 6***Summary of Regression Models*

Model	Dependent Variable	Independent Variable(s)	Analytical Purpose
1	MSME Growth	Innovativeness ( $X_1$ )	Test $H_1$ : Effect of innovativeness on MSME growth
2	MSME Growth	Risk-Taking ( $X_2$ )	Test $H_2$ : Effect of risk-taking on MSME growth
3	MSME Growth	Proactiveness ( $X_3$ )	Test $H_3$ : Effect of proactiveness on MSME growth
4	MSME Growth	Autonomy ( $X_4$ )	Test $H_4$ : Effect of autonomy on MSME growth
5	MSME Growth	Competitive Aggressiveness ( $X_5$ )	Test $H_5$ : Effect of competitive aggressiveness on MSME growth
6	MSME Growth	$X_1$ – $X_2$ (All EO Dimensions)	Examine the collective influence of EO dimensions

Before interpreting the regression outputs, the fundamental assumptions of multiple linear regression were tested to ensure model validity and reliability. The assumption of linearity was verified using scatterplots and partial regression plots to confirm that the relationship between each predictor and MSME growth was approximately linear. The independence of errors was examined using the Durbin–Watson statistic, where values between 1.5 and 2.5 indicated no serial correlation of residuals (Gujarati & Porter, 2009). Homoscedasticity was assessed visually through standardized residual plots and statistically using the Breusch–Pagan test, confirming that residual variance was constant across predicted values. The normality of residuals was tested using the Shapiro–Wilk test and further verified through normal probability plots (Q–Q plots), which revealed that residuals followed an approximately normal distribution. Finally, the absence of multicollinearity among independent variables was confirmed by calculating the

Variance Inflation Factor (VIF); all values were below the accepted threshold of 5, demonstrating that collinearity was not a concern (Hair et al., 2019). Collectively, these diagnostic tests satisfied the assumptions required for reliable regression analysis, confirming the robustness of the estimated models.

Regression estimates were reported using unstandardized and standardized coefficients ( $\beta$ ), the coefficient of determination ( $R^2$ ),  $F$ -statistics,  $t$ -values, and associated significance levels. Statistical significance was determined at  $p < 0.05$ , consistent with conventional thresholds for hypothesis testing in social science research. Quantitative findings were presented in the results chapter through tables and figures to facilitate clear interpretation and comparison across variables.

The quantitative and qualitative components of the study were designed to complement each other and reinforce overall validity through methodological triangulation. While the quantitative models quantified the magnitude and direction of the relationships between EO dimensions and MSME growth, the qualitative findings illuminated the mechanisms through which these relationships occurred. For example, regression analysis demonstrated that innovativeness had a statistically significant positive effect on MSME growth, and qualitative narratives explained this relationship by highlighting how innovation enhanced market adaptability, product diversification, and customer responsiveness. In this way, qualitative insights contextualized and deepened the understanding of the statistical patterns, whereas the quantitative results provided empirical validation and generalizability. This integrative approach enhanced the internal validity, interpretive richness, and credibility of the study's conclusions.

### **3.9.2 Qualitative Data Analysis**

The qualitative component of the study complemented the statistical findings by providing deeper insights into the lived experiences, beliefs, and entrepreneurial practices of MSME owners and managers in Kenya. As Patton (2015) notes, qualitative analysis involves the systematic organization and interpretation of non-numerical data to identify recurring patterns, meanings, and relationships. The goal is not merely to describe observable phenomena but to interpret them in context, compare cases, and generate a rich, theoretically informed understanding (Flick, 2014).

In line with the interpretivist orientation of this study, thematic analysis was employed as the primary method of analyzing the qualitative data. Thematic analysis is a flexible and widely used approach for identifying, analyzing, and interpreting patterns of meaning commonly referred to as themes within qualitative datasets (Braun & Clarke, 2006; Nowell et al., 2017). This method was particularly appropriate for the present research because it allows for both descriptive and interpretive depth, making it suitable for examining how entrepreneurial orientation is experienced and enacted within Kenya's MSME sector.

The analysis followed the six-phase framework proposed by Braun and Clarke (2012, 2021). First, the researcher manually transcribed all interviews and read each transcript several times to achieve immersion in the data and gain a holistic understanding of the participants' accounts. Second, initial codes were generated inductively to capture meaningful units of information related to the research objectives and the five dimensions of entrepreneurial orientation: innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness. Third, these codes were systematically reviewed to identify patterns of similarity or contrast and grouped into potential themes that represented coherent concepts emerging across multiple participants.

In the fourth phase, the preliminary themes were reviewed and refined to ensure that each theme accurately reflected the coded data and contributed meaningfully to the overall research objectives. In the fifth phase, themes were clearly defined, named, and organized in a way that revealed their interrelationships and analytical significance. Finally, in the sixth phase, the findings were synthesized into a coherent narrative that integrated the key themes with theoretical insights and prior literature on entrepreneurial orientation and MSME growth. All analysis was conducted manually using color coding, note-taking, and data matrices to ensure close engagement with the raw data and preserve contextual nuance.

The finalized themes reflected both explicit (surface) meanings and underlying (latent) interpretations consistent with the thematic analysis approach outlined by Naeem, Ozuem, and Ranfagni (2023). These themes provided a nuanced understanding of how MSME owners interpret and apply entrepreneurial behaviors in practice. For instance, patterns of innovativeness were reflected in the pursuit of new markets and creative adaptation of products, while risk-taking and autonomy emerged as crucial in decision-making and business sustainability.

The qualitative findings enriched the quantitative results by offering contextual explanations for the statistically significant relationships established through regression analysis. For example, while the quantitative models demonstrated that innovativeness significantly influenced the growth of MSMEs, the qualitative data illuminated how innovation translated into performance through experimentation, customer feedback, and incremental improvements. In this way, the qualitative insights added depth and contextual understanding to the statistical findings, enhancing the study's overall validity and interpretive coherence.

Through the integration of qualitative and quantitative approaches, the study achieved methodological triangulation, thereby strengthening both the reliability and the explanatory power of the research outcomes. The qualitative analysis thus not only supported the quantitative evidence but also revealed the underlying mechanisms and meanings that drive entrepreneurial orientation and enterprise growth within the Kenyan MSME context.

### **3.10 Ethical Considerations**

Ethical principles guided every stage of this research to ensure participant welfare, data integrity, and compliance with institutional and national regulations. The study adhered to the principles of voluntary participation, informed consent, confidentiality, and academic integrity (Bryman & Bell, 2016). Prior to the commencement of fieldwork, the researcher obtained formal ethical clearance from Kabarak University and a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) (Permit No. NACOSTI/P/15/5756/6073. Copies of these authorizations were presented to relevant stakeholders and participants to authenticate the legitimacy and ethical standing of the study.

Comprehensive and comprehensible explanations were provided to all prospective respondents before participation. These explanations outlined the purpose of the study, the nature of the research procedures, potential risks and anticipated benefits, and participants' rights, including the freedom to withdraw at any stage without prejudice. Only individuals who provided written informed consent were included in the study. This approach ensured that participation was both voluntary and based on a full understanding of the research context and implications.

Strict measures were implemented to uphold participant anonymity and confidentiality throughout the research process. Personal identifiers were excluded from all datasets, and the findings were presented in aggregated form to prevent the identification of individual participants. Physical research materials were securely stored in locked filing cabinets accessible only to the researcher, while digital data were encrypted and protected by strong passwords. The researcher exercised exclusive custodianship over the dataset to maintain its security and integrity.

To preserve the authenticity and trustworthiness of the findings, all data were handled with methodological rigor and ethical sensitivity. The researcher refrained from manipulating, inflating, or selectively reporting data in any manner that could distort the truth or misrepresent participants' responses. All secondary and borrowed materials were meticulously cited and referenced in accordance with APA guidelines and institutional requirements, thereby ensuring academic honesty and transparency.

In accordance with ethical data management standards, the researcher commits to retaining the research data for a period not exceeding five years to meet scholarly and regulatory obligations. Data will be reviewed annually, and materials beyond the retention period will be disposed of in an ethical manner. Digital files will be permanently erased using secure deletion software, and physical records will be shredded or professionally destroyed. All data will remain anonymized during the retention period to preserve participant privacy. The procedures for data retention and disposal were clearly communicated to participants during the consent process, reinforcing the study's commitment to transparency, confidentiality, and accountability.

Overall, the research was conducted in strict adherence to the ethical standards prescribed by Kabarak University, the NACOSTI framework, and international best practices for social science research. The researcher maintained continuous ethical

reflexivity throughout the study to ensure that every methodological and procedural decision respected participants' rights, upheld professional integrity, and advanced the broader ethical obligations of scholarly inquiry.

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND DISCUSSION

#### 4.1 Introduction

This chapter presents the empirical results of the study, based on both quantitative and qualitative data. Quantitative data were analyzed using SPSS (Version 26) through descriptive and inferential statistics, including correlations and regression analysis, with diagnostic tests to validate model assumptions. Qualitative data from interviews were analyzed using thematic analysis. This chapter presents the data analysis, including the survey response rate, demographic characteristics of the respondents, and the presentation of quantitative findings and qualitative insights derived through thematic analysis, all organized according to the study objectives. An interpretation and discussion of the results, in relation to the research hypotheses, follows.

#### 4.2 Survey Response Rate

This study targeted MSMEs operating in the manufacturing sector and those that had received financial grants from NACOSTI to support their innovations in Nairobi City County. MSME owners or managers representing owners were the respondents of this study. The sample size comprised 284 MSMEs; thus, the researcher administered 284 questionnaires to all the sampled MSME owners or managers. Table 7 shows the response rate.

**Table 7**

*Respondents' Response Rate*

Respondents	Frequency	Percentage
Returned	247	87
Not Returned	37	13
Total	284	100

Table 7 shows that out of the 284 administered questionnaires, 247 were duly filled out and collected. This represents an 87% response rate. This response rate is consistent with what is proposed by previous scholars, such as Babbie (2020), who consider a response rate of above 50% to be adequate for analysis and reporting in descriptive research, while 60% is considered good and 70% very good. Moreover, Blumberg, Cooper, and Schindler (2014) assert that a response rate of above 30% adequate data that can be used for generalization purposes. Therefore, the 87% response rate achieved in this research is considered adequate and acceptable for analysis.

### **4.3 Demographic Characteristics**

This research aimed to gather background information on MSMEs, including the type of business, activities of the enterprise, years the enterprise has been operating, number of employees, and annual sales of the enterprise. This background information is necessary in this study because it helps tailor sector-specific policies and support services, assess the enterprise's market experience and stability, examine the employment impact and job creation, and perform financial assessments for creditworthiness and performance benchmarking.

#### **4.3.1 Type of Business**

The study aimed to determine the types of businesses in which MSMEs were involved. The results in Table 8 indicate that the most common type of business among the MSMEs studied was private limited companies (68.8%, 170), followed by individual ownership (22.3%, 55 enterprises) and partnerships (8.1%, 20). The study found that only 0.8% (2 enterprises) fell into other unspecified categories; these constituted public corporations. These results suggest an inclination towards formally registered business structures, indicating a developed entrepreneurial environment where businesses strive for scalable growth and formalized operations. This finding is consistent with the results of a survey

conducted by the International Finance Corporation (2019), which revealed that approximately 70% of SMEs in Kenya were formally registered companies, indicating a preference for formalized business structures. The desire for scalability, access to finance, and legal protection often drives this trend towards formalization.

**Table 8**

*Frequency and Percentage Distribution of Enterprises According to Type of Business*

Category	Frequency	Percentage
Individual Ownership	55	22.3
Partnership	20	8.1
Private Limited Company	170	68.8
Any Other	2	0.8
Total	247	100

#### **4.3.2 Enterprise Activities**

The study found that enterprises were engaged in a wide range of activities, as shown in Table 9. Specifically, 19.84% (49 enterprises) were involved in chemical and allied industries, followed by 14.17% (35 enterprises) in the plastic and rubber sector. Food and beverages accounted for 13.77% (34 enterprises), while motor vehicle accessories accounted for 12.55% (31 enterprises). The textile and apparel, leather, and footwear industries represented 5.26% (13 enterprises) and 4.45% (11 enterprises), respectively. Engineering and information and communication technology each comprised 4.86% (12 enterprises). Smaller sectors included mechanics (3.24%, 8 enterprises), applied sciences (2.02%, 5 enterprises), and biotechnology (1.21%, 3 enterprises).

These findings suggest that Kenyan MSMEs are involved in a diverse range of sectors, spanning from traditional manufacturing to modern technology-based industries. This sectoral distribution is important for understanding the varied growth challenges and

opportunities across industries, and it provides a basis for designing sector-specific support mechanisms and policy interventions.

**Table 9**

*Frequency and Percentage Distribution of Enterprises by Sector of Activity*

Classification of Enterprise Activities	Frequency	Percentage
Food and Beverage	34	13.77
Leather and Footwear	11	4.45
Textile and Apparel	13	5.26
Motor Vehicles Accessories	31	12.55
Plastic and Rubber	35	14.17
Chemical and allied	49	19.84
Metal and allied	28	11.34
Mechanics	8	3.24
Applied Sciences	5	2.02
Biotechnology	3	1.21
Engineering	12	4.86
Information and Communication Technology	12	4.86
Any other	6	2.43
Total	247	100

#### **4.3.3 Years the enterprise has been in operation**

As shown in Table 10, the study revealed that a considerable proportion of enterprises (37.2%, 92) had been in operation for over 20 years, indicating a strong presence of long-standing businesses within the sample. This aligns with findings from the World Bank Enterprise Survey (2018), which highlighted the prevalence of well-established SMEs in Kenya. Such longevity may reflect qualities like resilience, adaptability, and sustained competitiveness in the face of economic challenges.

Additionally, a significant portion of the enterprises 27.5% (68) had been in operation for 2 to 5 years, demonstrating the presence of newly established businesses. This trend may be linked to increased entrepreneurial interest, government support for startups, and a growing culture of innovation. Enterprises that had been operating for 6 to 10 years (14.7%) and those in the 11- to 15-year range (10.1%) represent a middle-tier segment that has likely moved beyond initial startup challenges and is now navigating issues related to growth, consolidation, and sustainability.

**Table 10**

*Distribution of Enterprises by Duration of Operation*

Years in Operation	Frequency	Percentage
2-5 years	68	27.5
6-10 years	36	14.7
11-15 years	25	10.1
16-20 years	26	10.5
Over 20 years	92	37.2
Total	247	100

#### **4.3.4 Number of employees in the enterprise**

As presented in Table 11, the distribution of enterprises by number of employees indicates that a significant proportion (32.0%, 79 enterprises) had between 0 and 9 employees, highlighting the prevalence of micro-enterprises within the sample. Enterprises with 10 to 49 employees accounted for 24.7% (61), while those employing between 50 and 99 comprised 20.2% (50 enterprises). Notably, 23.1% (57 enterprises) reported having more than 100 employees, suggesting the presence of larger and more established firms within the MSME sector.

This variation in employment size reflects the diverse operational capacities of enterprises in the study. The presence of firms with over 100 employees indicates a

substantial contribution to job creation by certain businesses, particularly those that are more mature. These results align with findings from the Kenya Private Sector Alliance (2020), which reported that around 30% of SMEs in Kenya employ more than 50 people.

**Table 11**

*Distribution of Enterprises by Number of Employees*

Number of Employees	Frequency	Percentage
0-9	79	32
10-49	61	24.7
50-99	50	20.2
Over 100	57	23.1
Total	247	100

#### **4.3.5 Annual Sales of the Enterprise**

Finally, the results shown in Table 12 regarding annual sales revealed that the majority of enterprises (40.1%, or 99) reported annual revenues exceeding 10 million. Additionally, 21.1% (52 enterprises) reported annual sales between \$ 5 million and \$ 10 million. These findings underscore the economic impact of MSMEs, particularly in terms of job creation and revenue generation. This aligns with the Central Bank of Kenya's (2021) report on SME performance, which noted that most Kenyan SMEs generate substantial annual revenues, highlighting their significant economic role and growth potential.

**Table 12***Distribution of Enterprises by Annual Sales*

Annual sales	Frequency	Percentage
1 Million and below	50	20.2
2 – 3 Million	29	11.7
3 – 5 Million	17	6.9
5 – 10 Million	52	21.1
Over 10 Million	99	40.1
Total	247	100

**4.4 Descriptive Analysis**

Descriptive analysis was used to describe the basic features of the data under study, as it provides summaries about the sample and its measures. In this study, descriptive analysis included frequencies and percentages. MSME owners or their managers were asked to indicate their levels of agreement or disagreement with the statements on various entrepreneurial dimensions. Descriptive statistics, including means and standard deviations, were used to analyze the data and provide insights into participants' responses. This method allowed for the examination of central tendencies and variability in responses across various items. Higher mean scores indicated stronger agreement with the statements, while standard deviations provided information on the degree of consensus among respondents.

**4.4.1 Descriptive Results of Innovativeness**

The first objective of the study was to assess the impact of innovativeness on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. Innovativeness, as a dimension of entrepreneurial orientation (EO), was measured using five statements. Respondents were asked to indicate the extent to which they agreed or disagreed with

statements related to innovativeness within their firms. The results are presented in Table 13.

**Table 13**

*Descriptive Analysis of Innovativeness*

Statement	SD	D	N	A	SA	M	SD
In this firm we actively introduce improvements and innovations.	1.20%	3.20%	5.30%	7.30%	83.00%	4.66	0.83
Our business is creative in its methods of operation.	1.60%	2.40%	2.80%	17.40%	75.70%	4.61	0.84
In the last five years, this firm has marketed no new lines of products or services.	27.90%	39.30%	9.70%	12.10%	10.90%	2.43	1.30
This firm constantly experiments with new services or products and original approaches to problem solving rather than imitating methods that other firms have used for solving their problem.	2.00%	13.80%	27.50%	11.30%	45.30%	3.88	1.14
In my firm, changes in product or service lines have been mostly of a minor nature as compared with being quite dramatic	5.70%	24.30%	17.80%	17.00%	35.20%	3.55	1.31
Overall Mean						3.826	

*Note.* SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree;

M = Mean; SD = Standard Deviation

The results show that the majority of respondents (90.3%) agreed that in their firms, they actively introduced improvements and innovations ( $M = 4.66$ ,  $SD = 0.83$ ). These results imply that there was a strong consensus among MSME owners/managers that their firms are proactive in fostering an innovative culture and continuously seeking ways to enhance their products, services, or operations. Similarly, a significant majority (93.1%) of the respondents agreed that their businesses were creative in their methods of operation ( $M = 4.61$ ,  $SD = 0.84$ ), implying that MSME owners or managers perceived their firms as highly creative and innovative in their operational approaches. The low standard deviation indicates consistency in this perception among the respondents, implying that MSMEs in Nairobi City County actively encourage and embrace creative thinking and unconventional problem-solving methods. The consistency of this perception, as indicated by the low percentage of disagreement (4.0%), implies that creativity is widely recognized as a key component of operational success among these firms. This strong emphasis on creativity may contribute positively to the growth and competitiveness of MSMEs in Kenya.

On the other hand, the results show that the majority of respondents (67.2%) disagreed with the statement that "In the last five years, this firm has marketed no new lines of products or services" ( $M = 2.43$ ,  $SD = 1.3$ ). The results indicate that most MSMEs had introduced new product or service lines, but the relatively higher standard deviations suggest variability in their responses. However, the results imply that while innovation is valued, the degree of product or service innovation varies across MSMEs, with some being more active in introducing new offerings than others. This variability may reflect differences in resources, market opportunities, or strategic priorities among MSMEs, which impact their growth trajectories differently.

Furthermore, the results show that 56.6% of respondents agreed that their firm constantly experiments with new services or products and original approaches to problem-solving rather than imitating methods used by other firms ( $M = 3.88$ ,  $SD = 1.14$ ). The moderate level of agreement and higher standard deviation suggest that while a significant portion of MSMEs engage in experimentation and seek novel solutions, there is still a considerable variation in their approaches. This diversity in experimentation indicates that some firms are more inclined to take risks and innovate, potentially leading to different growth outcomes depending on the success of these innovations.

Moreover, 52.2% of respondents agreed that changes in their firm's product or service lines had been quite dramatic rather than minor ( $M = 3.55$ ,  $SD = 1.30$ ). This result, alongside a moderate percentage of disagreement (30.0%) and neutral responses (17.8%), suggests that while a significant number of MSMEs have implemented substantial changes in their offerings, others may have focused on more incremental improvements. These findings imply that dramatic changes likely indicative of radical innovations may drive significant growth for some MSMEs. In contrast, others may experience more gradual growth through continuous, albeit less transformative, innovations.

The study's findings indicate that innovativeness, particularly in the form of active improvements, creativity, and experimentation, plays a critical role in the growth of MSMEs in Kenya. The variations in the degree and nature of innovation across firms may lead to differing growth outcomes, emphasizing the importance of fostering a strong innovative culture to achieve sustained business growth. The results indicate that while some MSMEs undertook significant changes in their services, others made only minor modifications, reflecting the diverse nature of innovation strategies adopted by MSMEs in Nairobi City County.

The results generally revealed a positive perception of innovativeness among MSME owners or their managers, with a strong emphasis on introducing improvements, fostering creativity, and experimenting with new products and services. However, there was variability in the extent and nature of innovation across MSMEs, with some being more proactive and radical in their approaches than others. This diversity in innovation strategies can be attributed to various factors, including industry dynamics, resource availability, and strategic priorities. These findings are consistent with the assertions by Lumpkin and Dess (2001) that innovativeness encompasses methods for developing or adopting new products, services, or processes, as well as technological leadership and R&D in the development of new processes. They also acknowledged the importance of innovativeness as a key component of entrepreneurial orientation (EO), as it enables firms to pursue new opportunities. Similarly, Gathoni et al. (2021), in their study on micro and small enterprises (MSEs) in Kiambu County, Kenya, found that innovativeness as a dimension of EO had a positive effect on MSE growth. In addition, Kiiru et al. (2023) reinforced this finding by demonstrating a statistically significant and positive impact of innovativeness on the performance of small and medium-sized enterprises (SMEs) in the animal feed manufacturing sector in Kenya.

#### **4.4.2 Descriptive Results of Risk-Taking**

The second objective of the study was to assess the impact of risk-taking on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. Risk-taking, as a dimension of entrepreneurial orientation (EO), was measured using five statements. Respondents were asked to indicate the extent to which they agreed or disagreed with statements related to risk-taking within their firms. The results are presented in Table 14.

**Table 14***Descriptive Analysis of Risk-taking*

Statement	SD	D	N	A	SA	M	SD
The term 'risk taker' is considered a positive attribute for people in our business.	2.00%	10.90%	12.10%	10.90%	64.00%	4.21	1.16
People in our business are encouraged to take calculated risks with new ideas.	1.20%	13.80%	13.00%	14.60%	57.50%	4.10	1.16
The top managers of this firm have a strong proclivity for high risk projects (with chances of very high return) rather than low risk projects (with chances of normal and certain rates of return).	3.60%	13.80%	16.20%	10.10%	56.30%	4.05	1.23
When confronted with decision-making situations involving uncertainty, my firm typically adopts a cautious, "wait-and-see" posture in order to minimize the probability of making costly decisions	9.30%	46.20%	15.80%	10.90%	17.80%	2.91	1.30
The top managers of my firm prefer to study a problem thoroughly before deploying resources to solve it instead of being quick to spend money on potential solutions if problems are holding us back.	1.60%	11.30%	11.70%	8.10%	67.20%	4.26	1.14
Overall Mean						3.904	

*Note.* SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree; M = Mean; SD = Standard Deviation

The results in Table 14 show that the majority of respondents (74.9%) agreed that the term 'risk taker' is considered a positive attribute for people in their business ( $M = 4.21$ ,  $SD = 1.16$ ). These results imply that MSME owners or managers generally perceive risk-

taking as a desirable quality within their firms, suggesting a culture that encourages and values calculated risk-taking behaviors. The low percentage of disagreement (12.9%) further indicates that this perception is widespread among MSMEs in Kenya.

Similarly, most respondents (72.1%) agreed that people in their business are encouraged to take calculated risks with new ideas ( $M = 4.1$ ,  $SD = 1.16$ ). This implies that MSMEs in Nairobi City County are promoting a risk-taking mindset and creating an environment that supports the exploration of new and innovative ideas, even if they involve some level of risk. The consistency of this perception, as indicated by the low percentage of disagreement (15.0%), suggests that encouraging calculated risks is a common practice among these firms, which could contribute to their growth and innovation.

Furthermore, 66.4% of respondents agreed that the top managers of their firms have a strong proclivity for high-risk projects with chances of very high returns, rather than low-risk projects with normal and certain rates of return ( $M = 4.05$ ,  $SD = 1.23$ ). This result suggests a general willingness among MSME managers to accept higher levels of risk in pursuit of potentially greater rewards, reflecting an entrepreneurial and risk-taking orientation within these firms. The relatively small percentage of respondents who disagreed (17.4%) further supports this finding, highlighting a prevalent entrepreneurial spirit among these managers.

In contrast, only a small proportion (28.7%) of respondents agreed that, when faced with decision-making situations involving uncertainty, their firms typically adopt a cautious, 'wait-and-see' approach to minimize the risk of costly outcomes ( $M = 2.9$ ,  $SD = 1.3$ ). This suggests that most MSMEs in Kenya tend to be proactive in their decision-making and are willing to take calculated risks, rather than defaulting to a conservative, risk-averse stance. The relatively high percentage of disagreement (55.5%) further supports

this interpretation, indicating that caution is not the prevailing strategy within these firms.

Additionally, nearly three-quarters (75.3%) of the respondents agreed that the top managers of their firms prefer to study a problem thoroughly before deploying resources to solve it, instead of being quick to spend money on potential solutions if problems are holding them back ( $M = 4.26$ ,  $SD = 1.14$ ). This suggests that while these firms are not risk-averse, they value thorough analysis and strategic planning before committing resources, which could help mitigate risks and ensure more effective problem-solving.

The findings indicate that risk-taking, particularly in the form of calculated risks and strategic planning, plays a significant role in the decision-making processes and growth of MSMEs in Kenya. The emphasis on risk-taking, coupled with careful analysis, reflects a balanced approach to managing uncertainty and pursuing opportunities, which is likely to contribute positively to the overall performance and sustainability of these firms. This finding implies that while MSMEs in Kenya exhibit a risk-taking orientation, they also exercise due diligence and prudence in their decision-making processes, carefully evaluating potential solutions before committing resources.

These descriptive analysis results concur with the conclusion arrived at by Lumpkin and Dess (1996) that all business undertakings are associated with some degree of risks ranging from “safe” levels that have little uncertainty and few resource commitment risks to highly risky actions entailing projects with high uncertainty and large financial and other resource commitments. A study by Kariuki and Mungai (2024) examining the effect of entrepreneurial orientation on the performance of micro, small, and medium-sized enterprises in Nairobi City County confirmed that a firm's risk-taking ability is essential for its performance. Similarly, Machuki (2021), in a study on the influence of

entrepreneurial orientation on the performance of small-scale farming businesses in Kisii County, found that risk-taking had a significant positive impact on business performance.

#### 4.4.3 Descriptive Results of Proactiveness

The third objective of the study was to analyze the contribution of proactiveness to the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. Owners or managers of these enterprises were asked to indicate their level of agreement with a series of statements related to proactiveness, and their responses are presented in Table 15.

**Table 15**  
*Descriptive Analysis of Proactiveness*

Statement	SD	D	N	A	SA	Mean	Std. Dev.
In dealing with its competitors, this firm typically initiates actions which competitors then respond.	5.30%	25.90%	15.00%	17.40%	36.40%	3.54	1.33
In dealing with its competitors, my firm is often the first business to introduce new products/services.	0.80%	15.80%	19.40%	24.30%	39.70%	3.87	1.08
My firm excels at identifying opportunities	1.20%	4.00%	6.10%	12.10%	76.50%	4.58	0.87
The owner/manager of this firm have a strong tendency to “follow the leader” in introducing new products or ideas	4.50%	12.10%	6.90%	16.60%	59.90%	4.19	1.17
In dealing with competitors, this firm typically avoid confrontation with competitors and allow them to act	9.30%	38.90%	15.80%	15.00%	21.10%	3.08	1.31
Overall Mean						3.852	

*Note.* SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree; M = Mean; SD = Standard Deviation

The descriptive analysis results in Table 15 show that the majority of respondents (53.8%) agreed that in dealing with competitors, their firm typically initiates actions which competitors then respond to ( $M = 3.54, SD = 1.33$ ). This suggests that a significant portion of MSMEs in Nairobi City County adopt a proactive stance, taking the lead in initiating actions within their respective markets rather than merely reacting to competitors' moves. The relatively low percentage of disagreement (31.2%) further supports this finding, indicating that many MSMEs prefer to take the initiative in competitive environments.

Additionally, 64.0% of respondents agreed that their firms are often the first businesses to introduce new products or services when dealing with competitors ( $M = 3.87, SD = 1.08$ ). This result indicates a strong proactive orientation among MSMEs, with a significant number of firms actively seeking to be first-movers in introducing new offerings to the market, potentially gaining a competitive advantage. The consistency of this perception, as reflected in the relatively low percentage of disagreement (16.6%), underscores the importance of being a market leader in product innovation among these firms.

Similarly, a vast majority (88.6%) of respondents agreed that their firm excels at identifying opportunities ( $M = 4.58, SD = 0.87$ ). This finding suggests a strong consensus among MSME owners/managers regarding their firms' ability to identify and capitalize on emerging market opportunities proactively. The high mean score and low standard deviation further indicate that this capability is widely recognized and valued across the firms studied, highlighting a critical success factor for the growth and sustainability of MSMEs in Nairobi City County.

Moreover, most respondents (76.5%) agreed that the owners/managers of their firms have a strong tendency to "follow the leader" in introducing new products or ideas ( $M =$

4.19,  $SD = 1.17$ ). This interesting finding suggests that while many MSMEs take a proactive approach in some areas, a significant number also prefer to adopt successful strategies that their competitors have already proven effective. This "follow the leader" approach may be a strategic choice to mitigate risks associated with innovation while remaining competitive.

Interestingly, only 36.1% of respondents agreed that in dealing with competitors, their firm typically avoids confrontation and allows competitors to act first ( $M = 3.08$ ,  $SD = 1.31$ ). This suggests that most MSMEs in Nairobi City County do not adopt a passive approach in competitive situations. The higher percentage of disagreement (48.2%) suggests that many MSMEs prefer to engage actively in the market rather than avoiding confrontation, which may reflect a competitive and assertive business culture.

The findings indicate that MSMEs in Nairobi City County generally exhibit a proactive and competitive orientation, with many firms taking the initiative in the market, excelling at identifying opportunities, and sometimes following proven strategies. This balanced approach, which involves leading in some areas while adopting a "follow the leader" strategy in others, may help these firms navigate the complexities of the competitive market environment effectively. These results suggest that a greater proportion of MSMEs in Nairobi City County are willing to confront competitors and take action within their respective markets.

These results generally indicate that MSMEs in Nairobi City County exhibit a strong proactive orientation, characterized by a tendency to introduce new products or services, identify opportunities, and confront competitors. However, there is also evidence of a pragmatic approach, where MSMEs occasionally follow established market leaders, potentially as a risk mitigation strategy or to leverage proven success. These descriptive analysis results are generally consistent with the observation by Rauch et al. (2009) that

proactiveness is an “opportunity-seeking, forward-looking perspective characterized by the introduction of new services and products ahead of the competition and acting in anticipation of future demand”. Furthermore, Lumpkin and Dess's (1996) assertion that a proactive firm is a leader rather than a follower in pursuing new opportunities was reflected in the responses generated by this study. Additionally, Dess and Lumpkin (2005) emphasized the importance of proactiveness in creating a competitive advantage, as competitors are compelled to respond to successful initiatives.

They further stressed that these firms are involved in organization, monitoring of trends, identification of future needs of existing customers, and anticipation of changes in demand to create new venture opportunities. Elaborating further, Onyango et al. (2024) conducted a study on SMEs within Kenya’s public transport sector and confirmed a positive relationship between proactiveness and business growth. Similarly, Kivuitu and Karugu (2020) reported comparable findings in their study, although their focus was specifically on SMEs operating within Nairobi County.

#### **4.4.4 Descriptive Results of Autonomy**

The fourth objective of the study was to explore the role of autonomy in the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. Autonomy, as a dimension of entrepreneurial orientation (EO), was measured using a series of five statements. Respondents were asked to indicate the extent to which they agreed or disagreed with statements related to autonomy within their firms. The results are presented in Table 16.

**Table 16***Descriptive Analysis of Autonomy*

Statement	SD	D	N	A	SA	M	SD
My firm's employees are given freedom and independence in doing their work without depending on the owner/manager direction.	0.80%	33.20%	15.00%	10.50%	40.50%	3.52	1.30
In this firm, individuals and/or teams pursuing business opportunities have to obtain approval from their managers before making decisions	6.90%	14.60%	15.00%	12.60%	51.00%	3.86	1.32
The owner/manager of this firm believes that the best results occur when individuals and/or teams decide for themselves what business opportunities to pursue.	5.30%	15.40%	18.60%	22.70%	38.10%	3.74	1.24
In this firm, the owner/manager (rather than employee initiatives and input) plays a major role in identifying and selecting the entrepreneurial opportunities this firm pursues	4.00%	13.80%	16.20%	19.40%	46.60%	3.88	1.21
Employees in my firm are given authority and responsibility to act alone if they think it is in the best interests of the business	3.60%	31.60%	13.80%	14.60%	36.40%	3.53	1.32
Overall Mean						3.724	

*Note.* SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree; M = Mean; SD = Standard Deviation

The descriptive analysis results in Table 16 show that the majority of respondents (51.0%) agreed that their firms' employees were given freedom and independence in doing their work without depending on the owner/manager's direction (mean = 3.52, *SD* = 1.3). This suggests that a significant portion of MSMEs in Nairobi City County grant their employees autonomy in carrying out their work responsibilities without relying heavily on the owner/manager's guidance. However, a notable percentage of respondents

(33.2%) disagreed, indicating that while autonomy is present, it is not uniformly practiced across all firms.

Furthermore, 63.6% of respondents agreed that, in their firms, individuals and/or teams pursuing business opportunities must obtain approval from their managers before making decisions ( $M = 3.86$ ,  $SD = 1.32$ ). This suggests that, despite the autonomy granted to employees, a significant level of managerial oversight and control remains in the decision-making process, particularly when it comes to pursuing entrepreneurial opportunities.

Additionally, more than half (60.8%) of respondents agreed that the owner/manager of their firms believes that the best results occur when individuals and/or teams decide for themselves what business opportunities to pursue ( $M = 3.74$ ,  $SD = 1.24$ ). This finding suggests that while managerial approval is required, the owners/managers recognize the value of empowering their employees and teams to identify and pursue entrepreneurial opportunities independently. The significant percentage of disagreement (20.7%) suggests that this belief is not universal, but rather prevalent among a majority of firms.

Similarly, most respondents (66.0%) agreed that in their firms, the owners/managers (rather than employee initiatives and input) play a major role in identifying and selecting the entrepreneurial opportunities the firm pursues ( $M = 3.88$ ,  $SD = 1.21$ ). This result suggests that, despite the autonomy granted to employees and the recognition of their ability to identify opportunities, owners or managers retain significant control and influence in the final selection of entrepreneurial opportunities for the firm. This finding highlights a balanced approach where employee input is valued, but the final decision-making authority remains with management.

Furthermore, slightly more than half (51.0%) of respondents agreed that employees in their firms are given the authority and responsibility to act alone if they believe it is in the best interests of the business ( $M = 3.5$ ,  $SD = 1.32$ ). This suggests that while some level of autonomy and trust is placed in employees, this practice is not as widely adopted as other forms of autonomy and decision-making authority. The relatively high percentage of disagreement (35.2%) indicates that a significant portion of firms still prefer to maintain tighter control over decision-making processes. The study's findings indicate that while autonomy and employee empowerment are valued and practiced to varying degrees among MSMEs in Kenya, managerial oversight and control remain important, especially in critical decision-making processes. This balanced approach suggests that while firms recognize the benefits of empowering employees, they also recognize the need to maintain a level of control to ensure alignment with overall business goals. The results indicate a moderate level of autonomy granted to employees in the MSMEs studied, with a balance between empowerment and managerial control.

These descriptive findings concur with observations by Krauss et al. (2005) that individuals or teams exhibiting autonomy are highly motivated to realize their own ideas and visions by expressing their individuality. Lumpkin et al. (2009) also noted that autonomy enables firms to identify and launch new ventures by focusing decision-makers on key aspects, such as customer demand and industry changes. In addition, findings from a study by Messikh (2023) demonstrated a positive influence of entrepreneurial autonomy on the performance of family enterprises in Algeria. Similarly, Usoroh's (2021) research found that autonomy had a positive but statistically insignificant relationship with the growth of SMEs in North-Central Nigeria.

#### 4.4.5 Descriptive Results of Competitive Aggressiveness

The fifth objective of the study was to determine the impact of competitive aggressiveness on the growth of MSMEs in Kenya. Three statements were used to measure the competitive aggressiveness dimension of EO. Respondents were asked to what extent they agreed or disagreed with the statements on competitive aggressiveness. Results are presented in Table 17.

**Table 17**  
*Descriptive Analysis of Competitive Aggressiveness*

Statement	SD	D	N	A	SA	M	SD
In general, our business takes a bold or aggressive approach when competing.	2.40%	14.60%	19.00%	21.10%	42.90%	3.91	1.13
In dealing with competitors, our firm typically adopts a very competitive posture aiming at overtaking the competitors.	1.60%	16.60%	16.60%	18.20%	47.00%	3.98	1.15
Our business competes intensely in our industry	6.90%	8.50%	8.10%	25.50%	51.00%	4.07	1.22
Overall Mean						3.987	

*Note.* SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree; M = Mean; SD = Standard Deviation

The descriptive analysis results in Table 17 show that the majority of respondents (64.0%) agreed that their businesses take a bold or aggressive approach when ( $M = 3.91$ ,  $SD = 1.13$ ). This suggests that most MSMEs in Kenya adopt a competitively aggressive stance in their respective markets. The relatively low percentage of disagreement (17.0%) further supports this finding, indicating that boldness and aggression in competition are common strategies among these firms. Furthermore, the results revealed

that 65.2% of respondents agreed that, in dealing with competitors, their firms typically adopt a very competitive posture aimed at overtaking their competitors ( $M = 3.98$ ,  $SD = 1.15$ ). This indicates that MSMEs in Kenya are highly competitive and aggressive in their approach, actively seeking to outperform and overtake their competitors. The consistency of this behavior across firms suggests that a strong competitive drive is a prevalent characteristic in the industry.

Additionally, a majority (76.5%) of respondents agreed that their businesses compete intensely in their industry ( $M = 4.07$ ,  $SD = 1.22$ ). This finding further reinforces the highly competitive and aggressive nature of MSMEs in Kenya, with firms engaging in intense competition within the industry. The overall high percentage of agreement across these statements highlights the aggressive competitive behavior common among MSMEs in Kenya. These findings point to a strong presence of competitive aggressiveness within the sector. These firms tend to adopt bold, aggressive strategies in their market engagements, focusing on overtaking competitors and competing intensely within the industry. The data reflect a business environment where assertiveness and strategic aggressiveness are key components of success in the MSME sector.

This aggressive and intense competitive stance can be attributed to various factors, such as the need to gain a competitive edge, respond to competitive pressures, or capitalize on emerging market opportunities. These descriptive results imply that MSMEs in Nairobi City County operate in a highly competitive environment, and adopting an aggressive and intense competitive approach is crucial for their survival and growth in the industry. These results reflect the assertions by Dess and Lumpkin (2005) that competitive aggressiveness is characterized by price cutting, sacrificing profitability to gain market share, and aggressive spending to enhance manufacturing or production capacity.

Additionally, the responses from the survey conform with the Lumpkin and Dess' (2001) argument on the approach taken by competitive aggressive firms on confrontation and proclivity to outperform industry rivals. Findings from Kariuki and Mungai's (2024) research revealed a positive influence of competitive aggressiveness on SME performance in Nairobi City County. Similarly, George (2025) surveyed to evaluate the influence of entrepreneurial orientation dimensions on the performance of agro-dealers in Dodoma City. The findings indicated that competitive aggressiveness had a statistically significant and positive effect on business performance.

#### 4.4.6 Descriptive Results of MSME Growth

This study operationalized business growth using three indicators: sales growth, asset growth, and employee growth. Respondents were asked to rate their firm's performance over the previous five years using a five-point Likert scale ranging from 'Much Worse' to 'Much Better.' Table 18 presents the descriptive statistics for perceived growth across these indicators.

**Table 18**

*Descriptive Analysis on Growth*

Statement	Much Worse		Someho w Better		Much Better		Std. Dev.
	0.50%	4.00%	13.50%	15.00%	67.00%	Mean	
SalesGrowth	0.50%	4.00%	13.50%	15.00%	67.00%	4.44	0.91
AssetsGrowth	1.00%	4.00%	14.00%	11.50%	69.50%	4.45	0.94
EmployeesGrowth	1.50%	4.00%	15.70%	15.70%	63.10%	4.35	0.98
Overall Mean						4.413	

The descriptive analysis results in Table 18 indicate that the majority of MSMEs reported positive growth in terms of sales, assets, and the number of employees. Specifically, 82% (67% + 15% of the respondents indicated that their sales growth was better or much better ( $M = 4.44$ ,  $SD = 0.91$ ). This suggests that most MSMEs in Kenya experienced

substantial growth in their sales volumes over the years. Similarly, 81% (69.5% + 11.5% of the respondents reported that their asset growth was better or much better ( $M = 4.45$ ,  $SD = 0.94$ ). This finding indicates that the majority of MSMEs saw a positive increase in their asset base value, which could be attributed to the reinvestment of profits or access to additional financing.

Furthermore, 78.8% (63.1% "much better" and 15.7% "better") of the respondents indicated that their employee growth was better or much better ( $M = 4.35$ ,  $SD = 0.98$ ). This result suggests that a substantial number of MSMEs in Kenya experienced growth in their workforce, which could be a reflection of their expanding operations and increased demand for their products or services. The overall mean score of 4.413 indicates a generally positive growth trend across the three dimensions of sales, assets, and employees among the MSMEs studied.

These descriptive results paint a promising picture of the growth trajectories of MSMEs in Kenya, with most firms reporting significant improvements in key growth indicators over the years. This growth could be attributed to various factors, including effective business strategies, favorable market conditions, access to resources, and a conducive business environment.

#### **4.5 Diagnostic Tests**

When fitting a linear regression model, it is crucial to perform diagnostic tests to verify that the underlying assumptions are met and to evaluate the validity and reliability of the results (Hair, Babin, Anderson, & Black, 2019). These tests help evaluate whether key assumptions, including linearity, normality, homoscedasticity, and independence of errors, are satisfied. Violations of these assumptions can lead to biased or inefficient parameter estimates, invalid statistical inferences, and unreliable predictions. This study

conducted the following diagnostic tests: a test for normality, a test for multicollinearity, and a test for heteroscedasticity. The results and interpretation of these diagnostic tests are discussed in the following section.

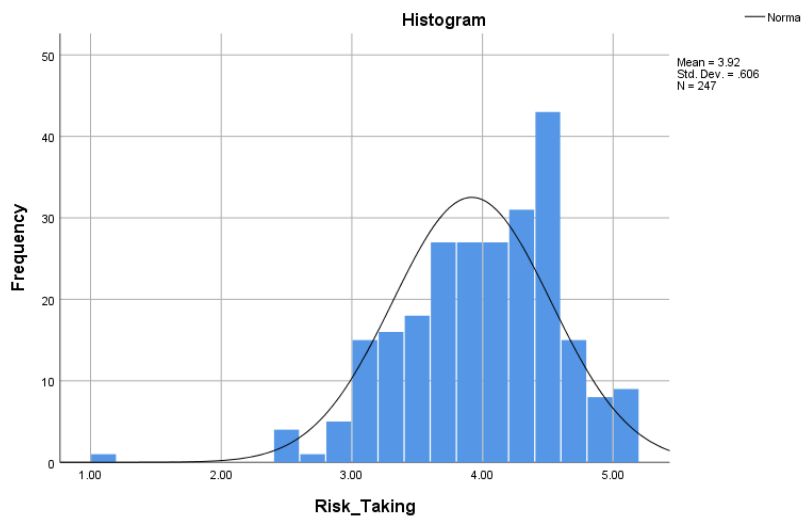
#### **4.5.1 Test for Normality**

Normality measures how far data deviates from the Gaussian distribution by examining the graph and determining if the distribution deviates grossly from a bell-shaped normal distribution. Normality establishes the likelihood that a random variable is normally distributed. It is an assessment of the normality of data in statistical tests. If the tests are non-normal, then the data has outliers, multiple modes, incorrect measuring tools, incorrect distributions, zero/infinite limits, or scanty collections (Singh & Masuku, 2014).

In order to fit a linear model, the dependent variable must follow a normal distribution. This study employed a histogram to assess the normality of the dependent variable, as it is generally accepted that when the dependent variable is normally distributed, the data can be considered to follow a normal distribution (Hair et al., 2019). The use of a histogram is a common approach to visually inspect the normality of a variable's distribution, as it graphically represents the frequency distribution of the data points (Tabachnick & Fidell, 2007). By examining the shape of the histogram, the researcher was able to determine whether the dependent variable deviates significantly from a normal distribution, a key assumption for many parametric statistical techniques, including linear regression analysis. The results are shown on the diagram in Figure 3.

**Figure 2**

*Histogram Showing Normal Curve*



The results, as depicted by the histogram, display a bell-shaped curve, which is characteristic of a normal distribution. The curve is symmetric and centered around the mean value, indicating that the data used in this study were evenly distributed on both sides of the mean. Overall, the shape of the histogram closely resembles the theoretical normal curve, providing evidence that the dependent variable follows a normal distribution; thus, the data were normally distributed.

#### **4.5.2 Test for Multicollinearity**

Multicollinearity exists when two or more predictor variables in a multiple regression model are highly correlated (Daoud, 2017). A set of variables is perfectly multicollinear if there exists one or more exact linear relationships among some of the variables. The tolerance of the variable and the VIF value were used in the study, where values greater than 0.2 for Tolerance and values less than 10 for VIF indicated that there was no multicollinearity (Senaviratna &Cooray, 2019). The results are presented in Table 19.

**Table 19***Multicollinearity Test Using Tolerance and VIF*

	Collinearity Statistics	
	Tolerance	VIF
Innovativeness	0.736	1.359
Risk-taking	0.881	1.135
Proactiveness	0.603	1.658
Autonomy	0.711	1.407
Competitive Aggressiveness	0.875	1.142

Based on the results presented in Table 19, all the variables had tolerance values greater than 0.2 and VIF values less than 10, indicating the absence of multicollinearity among the independent variables. Specifically, the tolerance values ranged from 0.603 for proactiveness to 0.881 for risk-taking, while the VIF values varied from 1.135 for risk-taking to 1.658 for proactiveness. These tolerance and VIF values suggest that the independent variables are not highly correlated with each other. The lack of multicollinearity is desirable, as it ensures that the regression coefficients are reliably estimated and that the independent effects of each variable on the dependent variable can be isolated and interpreted correctly.

#### **4.5.3 Test of Heteroscedasticity**

The Breusch-Pagan test was used to evaluate the null hypothesis that the error variance remains constant against the alternative hypothesis that the error variances are not constant (Breusch & Pagan, 1979; Gujarati & Porter, 2009). Breusch-Pagan tests the null hypothesis that heteroscedasticity is not present. If the p-value is greater than 0.05, the null hypothesis is rejected. The alternative hypothesis is that the data suffer from Heteroscedasticity. The results are presented in Table 20.

**Table 20**

*Heteroscedasticity Results*

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Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Ho: Constant variance

Variables: fitted values of MSME Growth

---

chi2 (1)	= 5.81
Prob > chi2	=0.1086

---

The test results in Table 20 show a chi-square value of 5.81 with a corresponding  $p$ -value of 0.1086. Since the  $p$ -value (0.1086) is greater than the significance level of 0.05, the study fails to reject the null hypothesis of constant variance, also known as homoscedasticity. This result implies that the assumption of homoscedasticity is not violated, implying that the error variances remain constant across the range of fitted values of the dependent variable, firm growth. Consequently, the data does not suffer from heteroscedasticity, a condition that could potentially lead to biased or inefficient parameter estimates in the regression model.

#### **4.6 Factor Analysis**

Factor analysis is a statistical technique used to reduce a large number of observed and interrelated variables into a smaller number of underlying factors or dimensions. It classifies variables based on shared variance and helps construct multi-item scales, each representing abstract theoretical constructs (Nachmias & Nachmias, 1996). This technique extracts the maximum common variance and reorganizes items into more precise groups with minimal loss of information (Bryman & Bell, 2015; Hair et al., 2019).

The resulting factor scores can then be used as composite indices for further analysis (Field, 2018). Although factor analysis is not formally part of the general linear model (GLM), it shares the assumption of linearity and is conceptually related in its use of

inter-variable relationships. The method assumes that variables are linearly related, free from multicollinearity, relevant to the constructs being studied, and sufficiently correlated to justify factor extraction (Tabachnick & Fidell, 2007; Field, 2018).

Cooper and Schindler (2013) suggested that variables with a factor loading of 0.5 are acceptable. However, a minimum value of 0.4 for factor loading is also allowed, as suggested by other researchers. Similarly, Tabachnick and Fidell (2007) described factor loading as follows: 0.32 (poor), 0.45 (fair), 0.5 (good), 0.63 (very good), or 0.7 (excellent). Factor analysis was conducted for the study to identify correlated variables and reduce redundancy in the data. It also helped to analyze the structure of the interrelationships by defining the factors. Factor analysis was conducted for all the study variables (innovativeness, risk-taking, proactiveness, autonomy, competitive aggressiveness, and growth). Factor analysis results are presented in the following section.

#### **4.6.1 Factor Analysis on Innovativeness**

Factor analysis was conducted on all five statements of the variable innovativeness. According to Tabachnick and Fidell (2007), variables with factor loading values greater than 0.5 are considered good. Factor loading for innovativeness is presented in Table 21.

**Table 21***Innovativeness Factor Analysis Results*

Innovativeness Statements	Component 1
In this firm, we actively introduce improvements and innovations.	0.825
Our business is creative in its methods of operation.	0.822
In the last five years, this firm has marketed no new lines of products or services.	0.591
This firm constantly experiments with new services or products and original approaches to problem-solving, rather than imitating methods that other firms have used to solve their problems.	0.695
In my firm, changes in product or service lines have been mostly of a minor nature, as compared with being quite dramatic	0.894

Extraction Method: Principal Component Analysis.

a 1-component extracted.

The sampling adequacy for the scale was found to be adequate, with only one component extracted through Principal Component Analysis. The factor loadings ranged from 0.591 to 0.894, capturing a cumulative variance that reflects the firm's innovativeness. Specifically, the firm's active introduction of improvements and innovations, as well as its creativity in operational methods, both exhibited a factor loading of 0.825. Higher loadings were observed for the firm's marketing behavior over the last five years, during which it has not introduced new lines of products or services, and its tendency to experiment with new services, products, and original problem-solving approaches. Additionally, changes in product or service lines were mostly of a minor nature, with a loading of 0.894. The entire five items were, therefore, retained in the computation of the innovativeness score.

#### 4.6.2 Factor Analysis on Risk-taking

Factor analysis was conducted on the statements related to the variable risk-taking, and the factor loading results are presented in Table 22.

**Table 22**

*Risk-taking Factor Analysis Results*

Risk-taking Items	Component 1
The term 'risk taker' is considered a positive attribute for people in our business.	0.603
People in our business are encouraged to take calculated risks with new ideas.	0.897
The top managers of this firm have a strong proclivity for high-risk projects (with chances of very high returns) rather than low-risk projects (with chances of normal and certain rates of return).	0.752
When confronted with decision-making situations involving uncertainty, my firm typically adopts a cautious, "wait-and-see" posture in order to minimize the probability of making costly decisions	0.681
The top managers of my firm prefer to study a problem thoroughly before deploying resources to solve it, rather than being quick to spend money on potential solutions if problems are holding us back.	0.633

Extraction Method: Principal Component Analysis.

a 1-component extracted.

The sampling adequacy for the scale was found to be adequate, with only one component extracted through Principal Component Analysis. The factor loadings ranged from 0.603 to 0.897, indicating the underlying construct of risk-taking within the firm. Specifically, the item indicating that 'People in our business are encouraged to take calculated risks with new ideas' exhibited the highest factor loading of 0.897. This was followed by the item reflecting the top managers' strong proclivity for high-risk projects with potentially high returns, which had a factor loading of 0.752. The firm's cautious approach to

decision-making in uncertain situations, aimed at minimizing costly errors, showed a factor loading of 0.681. The preference of top managers to thoroughly study problems before committing resources also loaded at 0.633. Finally, the perception of 'risk taker' as a positive attribute in the business had a factor loading of 0.603. The five items were therefore retained in the computation of the risk-taking score.

#### 4.6.3 Factor Analysis on Proactiveness

Factor analysis was conducted on the statements related to the variable proactiveness, and the factor loading results are presented in Table 23.

**Table 23**

*Proactiveness Factor Analysis Results*

Proactiveness Item	Component
	1
In dealing with its competitors, this firm typically initiates actions that competitors then respond to.	0.829
In dealing with its competitors, my firm is often the first business to introduce new products/services.	0.754
My firm excels at identifying opportunities	0.881
The owner/manager of this firm has a strong tendency to “follow the leader” in introducing new products or ideas	0.793
In dealing with competitors, this firm typically avoids confrontation and allows them to act.	0.695

Extraction Method: Principal Component Analysis.  
a 1-component extracted.

The sampling adequacy for the scale was found to be adequate, with only one component extracted through Principal Component Analysis. The factor loadings ranged from 0.695 to 0.881, effectively presenting the underlying construct of proactiveness within the firm. The item 'My firm excels at identifying opportunities' exhibited the highest factor

loading of 0.881, indicating the firm's strong capability in opportunity recognition. This was followed by the item 'In dealing with its competitors, this firm typically initiates actions which competitors then respond to,' with a factor loading of 0.829, highlighting the firm's tendency to take the lead in competitive actions. The perception that the owner/manager of the firm has a strong tendency to “follow the leader” in introducing new products or ideas showed a factor loading of 0.793, while the firm's position as often being the first to introduce new products/services had a factor loading of 0.754. Lastly, the firm's approach to avoiding confrontation with competitors and allowing them to act loaded at 0.695. The five items were therefore retained in the computation of the proactiveness score.

#### **4.6.4 Factor Analysis on Autonomy**

Factor analysis was conducted on the statements related to the variable autonomy, and the factor loading results are presented in Table 24.

**Table 24**

*Autonomy Factor Analysis Results*

Autonomy Items	Component 1
My firm’s employees are given freedom and independence in doing their work without depending on the owner/manager direction.	0.783
In this firm, individuals and/or teams pursuing business opportunities have to obtain approval from their managers before making decisions	0.811
The owner/manager of this firm believes that the best results occur when individuals and/or teams decide for themselves what business opportunities to pursue.	0.614
In this firm, the owner/manager (rather than employee initiatives and input) play a major role in identifying and selecting the entrepreneurial opportunities this firm pursues	0.672
Employees in my firm are given authority and responsibility to act alone if they think it to be in the best interests of the business	0.618

Extraction Method: Principal Component Analysis.  
a 1 component extracted.

The sampling adequacy for the scale was found to be adequate, with only one component extracted through Principal Component Analysis. The factor loadings ranged from 0.614 to 0.811. The item 'In this firm, individuals and/or teams pursuing business opportunities have to obtain approval from their managers before making decisions' exhibited the highest factor loading of 0.811, indicating the firm's structured approach to decision-making. This was closely followed by the item 'My firm's employees are given freedom and independence in doing their work without depending on the owner/manager direction,' which had a factor loading of 0.783, reflecting a significant level of autonomy granted to employees. The role of the owner/manager in identifying and selecting entrepreneurial opportunities, rather than relying on employee initiatives, showed a factor loading of 0.672, while the belief that the best results occur when individuals and/or teams decide for themselves what business opportunities to pursue loaded at 0.614. Finally, the item 'Employees in my firm are given authority and responsibility to act alone if they think it to be in the best interests of the business' had a factor loading of 0.618. Therefore, all five items were retained in the computation of the autonomy score.

#### **4.6.5 Factor Analysis on Competitive Aggressiveness**

Factor analysis was conducted on the statements of the variable "competitive aggressiveness," and the factor loading results are presented in Table 25.

**Table 25***Competitive Aggressiveness Factor Analysis Results*

	Component
Competitive Aggressiveness Items	1
In general, our business takes a bold or aggressive approach when competing.	0.867
In dealing with competitors, our firm typically adopts a competitive posture aimed at overtaking them.	0.749
Our business competes intensely in the manufacturing industry	0.851

Extraction Method: Principal Component Analysis.  
a 1-component extracted.

The sampling adequacy for the scale was found to be adequate, with only one component extracted through Principal Component Analysis. The factor loadings ranged from 0.749 to 0.867, effectively capturing the underlying construct of competitive aggressiveness within the firm. The item 'In general, our business takes a bold or aggressive approach when competing' exhibited the highest factor loading of 0.867, indicating the firm's strong inclination towards an assertive competitive strategy. This was followed by the item 'Our business competes intensely in the manufacturing industry,' which had a factor loading of 0.851, highlighting the firm's vigorous competitive behavior within its industry. Lastly, the item 'In dealing with competitors, our firm typically adopts a very competitive posture, aiming at overtaking the competitors' showed a factor loading of 0.749. The entire three items were therefore retained in the computation of the competitive aggressiveness score.

#### **4.6.6 Factor Analysis on Growth**

Factor analysis was conducted on the statements of the dependent variable, the firm's growth, and the factor loading results are presented in Table 26.

**Table 26***Growth Factor Analysis Results*

Growth Items	Component
	1
SalesGrowth	0.768
AssetsGrowth	0.761
EmployeesGrowth	0.676

The sampling adequacy for the scale was found to be adequate, with only one component extracted through Principal Component Analysis. The factor loadings ranged from 0.676 to 0.768, effectively capturing the underlying construct of firm growth. The item 'Sales Growth' exhibited the highest factor loading of 0.768, indicating that this measure is the most significant indicator of growth within the firm. This was closely followed by 'Assets Growth,' which had a factor loading of 0.761, reflecting the firm's expansion in asset accumulation. Lastly, the item 'Employees Growth' showed a factor loading of 0.676, indicating the firm's increase in workforce size as a contributor to its overall growth. The entire three items were therefore retained in the computation of the firm growth score.

**4. 7 Correlation Analysis**

In this study, Pearson's product-moment correlation analysis was conducted to examine the strength, direction, and linearity of the relationship between each independent variable and the dependent variable, MSME growth. The correlation coefficient ( $r$ ) ranges from -1 (indicating a perfect negative linear relationship) to +1 (indicating a perfect positive linear relationship), with 0 indicating no linear relationship. This analysis is useful for assessing linear associations and identifying potential multicollinearity among variables before regression analysis (Field, 2018; Hair et al., 2019).

According to Cohen (1988), correlation coefficients of approximately 0.10, 0.30, and 0.50 represent small, medium, and large effect sizes, respectively. Table 27 presents the results of the correlation analysis.

**Table 27**

*Correlation Analysis*

		MSME Growth	Innovativeness	Risk-taking	Proactiveness	Autonomy	Competitive Aggressiveness
MSME Growth	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	247					
Innovativeness	Pearson Correlation	.452**					
	Sig. (2-tailed)	.000					
	N	247	247				
Risk-taking	Pearson Correlation	.529**	.145*				
	Sig. (2-tailed)	.001	.023				
	N	247	247	247			
Proactiveness	Pearson Correlation	.631**	.290**	.142*			
	Sig. (2-tailed)	.000	.000	.026			
	N	247	247	247	247		
Autonomy	Pearson Correlation	-.576**	.220**	.170**	.481**		
	Sig. (2-tailed)	.000	.001	.007	.000		
	N	247	247	247	247	247	
Competitive Aggressiveness	Pearson Correlation	.318**	.127*	.377**	.122	.089	
	Sig. (2-tailed)	.000	.047	.000	.055	.162	
	N	247	247	247	247	247	247

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

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

As shown in Table 27, innovativeness exhibited a moderate, positive, and statistically significant correlation with MSME growth in Kenya ( $r = 0.452, p < 0.01$ ). This finding suggests that MSMEs with higher levels of innovativeness—reflected in their ability to

create an innovative culture, develop new products or services, and apply creative solutions tend to achieve higher growth outcomes. These results align with the findings of Oni et al. (2019) and Supeni et al. (2023), who similarly reported that innovativeness exerts a significant positive influence on firm performance and growth.

As indicated in Table 27, risk-taking exhibited a moderate, positive, and statistically significant correlation with MSME growth ( $r = 0.529, p < 0.01$ ). This suggests that while risk-taking contributes to firm growth, it operates in conjunction with other determinants of performance. MSMEs that are willing to take calculated risks—such as venturing into new markets, investing in innovation, or adopting novel strategies—tend to achieve stronger growth outcomes than those that are overly cautious. However, excessive risk-taking without proper assessment may undermine stability and sustainability. These findings align with those of Adim and Bassey (2022) and Okangi (2019), who reported that entrepreneurial risk-taking positively influences firm performance and profitability in small business contexts.

As indicated in Table 27, risk-taking exhibited a moderate, positive, and statistically significant correlation with MSME growth ( $r = 0.529, p < 0.01$ ). This suggests that while risk-taking contributes to firm growth, it operates alongside other determinants of performance. MSMEs that are willing to take calculated risks—such as venturing into new markets, investing in innovation, or adopting novel strategies—tend to achieve stronger growth outcomes than those that are overly cautious. However, excessive risk-taking without proper assessment may undermine stability and sustainability. These findings align with those of Adim and Bassey (2022) and Okangi (2019), who reported that entrepreneurial risk-taking has a positive influence on firm performance and profitability in small business contexts.

The results further demonstrate a substantial and statistically significant relationship between proactiveness and MSME growth in Kenya ( $r = 0.631, p < 0.01$ ). This strong positive association implies that firms exhibiting proactive behaviour such as anticipating market changes, introducing new products or services, and responding swiftly to emerging opportunities tend to realize higher growth outcomes. Proactiveness enhances a firm's strategic responsiveness and strengthens its competitive position, enabling sustained performance in dynamic environments. These results are consistent with Dess and Lumpkin (2005), who emphasized proactiveness as central to achieving competitive advantage, and with Cheruiyot and Mang'ana (2023), who found that proactive orientation significantly improves firm performance.

As indicated in Table 27, autonomy exhibited a moderate, negative, and statistically significant correlation with MSME growth in Kenya ( $r = -0.576, p < 0.01$ ). This suggests that greater levels of employee autonomy may be associated with reduced growth outcomes. The negative association does not imply causation but may reflect potential challenges arising from over-delegation or insufficient central coordination in decision-making. In contexts where strategic direction and control are weak, autonomy might dilute managerial oversight and hinder consistent implementation of growth strategies. This result contrasts with previous findings by Pratonno et al. (2018) and Messikh (2023), who reported positive effects of autonomy on firm performance in different environments, suggesting that the influence of autonomy may be context-dependent.

The results further demonstrate a weak but statistically significant positive correlation between competitive aggressiveness and MSME growth in Kenya ( $r = 0.318, p < 0.01$ ). This modest relationship indicates that while competitive aggressiveness contributes to growth, its impact is relatively limited compared to other entrepreneurial factors. MSMEs that actively challenge competitors and pursue market opportunities may

achieve incremental growth gains, but aggressive competition alone is unlikely to sustain long-term success. Consistent with Lumpkin and Dess (1996), competitive aggressiveness reflects a firm's tendency to directly and intensely challenge rivals to improve market position. Supporting evidence from Aigboje (2018) and George (2025) similarly shows that competitive aggressiveness can enhance firm outcomes when balanced with strategic adaptability and innovation.

#### **4.8 Linear Regression Analysis Results**

The main objective of this study was to examine the relationship between entrepreneurial orientation (EO) and the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. To achieve this, five hypotheses were formulated to test the effect of each EO dimension innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness on the growth of MSMEs. Linear regression analysis was employed as it enables the identification and quantification of statistical relationships between independent and dependent variables, thereby assessing how variations in EO dimensions explain differences in MSME growth (Hair et al., 2019).

Hypothesis testing was conducted at a 95% confidence level ( $p < 0.05$ ,  $p < 0.01$ , and  $p < 0.10$ ) using  $t$ -values to determine the statistical significance of each predictor. A hypothesis was rejected if the  $p$ -value was less than or equal to 0.05, indicating a significant relationship between the independent and dependent variables. Conversely, hypotheses with  $p$ -values greater than 0.05 were not rejected, suggesting insufficient evidence to support a significant relationship.

In addition to  $t$ -values, the analysis incorporated other key statistical measures— $R^2$ ,  $F$ -statistics, and standardized beta coefficients ( $\beta$ ) to provide a comprehensive assessment of the model's explanatory power and predictor influence. The coefficient of determination ( $R^2$ ) quantified the proportion of variance in MSME growth explained by

the EO dimensions, while the  $F$ -statistic tested the overall model significance. Standardized beta coefficients ( $\beta$ ) were used to evaluate the relative contribution of each EO dimension to MSME growth. The regression analysis results for each objective and corresponding hypothesis are presented in the subsequent sections.

#### 4.8.1 Innovativeness and growth of Micro, Small, and Medium Enterprises in Kenya

The first objective of the study was to assess the impact of innovativeness on the growth of MSMEs in Kenya. This section presents the results of a regression analysis examining the effect of innovativeness on the growth of MSMEs. It also includes the results of hypothesis testing.

The study conducted a regression analysis to determine the relationship between innovativeness and the growth of MSMEs. Regression analysis was done based on the coefficients of the linear regression model. The regression model summary is presented in Table 28.

**Table 28**

*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.452a	0.204	0.201	0.72527

a. Predictors: (Constant), Innovativeness

The results in Table 28 show a coefficient of determination ( $R^2$ ) of 0.204, indicating that innovativeness explains approximately 20.4% of the variation in MSME growth. The adjusted  $R^2$  value of 0.201 suggests that, after accounting for the constant term, innovativeness alone explains about 20.1% of the variation in growth, while the remaining proportion is attributable to other factors not included in the model. These

findings suggest that innovativeness is a significant explanatory factor for MSME growth, although additional determinants beyond the model also contribute substantially to overall performance. The subsequent analysis, presented in Table 29, reports the ANOVA results for this model.

**Table 29**

*Analysis of Variance (ANOVA)*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.065	1	33.065	62.86	.000 <sup>b</sup>
	Residual	128.873	245	0.526		
	Total	161.938	246			

a. Dependent Variable: MSME Growth

b. Predictors: (Constant), Innovativeness

The results indicate that the model was statistically significant in explaining the relationship between innovativeness and MSME growth, as evidenced by a *p*-value of 0.000. This provides strong evidence that innovativeness is a significant predictor of MSME growth. The findings underscore the importance of cultivating an innovative culture and continually introducing new products, services, and processes as strategic mechanisms for achieving sustainable growth and maintaining competitiveness. The regression coefficient results for innovativeness and MSME growth are presented in Table 30.

**Table 30***Regression Coefficient Result*

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	$\beta$		
1	(Constant)	2.466	0.239		10.311	0.000
	Innovativeness	0.557	0.070	0.452	7.928	0.000

a. Dependent Variable: MSME Growth

The revised model became:

$$\text{Growth of MSMEs (Y)} = 2.466 + 0.557x_1$$

Where:

Y=Growth of MSMEs

$X_1$ =Innovativeness

The regression coefficient results presented in Table 30 show a positive and statistically significant relationship between innovativeness and MSME growth ( $\beta = 0.452, p = .001$ ).

This suggests that firms that foster an innovative culture and continuously introduce new products, services, or processes tend to achieve stronger growth outcomes. These findings are consistent with those of Ringo et al. (2022), Waithaka (2017), and Oni et al. (2019), who emphasized that innovativeness enhances business performance and competitiveness. Based on these findings, the null hypothesis ( $H_{01}$ ) was rejected, confirming that innovativeness has a statistically significant relationship with MSME growth in Kenya.

Having established that innovativeness significantly contributes to MSME growth, the analysis next examined the influence of other entrepreneurial orientation dimensions, beginning with risk-taking. Risk-taking reflects a firm's propensity to pursue opportunities under conditions of uncertainty and is a key behavioural component of

entrepreneurial strategy. The model summary and ANOVA results assessing the relationship between risk-taking and MSME growth are presented in Tables 31 and 32.

#### 4.8.2 Risk-taking and Growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya

The second objective of this study was to evaluate the influence of risk-taking on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. This section presents the results of a regression analysis examining the impact of risk-taking on MSME growth, along with the corresponding hypothesis test outcomes.

A simple linear regression analysis was conducted to determine the nature and strength of the relationship between risk-taking and the growth of MSMEs. The model summary results are presented in Table 31.

**Table 31**

*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.648a	0.420	0.381	0.81165

a. Predictors: (Constant), Risk-taking

The results in Table 31 show a coefficient of determination ( $R^2$ ) of 0.420, indicating that risk-taking explains approximately 42.0% of the variation in MSME growth in Kenya. The adjusted  $R^2$  value of 0.381 suggests that, after accounting for the constant term, risk-taking alone explains about 38.1% of the observed variation, while the remaining proportion is attributable to other factors not captured in the model. These findings suggest that risk-taking is a moderate yet important explanatory factor for MSME growth, accounting for approximately two-fifths of the variation in performance outcomes. The fact that nearly 60% of the variation remains unexplained indicates that

other variables likely exert a significant influence on MSME growth. Overall, the results suggest that while risk-taking contributes meaningfully to growth, it should be balanced with other strategic and operational factors to achieve sustained performance. The subsequent analysis, presented in Table 32, reports the ANOVA results for this model.

**Table 32**

*Analysis of Variance (ANOVA)*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.838	1	6.838	10.802	.001 <sup>b</sup>
	Residual	155.1	245	0.633		
	Total	161.938	246			

a. Dependent Variable: MSME Growth

b. Predictors: (Constant), Risk-taking

The results show that the model is statistically significant in explaining the effect of risk-taking on the growth of MSMEs, as indicated by a p-value of 0.001. This provides evidence that risk-taking is a significant predictor of MSME growth in the country. The F-statistic of 10.802 and the corresponding *p* value of .001 suggest that the variation in MSME growth explained by risk-taking is unlikely to have occurred by chance. These findings highlight the significance of risk-taking in the growth strategies of MSMEs in Kenya. Table 33 presents the regression coefficient results for the relationship between risk-taking and growth.

**Table 33***Regression Coefficient Result*

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients $\beta$	t	Sig.
1	(Constant)	3.249	0.332		9.789	0.000
	Risk-taking	0.275	0.084	0.205	3.287	0.001

a. Dependent Variable: MSME Growth

The revised model became:

$$\text{Growth of MSMEs (Y)} = 3.249 + 0.275X_2$$

Where:

Y= Growth of MSMEs

X<sub>2</sub>=Risk-taking

The results show a positive and statistically significant relationship between risk-taking and MSME growth ( $\beta = 0.205$ ,  $p = .001$ ). This indicates that enterprises engaging in calculated risk-taking tend to achieve higher growth outcomes. However, the moderate coefficient suggests that risk-taking works alongside other factors to influence growth. These results align with the findings of Adim and Bassey (2022) and Okangi (2019), who reported that entrepreneurial risk-taking positively influences firm performance. Based on these findings, the null hypothesis ( $H_{01}$ ) was rejected, confirming a statistically significant relationship between risk-taking and the growth of MSMEs in Kenya.

Building on the evidence that risk-taking significantly influences the growth of MSMEs, the next analysis focused on the third entrepreneurial orientation dimension proactiveness. Proactiveness represents a firm's forward-looking tendency to anticipate market changes, seize emerging opportunities, and act ahead of competitors. The regression results examining this relationship are presented in Table 34.

### 4.8.3 Proactiveness and growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya

The third objective of the study was to analyze the effect of proactiveness on the growth of MSMEs in Kenya. This section presents the results of a regression analysis examining the impact of proactiveness on the growth of MSMEs, along with the corresponding hypothesis test results.

A simple regression analysis was conducted to assess the relationship between proactiveness and the growth of MSMEs, based on the coefficients of a linear regression model. The summary of the regression model is presented in Table 33.

**Table 34**

*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.631a	0.398	0.395	0.63101

a. Predictors: (Constant), Proactiveness

According to the model summary in Table 34, the coefficient of determination ( $R^2$ ) of 0.398, indicating that proactiveness explains approximately 39.8% of the variation in MSME growth in Kenya. The adjusted  $R^2$  value of 0.395 suggests that, after accounting for the constant term, proactiveness alone explains about 39.5% of the variation, while the remaining proportion is attributable to other factors not captured in the model. These findings imply that proactiveness is a substantial explanatory factor for MSME growth, accounting for about two-fifths of the total variation in performance outcomes. The fact that roughly 60% of the variation remains unexplained indicates that other determinants likely contribute to MSME growth. Overall, the results suggest that while proactiveness contributes meaningfully to growth, it should be complemented by other entrepreneurial

and strategic factors to achieve sustained performance. The subsequent ANOVA results are presented in Table 35.

**Table 35**

*Analysis of Variance (ANOVA)*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.385	1	64.385	161.7	.000 <sup>b</sup>
	Residual	97.553	245	0.398		
	Total	161.938	246			

a. Dependent Variable: MSME Growth

b. Predictors: (Constant), Proactiveness

The results in Table 35 show that the model used was statistically significant in explaining the effect of proactiveness on the growth of MSMEs, as indicated by a *p* value of .000, which is less than the .05 threshold. This result provides strong evidence that proactiveness is a significant predictor of growth among MSMEs. These findings highlight the crucial role of proactiveness in the growth strategies of MSMEs. The regression coefficient between proactiveness and growth is shown in Table 36.

**Table 36**

*Regression Coefficient Result*

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	β		
1	(Constant)	2.107	0.179		11.761	0.000
	Proactiveness	0.574	0.045	0.631	12.716	0.000

a. Dependent Variable: MSME Growth

The revised model became:

$$\text{Growth of MSMEs (Y)} = 2.107 + 0.574X_3$$

Where:

$Y$ = Growth of MSMEs

$X_3$ = Proactiveness

As indicated in Table 36, the regression coefficient results show a positive and statistically significant relationship between proactiveness and MSME growth ( $\beta = 0.574$ ,  $p < .001$ ). This suggests that higher levels of proactiveness are associated with stronger MSME growth, with each unit increase in proactiveness expected to enhance growth by approximately 0.574 units. These findings underscore the strategic importance of proactive behaviour anticipating market trends, seizing opportunities, and responding swiftly to changes in achieving sustained business expansion.

The  $p$ -value below .05 led to the rejection of the null hypothesis ( $H_{02}$ ), confirming that proactiveness has a statistically significant effect on MSME growth in Kenya. These results align with those of Oni et al. (2019) and Kivuitu and Karugu (2020), who reported that proactiveness significantly enhances firm performance by strengthening market responsiveness and competitive positioning. However, the present findings differ from those of Ringo et al. (2022), whose study of manufacturing-exporting SMEs in Tanzania found a negative association between proactiveness and export performance ( $\beta = -0.1748$ ,  $p < .001$ ), suggesting that the influence of proactiveness may vary across different business contexts.

Having confirmed that proactiveness significantly enhances MSME growth, the analysis proceeded to evaluate the next entrepreneurial orientation dimension autonomy. Autonomy reflects the degree of independence and decision-making freedom granted to employees or managers. The regression model results assessing this relationship are presented in Table 37.

#### 4.8.4 Autonomy and growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya

The fourth objective of the study was to explore the role of autonomy in the growth of MSMEs in Kenya. This section presents the results of a regression analysis examining the effect of autonomy on the growth of MSMEs, along with the corresponding hypothesis test results.

A simple regression analysis was conducted to determine the relationship between autonomy and the growth of MSMEs, based on the coefficients of a linear regression model. The summary of the model is presented in Table 37.

**Table 37**

*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.576a	0.331	0.329	0.66476

a. Predictors: (Constant), Autonomy

According to the model summary in Table 37, the coefficient of determination ( $R^2$ ) is 0.331, indicating that autonomy explains approximately 33.1% of the variation in MSME growth in Kenya. The adjusted  $R^2$  value of 0.329 suggests that, after accounting for the constant term, autonomy alone explains about 32.9% of the variation. At the same time, the remaining proportion is attributable to other factors not captured in the model. These findings imply that autonomy is a moderately important explanatory factor, accounting for roughly one-third of the total variation in MSME growth. However, the fact that a larger share of the variation remains unexplained indicates that other determinants also play a substantial role. Although autonomy can foster innovation, creativity, and initiative within MSMEs, excessive reliance on it may not constitute a comprehensive

growth strategy. The subsequent ANOVA results examining the relationship between autonomy and MSME growth are presented in Table 38.

**Table 38**

*Analysis of Variance (ANOVA)*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.671	1	53.671	121.454	.000 <sup>b</sup>
	Residual	108.267	245	0.442		
	Total	161.938	246			

a. Dependent Variable: MSME Growth

b. Predictors: (Constant), Autonomy

The ANOVA results in Table 38 show that the model used was statistically significant in explaining the effect of autonomy on the growth of MSMEs, as indicated by a p-value of 0.000, which is less than the 0.05 critical value. This result provides strong evidence that autonomy is a significant predictor of growth among MSMEs. These findings highlight the crucial role of autonomy in the growth strategies of MSMEs in Kenya. Based on these results, granting employees autonomy and decision-making authority appears to be a significant factor that contributes to the growth of these MSMEs, likely by creating an environment that encourages innovation, creativity, and proactive behavior. The regression coefficient between autonomy and MSME growth are shown in Table 39.

**Table 39**

*Regression Coefficient Result*

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	$\beta$		
1	(Constant)	2.503	0.171		14.656	0.000
	Autonomy	-0.381	0.035	-0.576	11.021	0.000

a. Dependent Variable: MSME Growth

b. Predictors: (Constant), Autonomy

The revised model became:

$$\text{Growth of MSMEs (Y)} = 2.503 - 0.381X_4$$

Where:

Y= Growth of MSMEs

X<sub>4</sub>= Autonomy

As shown in Table 39, the regression coefficient results indicate a statistically significant negative relationship between autonomy and MSME growth ( $\beta = -0.576$ ,  $p = .001$ ). This suggests that increased levels of autonomy are associated with reduced growth among MSMEs in Kenya. A p-value below .05 led to the rejection of the null hypothesis ( $H_{03}$ ), confirming that autonomy has a statistically significant effect on MSME growth. The negative association may reflect challenges such as over-delegation or weak coordination, which can limit the strategic alignment of employee initiatives with overall business goals.

These findings contrast with those of Messikh (2023) and Górska-Warsewicz (2024), who reported that autonomy has a positive influence on firm performance in other contexts. However, they are consistent with research by Oni et al. (2019) and Kapaya et al. (2018), which found that autonomy either had no significant or a negative relationship with business performance. This variation suggests that the effect of autonomy on firm growth is context-dependent, potentially influenced by management structure, cultural norms, or industry dynamics.

Having established the effect of autonomy, the analysis proceeded to examine the final entrepreneurial orientation dimension—competitive aggressiveness. This dimension reflects the firm's propensity to challenge competitors directly and respond assertively to market pressures, thereby enhancing its market position. The regression results for competitive aggressiveness and MSME growth are presented in Table 40.

#### 4.8.5 Competitive Aggressiveness and Growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya

The fifth objective of the study was to establish the effect of competitive aggressiveness on the growth of MSMEs in Kenya. This section presents the results of a regression analysis examining the impact of competitive aggressiveness on the growth of MSMEs, along with the corresponding hypothesis test results.

A simple regression analysis was conducted to determine the relationship between competitive aggressiveness and the growth of MSMEs in Kenya, based on the coefficients of a linear regression model. The model summary is presented in Table 40.

**Table 40**

*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.318a	0.101	0.097	0.7709

a. Predictors: (Constant), Competitive Aggressiveness

Evidence from Table 40 reveals that the coefficient of determination ( $R^2$ ) is 0.101, indicating that competitive aggressiveness explains approximately 10.1% of the variation in MSME growth in Kenya. The adjusted  $R^2$  value of 0.097 indicates that, after accounting for the constant term, competitive aggressiveness alone explains approximately 9.7% of the observed variation, while the remaining 90.3% is attributed to factors outside the model. These results demonstrate that competitive aggressiveness plays a relatively minor role in influencing the growth of MSMEs, contributing only modestly to overall performance outcomes.

Although adopting a competitively aggressive stance may support growth to some extent, the findings indicate that this factor alone is insufficient to drive substantial

performance gains. Instead, competitive aggressiveness should be viewed as a complementary element within a broader entrepreneurial strategy that integrates other determinants such as innovativeness, proactiveness, and calculated risk-taking. The subsequent ANOVA results assessing this relationship are presented in Table 41.

**Table 41**

*Analysis of Variance (ANOVA)*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.338	1	16.338	27.492	.000 <sup>b</sup>
	Residual	145.6	245	0.594		
	Total	161.938	246			

a. Dependent Variable: MSME Growth

b. Predictors: (Constant), Competitive Aggressiveness

The ANOVA results in Table 41 indicate that the model used was statistically significant in explaining the effect of competitive aggressiveness on the growth of MSMEs in Kenya, as indicated by a p-value of 0.000, which is less than the 0.05 critical value. This was supported by an F-statistic of 27.492, further suggesting that the relationship between competitive aggressiveness and MSME growth is statistically significant. The regression coefficient between autonomy and MSME growth is shown in Table 42.

**Table 42**

*Regression Coefficient Result*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	$\beta$		
1	(Constant)	2.871	0.282		10.184	0.000
	Competitive Aggressiveness	0.358	0.068	0.318	5.243	0.000

a. Dependent Variable: MSME Growth

The revised model became:

$$\text{Growth of MSMEs (Y)} = 2.871 + 0.358X_5$$

Where:

Y= Growth of MSMEs

X<sub>5</sub>= Competitive Aggressiveness

As indicated in Table 42, the regression coefficient results show a positive and statistically significant relationship between competitive aggressiveness and MSME growth ( $\beta = 0.318$ ,  $p < .001$ ). This implies that higher levels of competitive aggressiveness are associated with increased MSME growth, with each unit increase in competitive aggressiveness expected to enhance growth by approximately 0.358 units. The  $p$ -value below .05 led to the rejection of the null hypothesis ( $H_{03}$ ), confirming that competitive aggressiveness has a statistically significant effect on MSME growth in Kenya.

These findings align with previous research, which demonstrates that competitive aggressiveness has a positive influence on firm performance. For instance, Aigboje (2018) reported a strong positive association between competitive aggressiveness and hotel profitability ( $r = 0.703$ ), while Kariuki and Mungai (2024) found a significant effect of this dimension on SME performance in Nairobi ( $\beta = 0.376$ ,  $p = .001$ ). Similarly, Tumiwa (2023) observed a positive and significant relationship among Indonesian MSMEs, and George (2025) also reported that competitive aggressiveness had a significant positive effect on business performance ( $\beta = 0.513$ ,  $p < .001$ ). However, the results contrast with findings by Kapaya et al. (2018), who found no significant relationship between competitive aggressiveness and firm performance, suggesting that contextual and industry-specific factors may moderate this relationship.

Having analyzed the individual effects of each entrepreneurial orientation dimension innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness on the growth of MSMEs, the study proceeded to assess their combined influence using multiple regression analysis. This approach provides a more comprehensive understanding of how these dimensions jointly predict MSME growth while controlling for the interrelationships among the variables. The overall model summary, ANOVA results, and regression coefficients for the combined analysis are presented in the following section.

#### **4.9 Multiple Regression Analysis Results**

The multiple regression analysis examined the combined influence of the five entrepreneurial orientation (EO) dimensions—innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness—on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. This analysis assessed how these dimensions jointly predict MSME growth, providing a comprehensive understanding of their collective explanatory power. Multiple regression was deemed appropriate because it allows simultaneous estimation of the unique and shared contributions of several independent variables to a single dependent variable (Montgomery, Peck, & Vining, 2021).

The overall model results provide insights into the extent to which entrepreneurial orientation dimensions, when considered together, explain variation in MSME growth. The model summary, ANOVA, and regression coefficient results for the combined model are presented in Tables 43, 44, and 45, respectively.

#### 4.9.1 Goodness of Fit Model Summary

Multiple regression analysis was employed in this study to assess the combined effect of the five entrepreneurial orientation (EO) dimensions innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. This technique was appropriate because it allows simultaneous estimation of the influence of several independent variables on a single dependent variable. The coefficient of determination ( $R^2$ ) was used to evaluate the overall model fit, indicating the proportion of variance in the dependent variable that is collectively explained by the predictors. The value of  $R^2$  ranges from 0 to 1, where higher values indicate a stronger model fit. Table 43 presents the model summary for the overall regression model.

**Table 43**

*Overall Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.776a	0.602	0.594	0.51711

a. Predictors: (Constant), Competitive Aggressiveness, Autonomy, Risk-taking, Innovativeness, Proactiveness

The results in Table 43 indicate that the five independent variables collectively explain a significant portion of the variation in MSME growth in Kenya. The  $R^2$  value of 0.602 indicates that 60.2% of the variation in MSME growth is explained by the combined influence of the five EO dimensions, while the adjusted  $R^2$  of 0.594—preferred for model comparison as it adjusts for the number of predictors—suggests that, after controlling for model complexity, the predictors jointly explain about 59.4% of the variation. This indicates a strong model fit, implying that the EO dimensions collectively account for a substantial proportion of the variability in MSME growth. The remaining

39.8% of the variation is attributed to other factors not included in the current model, suggesting that additional determinants may also influence the growth of MSMEs in Kenya.

***ANOVA Analysis for the Overall Model***

Table 44 presents the results of the overall analysis of variance (ANOVA).

**Table 44**

*Overall Analysis of Variance (ANOVA)*

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97.493	5	19.499	72.918	.000 <sup>b</sup>
	Residual	64.445	241	0.267		
	Total	161.938	246			

a. Dependent Variable: MSME Growth

b. Predictors: (Constant), Competitive Aggressiveness, Autonomy, Risk-taking, Innovativeness, Proactiveness

The ANOVA results in Table 44 show that the overall regression model is statistically significant in explaining the relationship between entrepreneurial orientation dimensions and MSME growth ( $F = 72.918, p < 0.001$ ). The large F-statistic and very low  $p$ -value indicate that the combined effect of the five independent variables on MSME growth is unlikely to have occurred by chance.

This confirms that the regression model provides a good fit and that, collectively, innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness significantly predict the growth of MSMEs in Kenya. The results thus validate the suitability of the model for explaining variations in MSME growth based on the entrepreneurial orientation framework.

**4.9.2 Regression Coefficients Analysis of the Overall Model**

The regression coefficients of the overall model are presented in Table 45.

**Table 45***Multiple Regression Coefficients\*

Model	Unstandardized		Standardized	t	Sig.	
	Coefficients		Coefficients			
	B	Std. Error	$\beta$			
1	(Constant)	0.060	0.288		0.209	0.834
	Innovativeness	0.304	0.053	0.246	5.728	0.000
	Risk-taking	0.029	0.06	0.022	0.485	0.628
	Proactiveness	0.346	0.043	0.380	7.99	0.000
	Autonomy	-0.214	0.031	-0.323	-6.893	0.000
	Competitive					
	Aggressiveness	0.247	0.05	0.219	4.976	0.000

a Dependent Variable: MSME Growth

The regression model therefore became;

$$MSME\ Growth\ (Y) = 0.060 + 0.304X_1 + 0.029X_2 + 0.346X_3 - 0.214X_4 + 0.247X_5$$

Where:

$Y$  = MSME Growth

$X_1$  = Innovativeness

$X_2$  = Risk-Taking

$X_3$  = Proactiveness

$X_4$  = Autonomy

$X_5$  = Competitive Aggressiveness

The regression coefficients indicated that innovativeness had a positive and significant effect on MSME growth ( $\beta = 0.246$ ,  $t = 5.728$ ,  $p < .001$ ). A one-unit increase in innovativeness was associated with a 0.304-unit increase in MSME growth, holding other factors constant. This finding suggests that MSMEs that enhance their innovation capabilities—through product improvements or process innovations tend to experience higher growth. Similar results have been reported by Isichei et al. (2020) and Oni et al.

(2019), who found that innovativeness positively influences SME performance in Nigeria and South Africa, respectively.

Risk-taking exhibited a positive but statistically insignificant effect on MSME growth ( $\beta = 0.022$ ,  $t = 0.485$ ,  $p = .628$ ). Although risk-taking was slightly associated with higher growth, the relationship was not statistically significant enough to be meaningful. This suggests that adopting risky strategies may not necessarily yield measurable benefits in the Kenyan MSME context. This aligns with findings by Isichei et al. (2020) and Rezaei and Ortt (2018), who also reported that excessive risk-taking can fail to translate into improved firm performance in uncertain or resource-constrained environments.

The results further showed that proactiveness had the strongest positive and significant influence on MSME growth ( $\beta = 0.380$ ,  $t = 7.990$ ,  $p < .001$ ). A one-unit increase in proactiveness led to an estimated 0.346-unit increase in MSME growth. This finding underscores the importance of forward-looking and opportunity-driven behavior in enhancing a firm's performance. Comparable evidence from Isichei et al. (2020) and Oni et al. (2019) confirms that proactive strategic behavior significantly contributes to SME growth in emerging markets.

In contrast, autonomy had a negative and significant effect on MSME growth ( $\beta = -0.323$ ,  $t = -6.893$ ,  $p < .001$ ), indicating that a one-unit increase in autonomy was associated with a 0.214-unit decrease in growth. This suggests that excessive decentralization or individual decision-making may weaken coordination and reduce strategic alignment in MSMEs. George (2025) similarly observed that high autonomy can limit efficiency among Tanzanian SMEs, particularly in resource-constrained settings where cohesive leadership is vital. This finding diverges from Pratono et al. (2018), who reported a positive effect of autonomy in Indonesian firms, suggesting that contextual and structural differences influence how autonomy affects performance.

Finally, competitive aggressiveness showed a positive and significant effect on MSME growth ( $\beta = 0.219$ ,  $t = 4.976$ ,  $p < .001$ ). A one-unit increase in competitive aggressiveness corresponded to a 0.247-unit rise in MSME growth. This demonstrates that assertive market behavior such as aggressively responding to competitors or exploiting market gaps enhances firm performance. George (2025) found similar evidence in Tanzanian SMEs, where competitive assertiveness improved market positioning and overall growth.

Overall, the regression results revealed that proactiveness, innovativeness, and competitive aggressiveness are the most influential EO dimensions driving MSME growth in Kenya. Risk-taking had no significant effect, while autonomy negatively impacted growth. These findings underscore the importance of strategic initiative, creativity, and competitiveness in fostering sustainable MSME development, while highlighting the potential drawbacks of excessive independence in decision-making.

#### **4.10 Synthesis and Interpretation of Regression Results**

The regression analyses jointly highlight the relative strength of each entrepreneurial orientation (EO) dimension in predicting the growth of MSMEs. By comparing the simple and multiple regression models, the results illustrate how the individual and combined effects of innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness shape the performance of MSMEs in Kenya.

Table 46 presents a comparison of the simple and multiple regression models. The results show that innovativeness, proactiveness, and competitive aggressiveness remain positive and statistically significant across both models, whereas autonomy retains a negative coefficient, and risk-taking loses significance when other predictors are considered.

**Table 46***Comparison of Simple and Multiple Regression Results for EO Dimensions*

EO Dimension	Simple Regression ( $\beta$ )	Variance Explained ( $R^2$ )	Multiple Regression ( $\beta$ )	Significance ( $p$ )	Direction of Effect
Innovativeness	0.557	0.204	0.304	< .001	Positive, significant
Risk-taking	0.275	0.420*	0.029	.628	Positive, insignificant
Proactiveness	0.574	0.398	0.380	< .001	Positive, significant
Autonomy	-0.381	0.145	-0.323	< .001	Negative, significant
Competitive Aggressiveness	0.358	0.101	0.219	< .001	Positive, significant

*Note:* The  $R^2$  value for risk-taking (0.420) appears unusually high relative to the other EO dimensions. This may reflect contextual factors such as sectoral concentration or the prevalence of risk-intensive firms in the sample. In the multivariate model, this effect declines once overlapping behaviors particularly innovativeness and proactiveness are controlled.

Overall, the quantitative findings suggest that MSMEs that prioritize creativity, forward planning, and assertive market engagement tend to experience stronger growth. Innovativeness alone explains 20.4 percent of the variation in MSME growth ( $R^2 = 0.204$ ,  $\beta = 0.557$ ,  $p < .001$ ), and it remains significant within the multivariate model ( $\beta = 0.304$ ,  $p < .001$ ). Proactiveness similarly demonstrates the highest standardized coefficient across both models ( $\beta = 0.380$ ,  $p < .001$ ), confirming that anticipating and initiating market changes are decisive factors for firm performance. Competitive aggressiveness also contributes significantly ( $\beta = 0.219$ ,  $p < .001$ ), indicating that assertive positioning and responsiveness to competitors positively impact growth outcomes. In contrast, risk-taking becomes statistically insignificant in the multiple

model ( $\beta = 0.029$ ,  $p = 0.628$ ), implying that its contribution is indirect, operating through innovation and proactive market behaviors. Autonomy shows a significant negative association with growth ( $\beta = -0.323$ ,  $p < .001$ ), indicating that excessive decentralization may reduce strategic coordination and efficiency among Kenyan MSMEs.

#### **4.10.1 Summary of Hypotheses Testing Results**

In this study, each research hypothesis was tested using simple linear regression analysis, consistent with the objective of evaluating the individual effect of each entrepreneurial orientation (EO) dimension innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. This approach enabled the study to isolate and examine the direct influence of each EO variable on MSME growth without the confounding effect of the other predictors.

The multiple regression model presented earlier was used to assess the combined explanatory power of all entrepreneurial orientation (EO) dimensions and to validate the overall model fit. The hypothesis testing decisions summarized in Table 47 are therefore based on the multiple regression results, which account for the interrelationships among the predictors. In this model, risk-taking exhibited a positive but statistically insignificant effect on MSME growth ( $\beta = 0.029$ ,  $p = 0.628$ ), leading to a decision not to reject the null hypothesis (H04).

This finding indicates that risk-taking does not independently predict MSME growth once other EO dimensions particularly innovativeness and proactiveness are controlled for. The loss of significance suggests that the influence of risk-taking may operate indirectly through these related dimensions rather than as a stand-alone determinant of growth. Accordingly, the multiple regression model provides a more reliable assessment of the unique contributions of each EO component to the growth of MSMEs in Kenya.

**Table 47***Summary of Hypotheses Testing Results (Simple Regression Models)*

Hypothesis	Statement	Statistical Results	Decision on H <sub>0</sub>
H <sub>01</sub>	Innovativeness has no significant effect on MSME growth.	$\beta = 0.304, p < .001$	Reject H <sub>1</sub>
H <sub>02</sub>	Risk-taking has no significant effect on MSME growth.	$\beta = 0.029, p = .628$	Fail to reject H <sub>2</sub>
H <sub>03</sub>	Proactiveness has no significant effect on MSME growth.	$\beta = 0.380, p < .001$	Reject H <sub>3</sub>
H <sub>04</sub>	Autonomy has no significant effect on MSME growth.	$\beta = -0.323, p < .001$	Reject H <sub>4</sub>
H <sub>05</sub>	Competitive aggressiveness has no significant effect on MSME growth.	$\beta = 0.219, p < .001$	Reject H <sub>5</sub>

*Note:* Significance is based on a 95% confidence level ( $p < .05$ )

The results presented in Table 47 indicate that four of the five entrepreneurial orientation (EO) dimensions innovativeness, proactiveness, autonomy, and competitive aggressiveness have statistically significant effects on the growth of MSMEs in Kenya. Innovativeness, proactiveness, and competitive aggressiveness demonstrated positive and significant relationships with MSME growth, whereas autonomy showed a significant negative association. In contrast, risk-taking exhibited a positive but statistically insignificant effect ( $\beta = 0.029, p = 0.628$ ), leading to a decision not to reject the null hypothesis (H<sub>04</sub>).

These findings confirm that EO dimensions are critical determinants of MSME performance in Kenya, though their effects vary in strength and direction. The results also suggest that the apparent contribution of risk-taking observed in the simple regression diminishes when other EO dimensions are considered together, implying that

the EO traits operate interdependently rather than independently in influencing enterprise growth.

#### **4.11 Thematic Analysis**

In addition to the quantitative analysis, a thematic analysis was conducted using qualitative data collected from interviews with selected MSME owners or managers. This qualitative approach aimed to explore their perceptions and experiences regarding specific entrepreneurial dimensions within their businesses. Thematic analysis enabled the identification of key patterns, themes, and contextual insights that could not be captured through quantitative measures alone. By integrating these qualitative findings with the statistical results, the study achieved methodological triangulation, thereby enhancing the robustness, depth, and credibility of the overall interpretation of how innovativeness influences the growth of MSMEs.

##### **4.11.1 Thematic Analysis of Innovativeness**

In addition to the quantitative data, qualitative insights were gathered through interviews with MSME owners or their managers to explore the concept of innovativeness further. The thematic analysis revealed that most respondents perceived innovativeness as their firm's commitment to developing and supporting new product innovations, especially in comparison to competitors. Common themes included product improvement, operational creativity, and innovation as a survival strategy in resource-constrained conditions. Most of them explained that;

*Yes, the company introduces improvements and innovations, and you are well aware that the company started from scratch with the two products. We are currently having two innovations. The gravity electrical generator and the sisal decorticator. The gravity electrical generator is at the testing phase, while the sisal decorticator has been commercialized, and we have sold a number of units.*

*RI*

In addition, the R1 explained that:

*Yes, I will say that my firm actively introduces improvements and innovations, as we have been involved in developing a remote weighing and fuel monitoring system. We have been working on the project for the past four years and are currently awaiting commercialization. All the tests that have been undertaken have shown that the product is working in a great way. R1*

*Yes, my company is involved in improvements and innovations. Since I started working on the idea, I have been continually improving it until it reached its current form. Even at this stage, I am still improving the features so that it serves my clients well. R6*

*We continually innovate because it is not a one-day thing. We strive to innovate on a daily basis, as the technology industry is a fast-paced business, requiring continuous innovation. You need to be innovative on a day-to-day basis to survive. R3*

Additionally, it was interesting to note that some owner-managers opined that they had no option but to be innovative

*Yeaha... we are forced to be creative ... we don't have the luxury of funding like some companies in the US or other developed countries. Perhaps in Europe or America, there is a substantial amount of support, but not here in Kenya. In your day-to-day operations, you are forced to innovate around them. R2.*

Based on these interview outcomes, it is evident that MSMEs in Kenya prioritize innovation as a core aspect of their operations. Many managers and owners perceive their firms as highly innovative, frequently developing new product lines and enhancing existing products. This innovative drive is exemplified by projects such as the gravity electrical generator and the sisal decorticator the latter, which has already been commercialized and is generating sales. Respondents also emphasized efforts to improve operational methods, including the development of a remote weighing and fuel monitoring system that is nearing commercialization after four years of work. A recurring theme across the interviews was the view that innovation is not merely a strategic advantage, but a necessity. Limited access to substantial funding, unlike firms in more developed economies, has pushed these enterprises to rely on ingenuity and

adaptability. As a result, innovation has become a critical survival tactic for MSMEs operating in Kenya's competitive and rapidly evolving technology sector.

#### **4.11.2 Thematic Analysis of Risk-Taking**

Additionally, the researcher collected qualitative data through interviews with company owners and managers to explore their perspectives on risk-taking and to complement the quantitative findings of this study. Three key themes emerged from the analysis: perceptions of uncertainty, approaches to high-risk projects, and fostering a culture of calculated risk-taking.

With regard to perceptions of uncertainty and risk, most respondents acknowledged that risk-taking is a necessary and routine aspect of operating within the innovation landscape. The uncertainties they identified were commonly associated with financial losses, supply chain constraints, and limited institutional support.

*Challenges in developing the prototypes included significant financial, resource, and time losses. There is also the issue of a lack of spare parts availability in the country, which leads to importation from China and other countries. This time lag in the importation process greatly hampers the operation of the product. A case in point is the gravity electrical generator. There is also a lack of support from the government, or rather, inadequate support. There is insufficient support for innovation, as seen in the cases of the sisal decorticator and the gravity electrical generator. I require funding for mass production and adequate structured support from the government to bring my innovations to market and make them commercially viable. Also, there is the danger of piracy of our innovation. ... These are some of the uncertainties I can talk about. R1.*

Such statements highlight the high levels of uncertainty that MSMEs face and their ongoing drive to innovate despite structural limitations.

In terms of engagement in high-risk, high-return projects, the majority of the fifteen respondents expressed a strong willingness to undertake such initiatives when asked.

Many cited their experience with previous innovation projects as evidence of this readiness.

*I will greatly undertake the project. In engineering, we are accustomed to undertaking costly projects, both in terms of money and time. Like my sisal decorticator, I started working on the electric generator in 2010. R1*

*There are ways of mitigating risks. You look for other partners who know that area. Even before you undertake such a project, you know your risks and in case they have what they can help you with. It is a process of setting up systems so that your process is very clear. At times, the higher the risk, the less we fear the returns; we embrace the idea. We do our risk diligence. We do the necessary research. We make informed decisions. R3*

*This is very interesting. I will first analyze the situation critically before making a decision. As an innovator, I will likely opt for the high-risk project, given that the chances of success are also very high. R5*

*If I am faced with a high-risk project that offers a high return, I will pursue it. I have undertaken a number of costly projects before, and therefore I have no fear. R2*

This proactive and calculated approach to risk illustrates a common entrepreneurial mindset among the respondents.

On fostering a culture of risk-taking, many respondents emphasized the importance of encouraging calculated risk-taking within their teams. Innovation was seen as a shared responsibility supported through mentorship and team empowerment.

*Yes, you know I work with a team of technical people involved with innovations. These people are encouraged to think outside the box on how the product can be improved or enhanced. I also deal with mentorship. I develop employees so that they become innovators, hence improving the product. I also advise people on how the product can be further developed. R3*

One respondent emphasized the strategic boldness of their firm:

*We strive to explore areas of technology that most countries do not want to pursue. For us to perform an anti-virus scan is not a simple thing; it is unbelievable that somebody could not even consider doing such a thing. This could be viewed as a reserve for US companies and other developing countries, as well as for the Bunifu UIE system. These are very high-end programming*

*products. If you look across the continent, I think we are the only ones doing the tool. People are hesitant to get involved due to the complexity and cost associated with it. We take more risks than most companies. R4.*

In light of the above interview results, it is evident that risk-taking is a crucial aspect of innovation among MSMEs in Kenya. The respondents consistently described their readiness to engage in high-risk projects that come with the potential for high returns. They articulated a proactive approach to risk management, including partnerships, rigorous due diligence, and informed decision-making to mitigate potential downsides. Challenges such as financial losses, delays due to import dependencies, and inadequate governmental support were common uncertainties faced by these managers. Despite these challenges, there was a strong inclination towards embracing risk, with a focus on calculated risks where the potential benefits significantly outweigh the possible losses. Additionally, creating a culture of innovation and risk-taking within their teams was emphasized, with efforts focused on mentorship and encouraging team members to innovate and improve products.

#### **4.11.3 Thematic Analysis of Proactiveness**

During interviews with owners and managers, their perceptions of how they identify and respond to opportunities were explored. Additionally, they were asked about their interactions with competitors, particularly regarding the introduction of new products.

Some of the respondents shared the following insights;

*Every day, we encounter problems that need to be solved. There are a number of problems that require solutions, like the idea that came up after thieves broke into my friend's house and brutally murdered him in Umoja. It was at this time that I conceived the idea of securing people's homes through a 3G mobile remote camera. R6*

*I think it starts with passion because if people are passionate on what they do they will always be interested in coming up with new ideas. We try to solve day-to-day problems, which is why we end up with unique products. You don't just look at problems and complain; try to fix them. We try to look for solutions. R9*

*There are a number of ways in which I identify business opportunities. First of all, I examine problems or inconveniences and wonder what can be done better. In my mind, I start thinking about finding a solution to the problem. For my system, I come from the coast. Mlolongo and Mariakani are known for having long traffic queues for trucks. I then thought of coming up with an online system that can reduce the incessant traffic jams in Mariakani and Mlolongo. In the online system, the system can detect the vehicle's number, its weight, or deviation from the route. I have shared this with KRA, KENHA, and other stakeholders in the transport industry. R11*

The responses from the participants varied. Some indicated that they generated business ideas from everyday problems that required practical solutions. Others mentioned identifying opportunities through reading magazines and engaging in conversations with friends or relatives.

*There are many opportunities that you need to identify, which ones fit your business. Then you also look at your capacity. If you have capacity. The business is there, and you're there, doing something you want to do and are passionate about. There are opportunities in agriculture, IT, and many other areas where you need to be well-versed in such things. It is a process. R4*

*New business opportunities are developed by observing the problems faced by the community in which one lives. In my case, since people in my area were growing sisal and lacked a machine to decorticate it, I decided to design a machine that would help farmers produce clean sisal fiber. Additionally, if people in a given area lack water, the innovator may be prepared to come up with designs for pumping water to address problems faced by the general populace. R1*

Those respondents who had identified opportunities and used them to offer solutions by developing products were termed as proactive.

*We are not always the first ones to introduce new products, as I know that in IT, it is a very competitive field. We are not always the first, but we have a first-mover advantage. Being the first one within your region gives you a boost. We typically strive to be the first to introduce an innovation. R4*

One of the respondents mentioned the following regarding how they deal with their competition.

*At times, you can innovate within what already exists. We can be the first ones to do an innovation. At times, you can innovate within what already exists. We can*

*be the first ones to have a product with unique features, despite it already being in the market. But we add more value to the product... UIE, the programming one, has been in the market since May 2016. R4.*

In summary, the outcomes of the interviews revealed that managers of MSMEs in Kenya actively seek and respond to opportunities by identifying everyday problems and conceiving innovative solutions. A significant number of managers indicated that their method of opportunity identification originated from personal experiences or challenges observed within their communities, such as security concerns or traffic congestion. This approach leads to the development of targeted solutions, like the 3G mobile remote camera for home security or an online system to manage traffic. Managers also emphasized the role of passion in driving their initiative to innovate and solve real-world problems. Moreover, interactions with competitors and market changes also play a crucial role in how these managers approach innovation. While some managers may not always be the first to introduce new products, they strive to achieve a first-mover advantage within their region, which can significantly enhance their market presence.

#### **4.11.4 Thematic Analysis of Autonomy**

To explore the role of autonomy in the growth of MSMEs, in-depth interviews were conducted with firm owners and managers—the research aimed to understand how autonomy was practiced within these MSMEs and its impact on growth. Three key themes emerged from the analysis: employee decision-making, collaborative autonomy, and context-dependent independence.

Regarding employee decision-making, many respondents reported that their businesses actively promote employee involvement in decision-making processes. Autonomy was commonly demonstrated by allowing staff to propose ideas, initiate projects, and independently manage aspects of their work. One participant explained:

*Yes, the business allows individuals and/or teams to pursue business opportunities. You can give an idea, and we can discuss it. We believe that no single person is superior. People are not given the freedom to make decisions on all issues. Subject to discussion is the idea, which is workable well and is good if not, we think otherwise. R1*

Another respondent, leading a technical team, described autonomy in terms of product innovation:

*Since I am leading a team of innovators in the technical department, employees are free to come up with ways to improve the 3G remote-controlled camera. R2*

These accounts demonstrate a recognition that employee autonomy fosters creativity and innovation. However, decision-making is not entirely individualistic; rather, it is moderated through internal discussions and feasibility assessments.

Collaborative and participative autonomy emerged as a key theme during the analysis, highlighting how autonomy within MSMEs is often exercised through dialogue, consultation, and shared decision-making rather than in isolation. One manager shared:

*We strive as much as possible to empower people to be autonomous. You present what you have, and we discuss. It is not every day that we take orders; we also engage. The communication is two-way. R4*

This participative approach to autonomy reflects a management style where employee contributions are valued and leadership is inclusive. Rather than granting unrestricted freedom, autonomy is practiced within structured interaction, encouraging shared ownership of decisions and accountability.

Context-dependent independence also emerged as a theme, with autonomy described as conditional based on the nature of the task and the employee's role or area of expertise. Respondents indicated that employees are generally trusted to act independently, particularly in domains where they possess specialized knowledge. However, when

decisions carry broader implications for the company, a collaborative review process is typically required:

*At some point, they do that [allow employees or teams to work alone and make individual decisions], especially if it is within their area of specialty. These are things that are cross-cutting. Which affects all departments, different products. When you have a product manager, there are decisions they can make and later inform the company and let their colleagues do it. But some decisions affect products or the company. It depends on the nature of the assignment at hand. R8.*

This highlights a nuanced view of autonomy, where strategic decisions remain centralized but operational and technical decisions are delegated, aligning with the literature that presents autonomy as a structured yet empowering leadership practice (Lumpkin & Dess, 1996).

In view of the above interview results, it is apparent that a culture of autonomy is prevalent among MSMEs in Kenya. The firms predominantly empower their employees with the freedom to propose ideas and make individual decisions related to their work. This autonomy is typically exercised within the confines of team discussions where the feasibility of ideas is assessed collaboratively. Such an approach is indicative of a participative management style where no single person is deemed superior, and all ideas are subject to collective deliberation and validation. The responses from the participants also suggest that autonomy is granted, especially in areas where employees have specific expertise, thereby facilitating innovation and improvement in product development, such as the 3G remote-controlled camera. This level of independence, however, is balanced with the need for alignment on decisions that have broader implications for the company or its products.

#### **4.11.5 Thematic Analysis of Competitive Aggressiveness**

In this research, competitive aggressiveness refers to the intensity of MSMEs' efforts to confront and outperform their industry competitors directly. Considering the respondents'

viewpoints, it was evident that all firms in the phase of this research exhibited some elements of competitive aggressiveness.

For instance, one of the respondents raised the issue of having a strategy:

*I think having your own strategy is important. If you become helpless in the face of competition, chances are that you will normally lose out. You must be on the lookout for what others are doing. We try as much as possible to stick to our own strategy.*

With regards to response actions, varied responses were given by the interview respondents. Some respondents with niche products reported having no local competition. For other firms, it involved staying abreast of the latest developments in specific industries or reducing prices, as succinctly expressed in the following statement.

*Here, you have to be very smart; you try as much as possible to beat the competition. I normally do it by reducing the prices of products in relation to the competition. I also hold tightly to the clients I have for my products. This is achieved by meeting their expectations and treating them well, ensuring they are not lost to the competition. Additionally, I frequently monitor market trends, but I am not the first to take action. R6*

The participants of this research felt that the competition in their specific industry was intense. This was expected given that the MSMEs in the study were startups.

*I can say that we are doing well, despite the somewhat tight competition in the industry. R6.*

In summary, it is evident that competitive aggressiveness is a key characteristic among MSMEs in Kenya. The firms demonstrate a proactive approach to maintaining a competitive edge, either by adhering to distinct strategies or by actively monitoring and responding to market dynamics and competitor actions. Some respondents highlighted their use of aggressive pricing strategies and high levels of customer service as methods for retaining clients and outperforming competitors. Additionally, even those with niche products that face minimal local competition acknowledge the intensity of the broader market competition. This competitive environment is particularly pronounced given the

startup nature of these firms, necessitating a vigilant and dynamic approach to strategy and market positioning to ensure survival and growth.

#### **4.11.6 Thematic Analysis of MSME Growth**

MSME growth was measured by respondents' statements regarding the volume of product sales, asset base, and number of employees. The respondents were requested to compare the volume of sales, asset base, and number of employees to those of the previous five years. Some participants claimed that over the last five years, their firms had experienced growth in terms of product sales and the number of employees. In terms of asset base growth, no significant changes were reported by the participants. Other responses were not willing to disclose their growth indicators, especially in sales, but rather reported that their firms had registered some form of growth.

*The volume of sales for my products, asset base, and number of employees have been rising ever since we started in 2012. As we started with 10 technical staff members, we currently have 50 technical personnel and 20 support staff. Despite these challenges, there are seasons during holidays when our product sales drop, but that is part of the business. There are ups and downs. R8*

One of the respondents also said

*The volumes of sales for our products have been generally rising. We are currently receiving orders for exports to Nigeria and Madagascar. The challenge is that the freight charges are very high. We need to be supported so that we can produce in mass quantities, such as a whole container, which can then be shipped for export, thereby allowing us to enjoy economies of scale. Currently, our innovations stand at risk of being pirated, which would be a significant loss to us. R1*

Another participant mentioned

*We are looking for a strong partner. We have currently sold 3 units. I am forecasting selling 1000-2000 units per year. After commercialization, we will produce 10-15 million per year for new products. We have a creative team of people. R11*

*For technology, it is not easy to quantify. One project you can do for a million, another project you can do for ten thousand units. If I tell you we do five units, I may be misleading you. Besides products we also do consultancy. We are doing fairly well; we are making a few million dollars. R2.*

These findings indicate that MSMEs in Kenya studied have experienced varied degrees of growth over the past five years, primarily in terms of product sales and employee numbers. While some firms have significantly increased their sales and expanded their workforce, growth in asset bases has been less pronounced. Challenges such as seasonal fluctuations in sales and high freight charges for exports were noted, affecting the ability to scale operations effectively. Despite these challenges, respondents remain optimistic, with some looking to expand into new markets and increase production capacities to leverage economies of scale. However, concerns about product piracy and the need for strong partnerships to support expansion efforts were also highlighted.

#### **4.12 Integration of Quantitative and Qualitative Findings**

This section integrates the findings from the quantitative (Phase I) and qualitative (Phase II) components of the study to present a holistic understanding of how entrepreneurial orientation (EO) dimensions influence the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. Guided by the sequential explanatory design, the qualitative phase was conducted to explain and elaborate on the statistical patterns identified in the quantitative phase, thereby enriching interpretation and deepening contextual understanding.

The quantitative analyses, which included both simple and multiple regression models, revealed that four of the five EO dimensions innovativeness, proactiveness, autonomy, and competitive aggressiveness had statistically significant effects on MSME growth, while risk-taking was significant in the simple regression but lost significance in the multivariate model. The overall regression model ( $R^2 = 0.602$ , Adjusted  $R^2 = 0.594$ ) indicated that the five dimensions jointly explained approximately 60% of the variation in MSME growth. These results demonstrate that entrepreneurial orientation is a major

determinant of firm performance among Kenyan MSMEs, with each dimension contributing differently to growth outcomes.

The qualitative findings complemented these results by offering in-depth explanations of how and why these relationships occurred in practice. For instance, innovativeness showed a strong positive association with growth ( $\beta = 0.304$ ,  $p < .001$ ), which was explained qualitatively through the emphasis of MSME owners on continuous improvement, creative problem-solving, and innovation as a necessity under conditions of resource scarcity. Respondents described innovation as a daily practice, not a one-time event, confirming that innovativeness is embedded in firm culture and directly supports competitiveness and expansion.

Risk-taking, which was significant in the simple model ( $\beta = 0.275$ ,  $p = .001$ ) but insignificant in the multiple regression ( $\beta = 0.029$ ,  $p = .628$ ), was portrayed in the qualitative phase as a cautious, calculated process. Entrepreneurs recognized risk as unavoidable but emphasized strategic management through due diligence, partnerships, and incremental experimentation. This restrained approach to risk-taking explains the limited statistical effect observed when other entrepreneurial dimensions were controlled for.

Proactiveness emerged as the strongest quantitative predictor of growth ( $\beta = 0.380$ ,  $p < .001$ ) and was reinforced qualitatively by evidence of opportunity-seeking behaviors, problem driven innovation, and early market positioning. Entrepreneurs consistently described their ability to anticipate customer needs and develop timely solutions, such as home security devices or digital traffic management systems. This proactive orientation enables MSMEs to capitalize on emerging opportunities ahead of their competitors, underscoring its centrality as a growth driver.

Autonomy displayed a negative yet statistically significant relationship with growth ( $\beta = -0.323, p < .001$ ), suggesting that excessive decentralization may weaken coordination. The qualitative narratives clarified this finding, showing that autonomy in MSMEs tends to be collaborative rather than absolute. Employees are encouraged to make independent decisions within their areas of expertise; however, major decisions are discussed collectively to ensure alignment. This participative structure fosters creativity while preventing inefficiencies that could result from uncoordinated independence.

Competitive aggressiveness was found to have a positive and significant effect on the growth of MSMEs ( $\beta = 0.219, p < .001$ ). The qualitative evidence elaborated that entrepreneurs demonstrate competitive assertiveness through aggressive pricing, market vigilance, customer loyalty strategies, and constant adaptation to market dynamics. Respondents indicated that maintaining competitiveness requires both innovation and responsiveness, confirming the statistical significance of this dimension.

When analyzed collectively, the integration of both data strands demonstrates that innovativeness, proactiveness, and competitive aggressiveness form the core dynamic driving MSME growth in Kenya. At the same time, risk-taking and autonomy serve as complementary enablers. The qualitative results breathe life into the statistical models, illustrating that innovation thrives when reinforced by calculated risk-taking and proactive opportunity recognition. Proactiveness gains strength when combined with structured autonomy and competitive vigilance. Autonomy, when properly coordinated, facilitates creativity and responsiveness without compromising cohesion.

The integrated quantitative and qualitative findings confirm that the EO dimensions are mutually reinforcing rather than independent drivers of MSME growth. Innovation flourishes when supported by calculated risk-taking and proactive opportunity recognition. Proactiveness gains strength through competitive aggressiveness and

structured autonomy, while autonomy facilitates idea generation, and centralized coordination ensures strategic coherence. Taken together, these results indicate that the five EO dimensions operate as an interdependent system rather than as isolated traits. Innovativeness, proactiveness, and competitive aggressiveness constitute the core dynamic propelling MSME growth, while risk-taking and autonomy function as supportive enablers that sustain this effect. Innovation depends on informed risk-taking to transform ideas into viable ventures, and proactiveness leverages competitiveness and managed risk to capture emerging opportunities.

This synergy highlights that entrepreneurial orientation derives its strength from the integration and balance of its dimensions, rather than from any single behavior in isolation. Consequently, MSME growth in Kenya arises from a holistic configuration of EO behaviors a system combining creativity, initiative, collaboration, and competitiveness that enhances adaptability and long-term performance. These findings collectively highlight the need for MSMEs to cultivate multiple, complementary EO dimensions simultaneously, rather than emphasizing one in isolation, to achieve sustained growth and resilience.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The purpose of this study was to examine the influence of Entrepreneurial Orientation (EO) on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya, focusing on five key dimensions of EO: innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness. The study was grounded in three key theories: the Schumpeterian Entrepreneurship Theory, which emphasizes innovation as the engine of economic progress; the Risk-Taking Theory of Entrepreneurship, which views entrepreneurship as decision-making under uncertainty; and the Theory of Competitive Advantage, which explains how firms achieve superior performance through differentiation and market responsiveness.

Guided by a positivist–pragmatic paradigm, the study integrated both quantitative and qualitative methods. Quantitative analyses established measurable relationships among EO dimensions and MSME growth, while qualitative follow-up interviews provided contextual insights explaining how and why these relationships emerged. Drawing from both strands of analysis, this chapter synthesizes the study’s key findings and presents conclusions, recommendations, and directions for future research. The report begins with a summary of the integrated quantitative and qualitative results, followed by conclusions that align with the study’s objectives and theoretical foundations. The chapter then outlines practical and policy recommendations and concludes with suggestions for future research.

#### 5.2 Summary of the Findings

Quantitative analyses employed simple linear regression to examine the individual effect of each EO dimension on MSME growth and a multiple regression model to assess the

overall explanatory power of EO. The combined model yielded an  $R^2$  of 0.602, indicating that EO collectively explains 60.2% of the variation in MSME growth ( $p < .001$ ).

Results revealed that proactiveness had the strongest positive effect ( $\beta = 0.380, p < .001$ ), followed by innovativeness ( $\beta = 0.304, p < .001$ ) and competitive aggressiveness ( $\beta = 0.219, p < .001$ ). Autonomy demonstrated a significant negative effect ( $\beta = -0.323, p < .001$ ), while risk-taking, though positive ( $\beta = 0.029$ ), was statistically insignificant ( $p = .628$ ), indicating that its apparent contribution observed in the simple regression analysis was not sustained once other EO dimensions were included. These findings suggest that MSMEs that emphasize creativity, foresight, and strategic competitiveness experience stronger growth, whereas uncoordinated autonomy can undermine performance.

**Table 48***Summary of Regression Findings and Integrated Interpretations*

EO Dimension	Simple Regression Coefficient ( $\beta$ )	<i>p</i> -Value	Direction and Significance	Interpretation (Quantitative)	Qualitative Reinforcement
Innovativeness	0.557	< .001	Positive, Significant	Innovation strongly drives MSME growth.	MSMEs practice incremental and frugal innovation that enhances adaptability and competitiveness.
Risk-Taking	0.275	.001	Positive, Insignificant in combined model (significant in simple only)	Risk-taking contributes indirectly to growth when examined individually; effect diminishes when other EO dimensions are controlled.	Entrepreneurs engage in calculated, low-scale risk-taking due to financial and institutional constraints.
Proactiveness	0.574	< .001	Positive, Significant	Most influential predictor; anticipating and initiating market change accelerates growth.	Firms exhibit anticipatory opportunity-seeking and rapid market responsiveness.
Autonomy	-0.381	< .001	Negative, Significant	Excessive independence reduces coordination and strategic alignment.	MSMEs apply collaborative autonomy—freedom within managerial oversight.
Competitive Aggressiveness	0.358	< .001	Positive, Significant	Assertive competition enhances performance and market share.	Firms pursue strategic competitiveness through differentiation and customer focus.

Qualitative insights deepened understanding of how EO behaviors manifest in practice.

The integrated interpretation of the findings revealed that innovativeness, proactiveness,

and competitive aggressiveness were the strongest drivers of MSME growth. Autonomy exhibited a negative but significant influence, while risk-taking showed no direct significant effect in the combined model. Interviews confirmed that proactive and innovative enterprises tended to experience faster growth, whereas excessive autonomy without managerial oversight created coordination challenges. These enterprises commonly practiced incremental innovation, calculated risk-taking, anticipatory opportunity-seeking, collaborative autonomy, and strategic competitiveness, illustrating the interdependence of these EO dimensions.

Overall, the findings underscore that MSME growth depends on balanced entrepreneurial behavior a synthesis of creativity, foresight, disciplined autonomy, and competitive resilience.

### **5.3 Conclusions**

#### ***Overall Conclusion***

Entrepreneurial Orientation (EO) has a significant influence on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. Simple regression analyses confirmed that each EO dimension individually affects MSME growth, while the combined model demonstrated strong explanatory power, underscoring EO as a critical determinant of competitiveness, sustainability, and strategic renewal among enterprises.

The findings affirm Lumpkin and Dess's (1996) conceptualization of EO as a multidimensional construct whose components innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness interact dynamically to shape firm outcomes. They also extend theoretical understanding by situating EO within a resource-constrained developing economy, where innovation tends to be incremental,

risk-taking is cautious and adaptive, and competitiveness is transient yet essential for survival.

### **5.3.1 Objective 1: To Determine the Effect of Innovativeness on MSME Growth**

Innovativeness emerged as a key driver of MSME growth, underscoring its role as the creative engine of enterprise performance. This finding aligns with Schumpeter's Entrepreneurship Theory, which posits that innovation is the fundamental catalyst of economic progress through "new combinations" of resources and ideas. Empirical parallels from Ringo et al. (2022) in Tanzania, Waithaka (2017) in Kenya, and Isichei et al. (2020) in Nigeria consistently show that innovative firms experience superior growth trajectories.

The qualitative findings reinforced this by revealing that Kenyan MSMEs predominantly engage in incremental and frugal innovation low-cost adaptations, process improvements, and creative repurposing of existing technologies. These innovation patterns reflect a pragmatic adaptation of Schumpeter's "creative destruction" to a resource-constrained entrepreneurial ecosystem. By embedding creativity, continuous improvement, and adaptive innovation into their operations, firms enhance resilience, differentiation, and responsiveness to shifting market conditions. This outcome affirms Schumpeter's view that entrepreneurship thrives on ongoing creative recombination, demonstrating that even modest innovations can sustain competitiveness and long-term enterprise growth.

### **5.3.2 Objective 2: To Examine the Effect of Risk-Taking on MSME Growth**

Risk-taking appeared to be more supportive than decisive in influencing MSME growth. Although entrepreneurs recognize the importance of risk in pursuing opportunities, its direct influence on performance is limited when other EO dimensions are considered

together. This outcome aligns with Knight's (1921) Risk-Taking Theory of Entrepreneurship, which conceptualizes entrepreneurship as decision-making under uncertainty, while acknowledging the contextual constraints present in developing economies.

In Kenya's volatile business environment characterized by limited financing, unstable markets, and institutional uncertainty entrepreneurs tend to adopt calculated and incremental risk strategies rather than bold speculative ventures. Qualitative findings revealed that MSME owners often mitigate uncertainty through collective decision-making, phased investments, and strategic partnerships. Such disciplined risk management enables experimentation and innovation without jeopardizing scarce resources.

This result suggests that in resource-constrained contexts, risk-taking contributes indirectly to growth by enabling innovation and proactiveness. Entrepreneurial success therefore depends less on high-risk ventures and more on strategic, context-aware decision-making that balances opportunity with security an adaptive extension of classical risk-bearing theory.

### **5.3.3 Objective 3: To Analyze the Effect of Proactiveness on MSME Growth**

Proactiveness proved to be the most influential of the EO dimensions, highlighting its central role in shaping firm growth and competitiveness. The finding resonates with both Schumpeterian Theory, which views entrepreneurs as agents of change, and Porter's (1985) Theory of Competitive Advantage, which emphasizes strategic foresight and responsiveness as sources of superior performance.

Proactive enterprises anticipate emerging market trends, identify latent customer needs, and act promptly to capitalize on opportunities. This strategic posture aligns with

findings by Oni et al. (2019), Musyoka and Kyule (2024), and Yunusa et al. (2022), who demonstrated that proactive firms secure first-mover advantages, build strong market positions, and sustain competitive differentiation.

Qualitative results illustrated anticipatory opportunity-seeking behaviors such as diversifying product lines before demand peaks and leveraging digital platforms to reach underserved markets. Proactiveness, therefore, enhances adaptability and organizational resilience in turbulent environments. Anchored in Schumpeterian and Porterian principles of change and foresight, proactiveness emerges as the most decisive EO trait, enabling firms to transform uncertainty into opportunity and establish enduring market leadership.

#### **5.3.4 Objective 4: To Examine the Effect of Autonomy on MSME Growth**

Autonomy exhibited a dual effect on MSME growth: while it fosters creativity and initiative, excessive independence can undermine coordination and strategic coherence. This nuanced finding underscores the importance of striking a balance in small firms with limited managerial structures. It partly contrasts with studies such as Pratono et al. (2018) and Messikh (2023), which reported positive autonomy–performance links in formal organizations, but aligns with George (2025) and Kapaya et al. (2018), who observed neutral or negative effects in informal markets.

From an entrepreneurial behavior perspective, autonomy functions as a double-edged construct. It promotes individual initiative but may weaken unified direction if unregulated. Qualitative evidence suggests that successful enterprises practice collaborative autonomy, granting employees decision latitude within defined strategic boundaries. This approach allows creativity to flourish while maintaining organizational alignment and accountability.

Structured autonomy freedom within oversight—thus supports innovation and cohesion, whereas unchecked independence can fragment operations, create redundancy, and diminish growth potential.

### **5.3.5 Objective 5: To Determine the Effect of Competitive Aggressiveness on MSME Growth**

Competitive aggressiveness enhanced MSME growth by promoting responsiveness, differentiation, and customer engagement. This finding supports Porter's (1985) Theory of Competitive Advantage, which posits that firms achieve superior performance through strategic positioning, responsiveness, and renewal rather than passive adaptation.

Empirical evidence from Aigboje (2018), Tumiwa (2023), and Waithaka (2017) confirms that assertive market engagement through pricing, market intelligence, and customer retention strengthens profitability. However, the moderate effect of this dimension in Kenya's context reflects McGrath's (2013) concept of "transient advantage," where competitive gains are short-lived in dynamic markets.

Qualitative insights revealed that MSMEs strive for competitiveness through aggressive marketing, product diversification, and customer-focused innovation, yet also face imitation and price pressures. Competitive aggressiveness, when balanced with innovation and proactiveness, drives sustainable performance by fostering value creation rather than short-term tactical competition.

Taken together, the objective-level conclusions reveal that MSME growth is driven by a balanced configuration of EO dimensions where innovativeness, proactiveness, and competitive aggressiveness enhance performance, while autonomy must be managed carefully and risk-taking remains adaptive to contextual realities.

Overall, the study's findings validate and contextualize the three anchoring theories within Kenya's MSME landscape. The results affirm the Schumpeterian Entrepreneurship Theory, showing that innovativeness and proactiveness are the primary creative forces driving enterprise growth, even when innovation is incremental and constrained by limited resources. They also extend the Risk-Taking Theory of Entrepreneurship, illustrating that entrepreneurs in developing economies succeed not through bold speculation, but through prudent, context-sensitive risk-taking that balances opportunity with security. Finally, the findings reinforce the Theory of Competitive Advantage, demonstrating that sustainable MSME growth depends on strategic agility, proactive market engagement, and competitive differentiation supported by disciplined innovation. Taken together, these insights form a contextualized model of Entrepreneurial Orientation for developing economies, emphasizing that MSME success emerges from the synergistic interaction of creativity, foresight, disciplined autonomy, and competitive resilience.

## **5.4 Recommendations**

### **5.4.1 Recommendations for Practice**

*Institutionalize Innovation and Proactiveness:* MSME owners should embed innovation and forward planning as continuous processes. This can be achieved by allocating dedicated budgets for research and development, employee training, and creative experimentation. Establishing or joining innovation hubs and inter-firm collaborations will enhance idea exchange and anticipatory market response.

*Integrate Structured Risk Management Practices:* MSMEs should adopt formal risk assessment and mitigation tools such as contingency planning, scenario analysis, and diversification strategies. This approach strikes a balance between entrepreneurial

boldness and operational prudence, ensuring that risk-taking contributes positively to sustainable growth.

*Balance Autonomy with Strategic Oversight:* Managers should empower employees to make operational decisions while maintaining clear lines of accountability. Adopting participatory decision-making systems, regular performance reviews, and transparent communication channels can harmonize creativity with coordinated execution.

*Enhance Competitive Capabilities Responsibly:* MSMEs should strengthen their competitiveness through marketing innovation, customer relationship management, and digital adoption rather than relying on unsustainable price-based competition. Leveraging social media analytics and e-commerce platforms can expand market reach and responsiveness.

#### **5.4.2 Recommendations for Policy**

*Integrate Entrepreneurial Orientation within National and County MSME Policy Frameworks:* National and county governments should mainstream Entrepreneurial Orientation (EO) principles within Kenya's key strategic frameworks—specifically Vision 2030, the MSME Policy (2019), and the forthcoming Draft MSME Policy (2025). Embedding EO as a core pillar of MSME development will align Kenya's policy agenda with global best practices that link enterprise growth to innovation, proactiveness, and calculated risk-taking.

*Policymakers should:*

- Introduce fiscal incentives, such as targeted tax reliefs, R&D deductions, and innovation grants, to stimulate the development of creative enterprises.
- Establish startup incubators and accelerators in collaboration with universities, research institutions, and the private sector to nurture innovation ecosystems.

- Promote public–private partnerships (PPPs) to mobilize investment in MSME innovation, digital transformation, and skills development.
- Institutionalize entrepreneurial education and mentorship programs through county enterprise offices to build a culture of innovation and proactive market engagement.

*Facilitate Access to Finance and Capacity Building*

Government agencies, financial institutions, and development partners should:

- Expand affordable credit facilities and introduce credit-guarantee schemes.
- Support MSME training in innovation management, risk assessment, and digital entrepreneurship.
- Establish innovation and growth funds targeting startups and high-potential enterprises engaged in product development, digital transformation, or green entrepreneurship.
- Implement structured entrepreneurship and financial literacy training through county enterprise centers, vocational institutions, and business incubators to enhance managerial competence.
- Encourage financial-technology (FinTech) partnerships to leverage mobile lending, crowdfunding, and digital payment platforms.
- Provide preferential financing windows for women, youth, and persons with disabilities in line with the inclusivity objectives of the *Draft MSME Policy (2025)* and *Vision 2030*

*Promote Proactive Market Linkages and Collaboration:* To enhance competitiveness and expand market access, national and county governments should facilitate proactive market linkages and strategic collaboration among MSMEs and between MSMEs and larger enterprises. This aligns with the Draft MSME Policy (2025), which emphasizes integration, inclusivity, and market diversification as pillars of growth and resilience.

***Policy makers should:***

- Establish sector-based business clusters and innovation networks to promote collective efficiency, shared learning, and joint value chain participation across counties.
- Create digital and physical market linkages, including e-commerce platforms and county trade fairs, to connect MSMEs with local, regional, and global markets.
- Support the development of MSME export consortia and partnerships that leverage regional trade agreements, such as the African Continental Free Trade Area (AfCFTA), to enhance cross-border competitiveness.
- Facilitate strategic alliances between MSMEs and large corporations through supplier development programs and subcontracting frameworks, fostering technology transfer and knowledge diffusion.
- Encourage county-to-county business cooperation and inter-regional trade missions that strengthen Kenya's internal markets and reduce geographical disparities in MSME opportunities.

*Institutionalize Monitoring and Evaluation of Entrepreneurial Orientation:* To ensure effective implementation of MSME policies and sustained entrepreneurial growth, the government should institutionalize a robust Monitoring, Evaluation, and Learning (MEL) framework for tracking Entrepreneurial Orientation (EO) outcomes across all counties and sectors.

The State Department for MSME Development, in collaboration with the Kenya National Bureau of Statistics (KNBS), the Kenya Institute for Public Policy Research and Analysis (KIPPRA), and county governments, should:

- Develop standardized EO performance indicators that measure key dimensions, such as innovativeness, proactiveness, risk management, autonomy, and competitive aggressiveness, across various sectors.
- Establish a national MSME observatory or dashboard to aggregate and disseminate real-time data on enterprise growth, financing patterns, innovation adoption, and job creation.
- Conduct annual EO performance audits and policy reviews to evaluate progress and identify gaps in MSME development programs.
- Promote a learning-oriented feedback mechanism that integrates field experiences, best practices, and case studies into ongoing policy improvement and capacity-building efforts.
- Encourage collaboration with research institutions and universities to generate empirical evidence and foster innovation-driven policymaking.

Collectively, these policy recommendations are mutually reinforcing and should be implemented in an integrated manner to accelerate Kenya’s transition toward an innovation-driven, inclusive, and competitive MSME sector. Embedding Entrepreneurial Orientation (EO) principles within national and county policies, expanding access to finance and capacity-building, strengthening market linkages, and institutionalizing monitoring and learning will create a coherent policy ecosystem that nurtures innovation, calculated risk-taking, and proactive entrepreneurship.

Alignment with Vision 2030, BETA, and the Draft MSME Policy (2025) will ensure that MSME development is not only strategic and data-driven but also inclusive—addressing the needs of women, youth, persons with disabilities, and marginalized communities. A holistic, evidence-based policy approach will therefore be essential in positioning

Kenya's MSMEs as engines of sustainable industrialization, employment creation, and equitable economic growth.

### **5.4.3 Recommendations for Further Research**

Building on the insights and limitations of this study, future research can expand understanding of entrepreneurial orientation (EO) and MSME growth along three interrelated dimensions: methodological, conceptual, and contextual.

#### *Methodological Directions*

This research demonstrated how a multi-method, positivist–pragmatic approach can capture both measurable and contextual aspects of EO. Future studies may advance this contribution by:

- *Broadening empirical testing of the multidimensional EO framework.* The present study has empirically illustrated how the Lumpkin and Dess (1996) framework operates in a resource-constrained context. Subsequent studies could adopt longitudinal or cross-country comparative designs to test the robustness and adaptability of this framework across diverse economies and sectors.
- *Investigating the differential effects of EO dimensions.* Evidence from this study suggests that EO dimensions have varied effects on MSME growth, particularly that innovativeness and proactiveness are key drivers of growth, while autonomy, if poorly managed, may hinder performance. Future researchers should employ advanced analytical techniques, such as structural equation modeling (SEM) or multilevel modeling, to assess the interactive and mediating effects among EO dimensions.

- *Enhancing methodological integration.* This study demonstrated the value of integrating quantitative rigor with qualitative depth through a multi-paradigmatic approach. Future studies could refine this by employing fully integrated mixed-method designs that merge survey data, case studies, and longitudinal tracking to develop deeper, context-specific insights into entrepreneurial behavior and firm growth.

### ***Conceptual Directions***

Further studies should explore additional constructs shaping the EO–growth relationship, including:

- Mediating and moderating factors such as access to finance, digital adoption, environmental turbulence, and firm culture.
- Interaction effects between EO dimensions to examine synergistic or offsetting relationships.
- Emerging constructs, such as strategic resilience, digital agility, and sustainability orientation, are used to extend EO theory in contemporary MSME contexts.

### ***Contextual Directions***

Given the contextual diversity of MSMEs, future research should:

- Conduct sectoral comparisons (e.g., manufacturing vs. service vs. agribusiness) to determine how industry characteristics influence the EO–growth linkage.
- Undertake regional or cross-country studies across East Africa to capture how institutional and cultural environments shape EO outcomes.

- Examine youth- and women-owned enterprises to understand how inclusivity, social networks, and gendered constraints influence entrepreneurial orientation and performance.

Such contextual studies would also generate policy-relevant insights to inform the implementation of Kenya's Draft MSME Policy (2025) and similar frameworks across Sub-Saharan Africa.

In conclusion, future research on Entrepreneurial Orientation (EO) should aim to deepen, broaden, and contextualize understanding by embracing multi-paradigmatic methodologies, exploring complex conceptual linkages, and situating findings within diverse entrepreneurial ecosystems. Advancing EO scholarship in developing economies such as Kenya requires methodological rigor, theoretical expansion, and contextual sensitivity to capture the dynamic interplay between entrepreneurial behavior and environmental conditions. Such efforts will not only strengthen theory but also inform evidence-based strategies that foster inclusive, innovation-driven, and sustainable enterprise development across emerging economies.

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## APPENDICES

### **Appendix I:** Letter of Introduction

Dear Sir/Madam,

#### **Re: Request For Participation In A Research Study**

I am a postgraduate student pursuing a Doctor of Philosophy (PhD) Degree in Business Administration at the School of Business, Kabarak University. I am currently conducting research in the field of Entrepreneurship entitled:

**“The Influence of Entrepreneurial Orientation on the Growth of Micro, Small, and Medium Enterprises in Kenya.”**

I kindly request your participation in this study by responding to the attached questionnaire. The information you provide will be highly valuable in generating data necessary for the successful completion of this research.

Please be assured that all information obtained will be treated with the highest level of confidentiality. Neither your name nor that of your organization will appear in the final report. The data collected will be used strictly for academic purposes. Participation in this study is entirely voluntary, and the questionnaire does not require you to identify yourself.

Should you have any questions or require further clarification, please feel free to contact me.

Thank you very much for your time, cooperation, and valuable input.

**Sincerely,**

**Isaac Katialem**

Ph.D. Candidate, School of Business

Kabarak University

**Phone:** 0717479399

**Email:** isaackatialem@gmail.com

## Appendix II: Questionnaire

### General Instructions

The Purpose of this Questionnaire is to collect data on “*The Influence of Entrepreneurial Orientation on the Growth of Micro, Small, and Medium Enterprises in Kenya*”. The questionnaire consists of 6 sections. Please respond to every statement.

### Section A: Background Information

1. What is the name of your organization (Optional) .....
2. Location of Business .....
3. Type of business: Tick (√) appropriately.  
(A) Individual Ownership [ ], (B) Partnership [ ], (C) Private Limited Company [ ],  
(D) Any Other [ ] specify.....
4. What are the activities of your enterprise? Tick (√) appropriately  
(A) Food & Beverage [ ], (B) Leather & Footwear [ ], (C) Textile & Apparel [ ]  
(D) Motor vehicle accessories [ ], (E) Plastic and Rubber [ ],(F) Chemical and Allied [ ],  
(G) Metal and Allied [ ], (H) Any other [ ] specify.....
5. How many years has your enterprise been in operation? Tick (√) appropriately.  
(A) 2-5 years [ ], (B) 6-10 years [ ], (C) 11-15 years [ ]  
(D) 16-20 years [ ], (E) Over 20 years [ ]
6. Number of employees in your firm including contractual work force  
Tick (√) appropriately  
A) 0-9 [ ], (B) 10-49 [ ], (C) 50-99 [ ] (D) Over 100 [ ],
7. What range best describes your annual sales? Tick (√) appropriately  
(A) 1 Million and below [ ], (B) 2 – 3 Million [ ], (C) 3 – 5 Million [ ]  
(D) 5 – 10 Million [ ],(E) Over 10 Million [ ]

### Section B: Innovativeness

Please indicate the extent to which you agree with the following statements about the situation in your company. Use the scale below to select the number that best represents your opinion. Place a tick (√) in the box that corresponds to your answer. Selecting a 1 indicates complete disagreement with the statement, while selecting a 5 indicates complete agreement.

**Rating scale: 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly Agree)**

	<b>Innovativeness</b>	1	2	3	4	5
1	In this firm we actively introduce improvements and innovations.					
2	Our business is creative in its methods of operation.					
3	In the last five years, this firm has marketed no new lines of products or services.					
4	This firm constantly experiments with new services or products and original approaches to problem solving rather than imitating methods that other firms have used for solving their problem.					
5	In my firm, changes in product or service lines have been mostly of a minor nature as compared with being quite dramatic					

**Section C: Risk-Taking**

Please indicate the extent to which you agree with the following statements about the situation in your company. Use the scale below to select the number that best represents your opinion. Place a tick (√) in the box that corresponds to your answer. Selecting a 1 indicates complete disagreement with the statement, while selecting a 5 indicates complete agreement.

**Rating scale: 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly Agree)**

	<b>Risk-Taking</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	The term ‘risk taker’ is considered a positive attribute for people in our business.					
2	People in our business are encouraged to take calculated risks with new ideas.					
3	The top managers of this firm have a strong proclivity for high-risk projects (with chances of very high return) rather than low-risk projects (with chances of normal and certain rates of return).					
4	When confronted with decision-making situations involving uncertainty, my firm typically adopts a cautious, “wait-and-see” posture in order to minimize the probability of making costly decisions					
5	The top managers of my firm prefer to study a problem thoroughly before deploying resources to solve it instead of being quick to spend money on potential solutions if problems are holding us back					

**Section D: Proactiveness**

Please indicate the extent to which you agree with the following statements about the situation in your company. Use the scale below to select the number that best represents your opinion. Place a tick (√) in the box that corresponds to your answer. Selecting a 1 indicates complete disagreement with the statement, while selecting a 5 indicates complete agreement.

**Rating scale: 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly Agree)**

1	<b>Proactiveness</b>	1	2	3	4	5
1	In dealing with its competitors, this firm typically initiates actions which competitors then respond.					
2	In dealing with its competitors, my firm is often the first business to introduce new products/services.					
3	My firm excels at identifying opportunities.					
4	The owner/manager of this firm have a strong tendency to “follow the leader” in introducing new products or ideas.					
5	In dealing with competitors, this firm typically avoid confrontation with competitors and allow them to act.					

**Section E: Autonomy**

Please indicate the extent to which you agree with the following statements about the situation in your company. Use the scale below to select the number that best represents your opinion. Place a tick (√) in the box that corresponds to your answer. Selecting a 1 indicates complete disagreement with the statement, while selecting a 5 indicates complete agreement.

**Rating scale: 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly Agree)**

1	<b>Autonomy</b>	1	2	3	4	5
1	My firm's employees are given freedom and independence in doing their work without depending on the owner/manager direction.					
2	In this firm, individuals and/or teams pursuing business opportunities have to obtain approval from their managers before making decisions.					
3	The owner/manager of this firm believes that the best results occur when individuals and/or teams decide for themselves what business opportunities to pursue.					
4	In this firm, the owner/manager (rather than employee initiatives and input) play a major role in identifying and selecting the entrepreneurial opportunities this firm pursues.					
5	Employees in my firm are given authority and responsibility to act alone if they think it to be in the best interests of the business.					

**Section F: Competitive Aggressiveness**

	<b>Competitive Aggressiveness</b>	1	2	3	4	5
1	In general, our business takes a bold or aggressive approach when competing.					
2	In dealing with competitors, our firm typically adopts a very competitive posture aiming at overtaking the competitors.					
3	Our business competes intensely in the our industry					

**Section G: Enterprise Growth**

Please read the following statements and tick (√) one of the five choices provided that best represents your views as they relate to your company.

**Rating scale: 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly Agree)**

1. Compared to previous years (since 2010) volumes of sales of our products in 2014 are now.....(Please tick √ on one of the 5 choices provided)						
Much worse	1	2	3	4	5	Much Better
2. Compared to previous years (since 2010) our assets base in 2014 are now.....(Please tick √ on one of the 5 choices provided)						
Much worse	1	2	3	4	5	Much Better
3. Compared to previous years (since 2010) the number of employees in our firm.....(Please tick √ on one of the 5 choices provided)						
Much worse	1	2	3	4	5	Much Better

*Thank you for your valuable time and the information provided*

## **Appendix III: Interview Guide**

### **General Instructions**

The Purpose of this guide is to collect data on “*Entrepreneurial orientation as a catalyst for spurring the growth of small and medium enterprises in Kenya*”. Please respond to every statement.

### **A. Innovativeness**

- i. Would you say your firm actively introduces improvements and innovations?  
Please explain
- ii. Is your business creative in its methods of operation? Please explain
- iii. Would you say that your firm has introduced new lines of products over the last five years? Please give examples
- iv. Would you say that your firm constantly experiments with new services or products and original approaches to problem-solving, rather than imitating methods that other firms have used to solve their problems? Please explain?

### **B. Risk-taking**

- i. What kind of uncertainties do you deal with in your industry?
- ii. How do you deal with such uncertainties?
- iii. What would you do if you were faced with high-risk projects that offer very high returns?
- iv. Is your firm considered bold? Please explain
- v. Does your business encourage people to take calculated risks with new ideas?  
Please explain

### **C. Proactiveness**

- i. How do you identify business opportunities?
- ii. How do you respond to business opportunities?
- iii. In dealing with its competitors, would you say that your firm is the first business to introduce new products?

**D. Autonomy**

- i. How do you manage individuals in your firm in relation to your work?
- ii. Does your business allow individuals and/or teams pursuing business opportunities to decide for themselves how to conduct their work? Please explain
- iii. Do you give employees or teams in your firm the authority and responsibility to act alone and make decisions without referring to their supervisors? explain

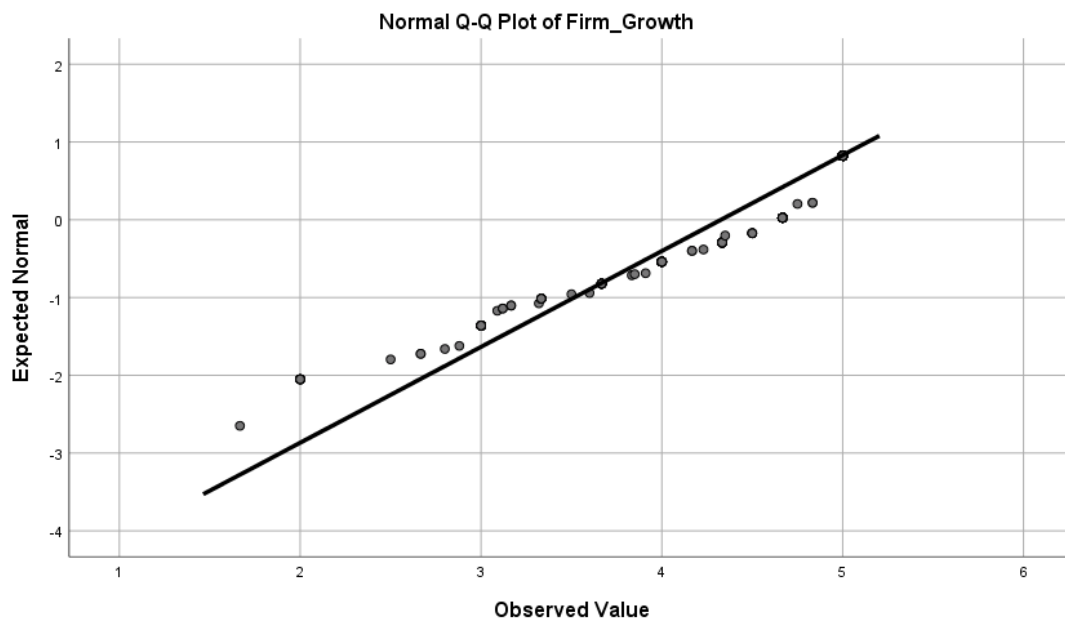
**E. Competitive Aggressiveness**

- i. How do you respond to actions that competitors initiate, or do you initiate actions that competitors respond to?
- ii. How do you respond to competitors' actions?
- iii. How does your business compete in your industry?

**F. Enterprise Growth**

- i. How do your sales volumes of your products this year compare to the previous five years? Is the trend increasing or decreasing?
- ii. How does the assets base of your firm this year compare to the previous five years? Is the trend increasing or decreasing?
- iii. How does the number of employees of your company this year compare to the previous five years? Is the trend increasing or decreasing?

## Appendix IV: Normal Q-Q Plot For SME Growth



## Appendix V:List of MSMEs

<b>S.N.</b>	<b>Name of Enterprise</b>
1	Panteel Chemicals Ltd
2	Singh Retread Ltd
3	Spare & Industries Ltd
4	Leather Masters Ltd
5	Comet Healthcare Ltd
6	Unga Farm Care Ltd
7	Chloride Exide Ltd
8	AfricaPolysackLimited
9	National Panel Batteries Ltd
10	Osho Chemicals Ltd
11	Global Automotive Ltd
12	Shineray Ltd
13	Plastic Electrons Ltd
14	Ocean Food Ltd
15	Land Mawe ltd
16	PackagingMasters Ltd
17	Japan Auto Ltd
18	Automasters Ltd
19	Cretecon SuppliesLt
20	MarooPolymersLtd
21	AgroManufacturingCoLtd
22	CityEngineeringWorks(K) Ltd
23	RiftValleyLeatherLimited
24	Rubber ProductsLtd
25	Car Care Ltd
26	Kenapen ltd
27	Brush Manufacturers Ltd
28	Sky Plast Limited
29	Wazawaza Ltd
30	Metro Plastics Ltd
31	C&Shoe Industries
32	Kasai Products Ltd
33	Aulucop Trading Ltd
34	Safety Bata Ltd
35	Assaabloy EA Ltd
36	Colour Up Ltd
37	Machinery Tools Ltd
38	Bruce Truck and Equipment (E.A.) Ltd.
39	Rayan Spares Ltd
40	StainlessSteelProductsLtd
41	Afrostreet Ltd
42	TwigaChemicalIndustries Ltd
43	Autobros Car Parts
44	Multi Options ltd
45	Dalex Motors Ltd
46	Specialised Towel Manufacturers Ltd
47	Kema Ltd
48	Mototech Auto

49	Jaspere Auto Ltd
50	Manchester Outfitter Ltd
51	Davies and Shirriff
52	Pharmaceuticals ltd
53	Supra Textiles Ltd
54	Apex Steel Ltd
55	Kridha Ltd
56	Gonas Best Ltd
57	J.P Motors Ltd
58	Triclover Industries (K) Limited
59	Chemlabs Ltd
60	Complast Industries
61	Lab and Allied Ltd
62	Manji Food Industries
63	Alpha Medical Ltd
64	Macs Pharmaceuticals
65	Lasco ltd
66	Canon Chemicals
67	Kip Melanine
68	Friendship Ltd
69	Subaru Genuines ltd
70	Frontier Auto Ltd
71	Galaxy Paints Ltd
72	Weetabix E A Ltd
73	Thermopack Ltd
74	Steel ways E Africa
75	Bake and Bite
76	Rehsi Ventures Ltd
77	Sadolin Ltd
78	Comet Plastics Ltd
79	Elson Plastics Ltd
80	Nairobi Millers Ltd
81	Supa Loaf Ltd
82	Mars Auto Ltd
83	Elgi Tread Ltd
84	Paint and Industrial
85	Dobenet Ltd
86	Assi Engineering and Construction Ltd
87	Raddy Tyres Ltd
88	New World Stainless Steel Ltd
89	Unilab Ltd
90	Corrugated Ltd
91	Toshlee Spares
92	ChemrawE.A.Limited
93	Sky Autos ltd
94	Jat Auto Parts
95	Afro Industrial ltd
96	Tonoka Steel Ltd
97	Mabati Steel ltd
98	Breakfast Cereals It
99	Gonas Best Ltd
100	Associate Batteries


101 Kamili Packers Ltd  
102 DynamicChemicalsLtd.  
103 Paninis Corner  
104 Nas Plastic Ltd  
105 Asl Ltd  
106 Roka Trading ltd  
107 Sunstone roof Ltd  
108 Tradewell Ventures L  
109 Elliot Ltd  
110 African Cotton Ltd  
111 Spectra Chemicals Limited  
112 Zenith Steels Ltd  
113 Kenya Sweet ltd  
114 Beta Health Ltd  
115 Patco Industries Ltd  
116 Blowplast Limited  
117 Ace Chemicals Ltd.  
118 Carbacid Ltd  
119 Odex Chemicals Ltd  
120 Dune Packaging  
121 Barkers Corner  
122 Canon Chemicals Ltd  
123 Polyflex Ltd  
124 Uniplastics Ltd  
125 Power Technics Ltd  
126 Steel Structures Ltd  
127 Biopharm Ltd  
128 Maruti Steels Ltd  
129 Nestle Kenya Ltd  
130 Pan African Limited  
131 Gas Africa Ltd  
132 Wire Products Ltd  
133 NovelPaintsLtd  
134 Basco Product Ltd  
135 Crown Paints Ltd  
136 SagooHoldingsLimited  
137 Beiersdorf EA Ltd  
138 Osho Chemicals Ltd  
139 Sameer Africa ltd  
140 Kenchic Ltd  
141 Zam Zam Ltd  
142 Arichem ltd  
143 Rok Industries Limited  
144 Nayan Products Ltd  
145 AutoAuxillary Ltd  
146 RajMetalsLtd  
KenyaInks&Coatings Industries  
147 Ltd  
148 R N B Plastics Ltd  
149 Twiga Chemicals Ltd  
150 Sumaria Industries  
151 Coninx Industries Ltd

152	Ziwa Garments Ltd
153	TwinAfricaHoldingsLtd
154	Sphinx Pharmaceutica
155	E. A Cans and CI Ltd
156	Impala Auto Ltd
157	Supa Textiles Ltd
158	APlusPvcTechnology Ltd
159	Japan Motors Ltd
160	Hydraulic Hoses Ltd
161	East African Metals
162	KHE Ltd
163	Atlas Ltd
164	ChuiManufacturersLimited
165	Nanak textile
166	Model Builders Ltd
167	JF MCcloy Ltd
168	AfroCablesIndustriesLtd
169	TwinAfricaLtd
170	AraxMill Ltd
171	Glaxosmithkline Limited
172	Ken and Metal Its
173	Dynaplast Ltd
174	Kalztech Kenya ltd
175	AlMahraIndustriesLimited
176	ASP Ltd
177	Infinity Ltd
178	Homefresh Ltd
179	Raneem Plastic Industries
180	Mjengo Limited
181	Softa Bottling ltd
182	Patco Industries Limited
183	Pioneer Feeds Ltd
184	Premier Foods Limited
185	Dentex Industries Ltd.
186	Empire Glass Industries Ltd
187	Infinity Plastics Ind. Ltd.
188	Tri Packing Ltd
189	Murphy Chemicals E.A. Ltd.
190	Jojo Plastic Ltd
191	Euro Industrial Chemicals Ltd
192	Triclover Industries (K) Limited
193	Kenya Canvas Ltd.
194	Mini Bakers (NBI) Ltd.
195	Anffi ltd
196	Themaco Group Ltd.
197	Elys Chemical Ind. Ltd.
198	Solai Trading Limited
	East Africa Steel Structures and Engineering
199	Supplies Limited
200	Excel Packaging Ltd.
201	Rok Industries Ltd

## Appendix VI: NACOSTI Research Permit

**THIS IS TO CERTIFY THAT:**  
**MR. ISAAC RUTO KATIALEM**  
**of KABARAK UNIVERSITY, 109-30600**  
**KAPENGURIA, has been permitted to**  
**conduct research in Nairobi County**  
**on the topic: ENTREPRENEURIAL**  
**ORIENTATION AND GROWTH OF SMALL**  
**AND MEDIUM MANUFACTURING**  
**ENTERPRISES IN KENYA**  
**for the period ending:**  
**31st December, 2015**

**Permit No : NACOSTI/P/15/5756/6073**  
**Date Of Issue : 16th June, 2015**  
**Fee Received :Ksh 2000**



*[Handwritten Signature]*  
**Applicant's Signature**

*[Handwritten Signature]*  
**Director General**  
**National Commission for Science,**  
**Technology & Innovation**

**Appendix VII: Evidence of Conference Participation**



## Appendix VIII: List of Publications



### Journal of Business and Entrepreneurship

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JBE

#### Examining the Contribution of Entrepreneurial Proactiveness to the Growth of Micro, Small, and Medium Enterprises in Kenya

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##### Abstract

The study examines the role of proactiveness, a key dimension of Entrepreneurial Orientation (EO), in the development of Micro, Small, and Medium Enterprises (MSMEs) in Kenya. MSMEs are important for economic growth and job creation in emerging economies, but their expansion in Kenya is hindered by limited credit access, regulatory instability, infrastructural gaps, and intense competition. EO provides a framework for firm competitiveness, with proactiveness, defined as a forward-looking orientation that enables firms to anticipate change, exploit opportunities, and act ahead of competitors, emerging as a particularly strategic capability. Despite its importance, empirical evidence on proactiveness in African MSMEs remains limited. To address this gap, the study adopted a sequential mixed-method design targeting 284 manufacturing firms and innovation-oriented startups in Nairobi. Quantitative data from structured questionnaires were analysed using regression, while qualitative insights from semi-structured interviews highlighted how proactive practices supported opportunity identification, market adaptation, and resilience. Results revealed a significant positive effect of proactiveness on MSME growth ( $r = .631$ ;  $\beta = .574$ ,  $p < .001$ ), explaining nearly 40 per cent of performance variance. Qualitative findings reinforced that firms embedding proactive scanning and early market entry strategies sustained superior growth despite resource constraints. The study advances EO theory by highlighting proactiveness functions both as a behavioural orientation and a dynamic capability in turbulent environments. Practically, managers are encouraged to institutionalise proactive practices, while policymakers should design ecosystems that reward forward-looking strategies. These insights position proactiveness as a pathway to inclusive and sustainable MSME development in Kenya and comparable economies.

**Key terms:** Entrepreneurial orientation, growth, proactiveness, MSME, Kenya.

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Journal url: <https://journals.editononline.com/>





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## Rethinking Entrepreneurial Orientation in Emerging Economies: Dimension-Specific Effects on MSME Growth in Kenya

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Robert Ingabo Otuya <sup>(2)</sup>

Stella Isendi Muhanji <sup>(3)</sup>

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Katialem, I. R., Otuya, R. I., & Muhanji, S. I. (2025). Rethinking entrepreneurial orientation in emerging economies: Dimension-specific effects on MSME growth in Kenya. *Editon consortium journal of business and management studies*, 7(1), 93-103. <https://doi.org/10.51317/ecjbms.v7i1.634>

### Abstract

The purpose of this article is to investigate the influence of Entrepreneurial Orientation (EO) on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Kenya, which, despite their significant contribution to employment and GDP, continue to face persistent growth barriers and high failure rates. EO—defined by innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness—has been widely studied, but empirical evidence in Sub-Saharan Africa remains limited and context dependent. To address this gap, the study employed a sequential mixed-methods design, combining quantitative surveys of 284 MSMEs with qualitative interviews of 15 owners/managers. Correlation results indicated that proactiveness, risk-taking, and innovativeness were positively associated with growth, autonomy was negatively related, and competitive aggressiveness was weakly positive. Regression analysis confirmed proactiveness, innovativeness, and competitive aggressiveness as significant growth drivers, while autonomy exhibited a significant negative effect, and risk-taking was statistically non-significant. The overall model explained 60.2 per cent of the variance in MSME growth. Qualitative findings complemented these results by showing that risk-taking was often interpreted as survival-driven rather than strategic, and autonomy contributed to inefficiencies due to weak oversight. Conversely, innovativeness and proactiveness were consistently perceived as critical for survival and competitiveness. These findings highlight EO's heterogeneous and context-sensitive effects on MSME performance. The study contributes to theory by advancing a contextualised understanding of EO in emerging economies and provides practical insights for policy and management by recommending strategies to strengthen innovation, proactiveness, and structured autonomy among MSMEs.

**Key words:** Competitiveness, entrepreneurial orientation, growth, innovativeness, MSMEs proactiveness, risk-taking.



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