International Journal of
Entrepreneurship
(IJE)



Entrepreneurial Agility and Growth of Small and Medium-Sized Food and Beverage Manufacturing Enterprises in Nairobi Metropolitan, Kenya

David Njeru Kariuki, Prof. G.S Namusonge, Dr. Susan Naikuru, Dr. Peter Wanjohi

AJP

International Journal of Entrepreneurship
ISSN 2790-6965 (Online)
Vol.9, Issue 1, pp 59- 79, 2026

www.ajpojournals.org

Entrepreneurial Agility and Growth of Small and Medium-Sized Food and Beverage Manufacturing Enterprises in Nairobi Metropolitan, Kenya

David Njeru Kariuki[1], Prof. G.S Namusonge[2], Dr. Susan Naikuru[3], Dr. Peter Wanjohi[4]

[1]PhD Scholar, Jomo Kenyatta University of Agriculture and Technology
[2]Professor Jomo Kenyatta University of Agriculture and Technology
[3]Senior Lecturer, Jomo Kenyatta University of Agriculture and Technology
[4]Lecturer, Jomo Kenyatta University of Agriculture and Technology

Article history

Submitted 13.08.2026 Revised Version Received 20.09.2026 Accepted 28.10.2026

Abstract

Purpose: The study aimed to establish the influence of entrepreneurial agility on the growth of Small and medium-sized food and beverage manufacturing enterprises in the Nairobi Metropolitan Area, Kenya. The study was conducted because the growth of small and medium-sized enterprises (SMEs) in the food & beverage sector within the Nairobi Metropolitan Area are experiencing limited growth.

Materials and Methods: This study used a combination of descriptive and explanatory research designs. Data was collected from 139 respondents drawn from business owners in Nairobi Metropolitan Area, Kenya. Data analysis involved descriptive statistics, Pearson correlation analysis and simple linear regression. Qualitative data was analyzed using thematic analysis to complement the quantitative findings.

Findings: The study found a strong positive and statistically significant relationship between entrepreneurial agility and growth of small and medium Food and Beverage manufacturing enterprises in Nairobi Metropolitan Area, Kenya. Regression results revealed that entrepreneurial agility significantly predicts SMEs growth that entrepreneurial agility enhances SMEs' growth $\beta = 0.629$, $t = 12.669$, $p = 0.000 < \alpha = 0.05$, accounting for 60.5% of variation in SMEs growth, R-squared (0.605).

Implications to Theory, Practice and Policy: The study was informed by dynamic capabilities theory which argues that an organization's long-term growth and competitive advantage depend not only on the resources it possesses but also on its ability to sense opportunities and threats in the environment, seize opportunities by making timely strategic decisions and investments .To business owners, the study recommends that they should focus on transforming their resources and capabilities to respond to changing market conditions. For policy makers, the study recommends that they should amend and formulate progressive policies that promote the establishment and growth of SMEs.

Keywords: *Entrepreneurial Agility, Growth, Entrepreneurship, Small and Medium Enterprises*.

INTRODUCTION

Entrepreneurship is increasingly acknowledged as a vital force for economic growth, especially in developing and emerging economies where entrepreneurial businesses aid in job creation, income generation, innovation, and poverty alleviation (Mwangi et al., 2022). Small and Medium-Sized Enterprises (SMEs) represent a vital part of economic activity in these regions and offer avenues for business growth and income generation (CBK, 2022). Nonetheless, the role of SMEs in economic advancement heavily relies on their capacity to endure, adjust, and attain long-term growth.

Hamdan et al. (2021) note that the dynamics of entrepreneurship in emerging economies are still poorly understood, emphasizing the necessity for additional research into the elements that allow businesses in these environments to evolve and expand. This issue is notably significant as SMEs typically function with fewer financial, technological, human, and organizational resources compared to larger companies (European Commission, 2021). As a result, their capacity to adapt to shifts in the business landscape could greatly affect their development.

The ability of businesses to recognize opportunities, react to shifts in the market, innovate, obtain and use resources, and modify operations in response to shifting environmental conditions all have an impact on the growth of SMEs. SMEs may find it difficult to grow due to resource limitations, fierce rivalry, changing consumer tastes, technical advancements, legal requirements, and unpredictability in the market. In order to help SMEs overcome obstacles and enhance their results, prior research has looked at entrepreneurial practices and capabilities such creativity, entrepreneurial orientation, networking, and external resource usage.

For instance, Adam and Alarifi (2021) discovered that innovation practices were linked to company performance and survival in Saudi Arabia, and that the relationship between innovation and survival was reinforced by external support. Mirkovski et al. (2024) showed how Macedonian businesses overcame capacity and resource limitations and fostered entrepreneurial growth by leveraging outside resources and talents. In a similar vein-Peng et al. (2022) and Riaz et al. (2024) discovered favorable connections between social networking and the expansion and profitability of entrepreneurial businesses. These results highlight how crucial entrepreneurial skills are for helping SMEs overcome obstacles and seek expansion. Among these abilities, entrepreneurial agility has garnered growing academic interest due to its importance for companies functioning in volatile and unpredictable settings.

Entrepreneurial agility pertains to the capacity of an organization to react efficiently and successfully to changes (Zulganef et al., 2023). It includes the ability of businesses to identify changes, make prompt decisions, modify their actions, and react to new opportunities and challenges. From a dynamic capability's viewpoint, agility allows companies to adjust and reorganize their resources and abilities in reaction to changes in the environment. Previous research has linked entrepreneurial agility to different organizational results.

Using the Resource-Based View (RBV), Miočević and Arslanagić-Kalajdžić (2024), defined agility as a dynamic capability and discovered that agility mediates the relationship between sales growth and sales capability. The performance of SMEs and entrepreneurial agility were found to be statistically significantly correlated in a study conducted in in Pakistan, Khan and Rehman (2021) also found a significant correlation between the two.

However, much of the existing literature has focused on general firm performance, survival,

innovation, or sales growth rather than examining enterprise growth as a distinct outcome.

The challenge of SME growth is particularly relevant in developing economies such as Kenya. SMEs contribute significantly to employment, income generation, and economic development, but their growth is constrained by financial, technological, managerial, and market-related challenges. In their study on the impact of entrepreneurial skills on the organizational performance of SMEs in Nakuru, Kenya, Mutuku et al. (2022) found that low market share, limited market reach, a lack of capital, and poor managerial and technological skills are the main causes of SMEs' poor business performance.

Oketch and Okeyo (2024) highlighted insufficient technological expertise and financial resources as barriers to SME performance, whereas Kariuki and Mungai (2024) mentioned difficulties concerning SMEs' capacity to adjust to evolving market conditions. Gathoni et al. (2021) also emphasized the significant mortality rate of SMEs and underscored the necessity of innovative skills for business growth. These findings indicate that business owners must have skills that allow them to identify and react effectively to evolving business conditions in order to attain continued growth.

This matter is especially significant in the food and beverage manufacturing industry, which plays a role in employment, industrial operations, income creation, and economic growth in Kenya. Small and medium-sized enterprises in food and beverage manufacturing function in a landscape marked by shifting consumer tastes, rivalry, technological advancements, supply chain challenges, regulatory obligations, and the necessity for ongoing innovation.

These circumstances render the capacity to react swiftly and efficiently to changes in the environment especially crucial. Research on food and beverage manufacturing companies in Nairobi has explored topics like growth strategies, product innovation, competitive approaches, supply-chain adaptability, and strategic leadership concerning business outcomes. Nonetheless, comparatively little focus has been placed on entrepreneurial agility as a skill that could help food and beverage manufacturing SMEs adapt to these circumstances and attain growth.

The Nairobi Metropolitan area is notably significant as SMEs there function in a competitive and ever-changing business landscape marked by evolving consumer demands, technological advancements, market rivalry, and limitations in resources. Even with the significance of SMEs and the food and beverage manufacturing industry to economic performance, issues concerning business growth and sustainability are still apparent. Current Kenyan research has offered valuable insights into entrepreneurial orientation, entrepreneurial abilities, innovation, networking, and various elements linked to the performance and growth of SMEs. However, information regarding entrepreneurial agility and its role in the development of food and beverage manufacturing SMEs in the Nairobi Metropolitan area is still scarce.

Consequently, there is a theoretical and empirical deficit. Empirical research on entrepreneurial agility has primarily investigated results like firm performance, innovation, resilience, survival, and sales growth, while studies concerning Kenyan food and beverage manufacturing firms have generally emphasized different strategic and organizational aspects. As a result, there is insufficient empirical evidence detailing whether and how entrepreneurial agility aids in the expansion of small and medium-sized food and beverage manufacturing companies in the Nairobi Metropolitan area. Theoretically, the Resource-Based View offers a valuable foundation for comprehending entrepreneurial agility as a capability that allows firms to utilize, adjust, and rearrange resources in reaction to environmental shifts. Nonetheless, the use of this viewpoint regarding entrepreneurial agility and SME development

is still inadequately explored in the Kenyan food and beverage production sector.

This study therefore investigates the entrepreneurial agility and growth of small and medium-sized food and beverage manufacturing enterprises in Nairobi Metropolitan, Kenya. The research aims to add to the entrepreneurship and SME literature by offering context-relevant evidence on how entrepreneurial agility influences business growth and by broadening the Resource-Based View application to SMEs functioning in a dynamic emerging-economy context.

Statement of the Problem

It is anticipated that Kenya's manufacturing sector will play a major role in industrialization, economic expansion, value addition, job creation, and the achievement of Vision 2030 (Faith & Mary, 2025). The food and beverage manufacturing subsector of the industry is crucial for generating jobs, ensuring food security, adding value, and satisfying the rising demand for processed foods (Mwiti, 2023). As a result, it is anticipated that food and beverage manufacturing SMEs will see steady and scalable growth through higher profits, increased output, better market penetration, and access to official markets. Their competitiveness and contribution to employment and economic development would both be strengthened by such growth.

Nonetheless, a lot of small and medium-sized enterprises (SMEs) that produce food and beverages still have restricted market expansion and growth. This subsector's growth decreased from 4.3% in 2020 to 2.9% in 2022 (Njuguna & Juma, 2024), and over 60% of SMEs report revenue growth of less than 5% annually (Kariuki & Aduda, 2020). Additionally, only 15% of SMEs have entered established retail marketplaces like supermarkets; the remainder rely on unofficial distribution channels, which limit their ability to expand into new markets (KNBS, 2023; Were et al., 2023). These patterns show that a large number of SMEs are failing to meet expectations for long-term growth and scalability.

The limited growth of SMEs has traditionally been attributed to inadequate access to finance, unfavorable business environments, and limited market opportunities (Gathoni et al., 2021; Mutuku et al., 2022). Although these factors are important, they do not fully explain why SMEs operating under similar conditions experience different growth outcomes. Existing studies have also focused predominantly on firm performance, tangible resources, and external environmental constraints, while giving comparatively limited attention to the entrepreneurial capabilities that enable firms to identify opportunities, acquire and apply knowledge, build strategic relationships, withstand adversity, and respond rapidly to changing market conditions.

If this problem persists, food and beverage manufacturing SMEs may continue to experience low revenue growth, limited production expansion, restricted market penetration, and reduced competitiveness. Such constraints may undermine their ability to survive, create employment, generate income, and contribute to value addition and industrialization. At the broader level, persistent underperformance may weaken the contribution of the subsector to Kenya's economic growth, employment creation, food security, and development objectives.

In order to solve this issue, consideration must be given to both external limitations and the entrepreneurial skills that allow SMEs to go around obstacles and seize opportunities. Increasing entrepreneurial agility may help businesses innovate, access markets and resources, adjust to volatility, and maintain growth. Effective interventions, however, necessitate actual data on the capabilities that have the biggest impact on SME growth. Thus,

the impact of entrepreneurial agility on the expansion of food and beverage manufacturing SMEs in the Nairobi Metropolitan Area was investigated in this study. Policymakers and SME managers are anticipated to use the findings to prioritize actions and methods for fostering scalable and sustainable SME growth.

LITERATU REVIEW

Conceptual Framework

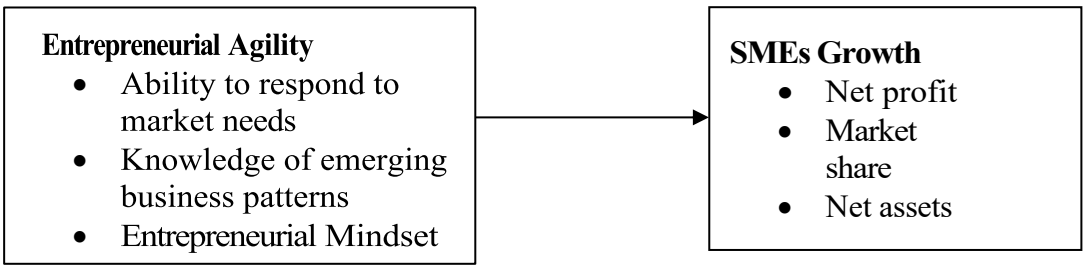


Figure 2.1 Conceptual Framework

Empirical Review

Entrepreneurial agility has become a crucial skill that enables small and medium-sized enterprises to adapt to swiftly evolving business landscapes. For SMEs, agility means the capacity to detect changes in the environment, make prompt decisions, reorganize resources, and react to new opportunities and risks. This ability is especially important for business expansion since SMEs usually function with constrained resources and thus must utilize those resources swiftly and adaptively when market conditions shift. Research has increasingly investigated if entrepreneurial agility helps SMEs attain growth, although there is more literature focused on firm performance than on growth perse.

Miočević and Arslanagić-Kalajdžić (2024) offer especially pertinent empirical data regarding the connection between agility and the growth of SMEs. Utilizing the Resource-Based View, the authors defined agility as a dynamic capability and investigated its connection with sales capability and sales growth. Their research indicated that agility acted as a mediator in the connection between sales capability and sales growth. This discovery is significant as it offers clear proof that agility can promote growth, rather than simply enhancing overall organizational effectiveness. The research indicates that the capacity of SMEs to swiftly adapt to market demands can transform their current sales strengths into enhanced sales growth. Nonetheless, the research took place outside of Kenya and did not concentrate specifically on food and drink manufacturing businesses. Consequently, its results offer both a theoretical and empirical foundation for investigating whether a comparable relationship is present among SMEs in the Nairobi Metropolitan area.

Korry et al. (2025) conducted a study to examine the role of entrepreneurial agility on the SME entrepreneurs and its impact on innovation and entrepreneurial resilience. Their study was guided by dynamic capability theory. The research was conducted on weaving entrepreneurs which is a tourism support sector, which depend on tourist visits and is very vulnerable to changes in external environment. Using a research questionnaire, data was collected from 333 weaving entrepreneurs in Bali. The research data was analyzed using SEM PLS

to determine the relationship between dependent and independent variables. The results showed that entrepreneurial agility is a dynamic ability that affects the innovation and resilience of SME entrepreneurs. Agile entrepreneurs find it easier to see opportunities and adjust their business to easily adapt to the dynamics of the business environment so that it is easier to survive when meeting challenging situations. Entrepreneurs who are quick to innovate will also increase their competitive advantage which affects their resilience.

A recent study by Siddique et al. (2025) examined the influence of entrepreneurial agility on SME project performance, emphasizing the mediating role of effectuation and the moderating role of environmental dynamics. Drawing on dynamic capabilities and effectuation theories, the research proposed that entrepreneurial agility enhances project outcomes by enabling SMEs to rapidly respond to changing conditions, while effectuation processes served as a mechanism through which agile decision-making translates into improved performance. A quantitative, cross-sectional survey was conducted among SME Projects in Pakistan, with responses analyzed using structural equation modeling to test direct, indirect, and interactive effects. The study also found that entrepreneurial agility positively influenced effectuation, while effectuation partially mediated the relationship between agility and firm performance. Although the dependent variable was firm performance rather than growth, the findings provide evidence of the mechanism through which agility may produce organizational outcomes.

Recent research has continued to position entrepreneurial agility as a dynamic capability that enables SMEs to respond to uncertainty and changing market conditions. Junaedy et al., (2026) conducted a study on SME's international performance amidst turbulence, emphasizing on the role of entrepreneurial leadership in navigatin network capability and strategic agility. The theoretical foundation of the study was drawn from Upper Echelons Theory (Hambrick & Mason, 1984) with the dynamic capability theory (Teece et al., 1997) to provide the moderated mediation model of international performance SMEs. The study adopted a structured survey questionnaire as the primary research instrument. The study targeted SMEs registered with the Export Centre Surabaya (ECS) a government supported hub in Indonesia. The sample size was 282 business owners aged between 20-65 years. The study found that strategy agility positively contributed to SME performance and mediated the relationship between entrepreneurial leadership and performance. The findings suggest that entrepreneurial agility can enable SMEs to translate strategic and innovation capabilities into improved performance in volatile market environments. However, the study focused on international business performance rather than enterprise growth and was conducted among Indonesian commodity-trading SMEs.

Similarly, recent research by Kuhbanani et al. (2026) examines AI adoption and SMEs' innovation performance, emphasizing the role of absorptive capacity, entrepreneurial agility and digital maturity. The study conceptualizes entrepreneurial agility as the capability through which technological and informational resources are translated into innovation-oriented action. While the study focuses on innovation performance rather than enterprise growth, it reinforces the emerging view that entrepreneurial agility is a conversion capability: resources and information do not automatically produce organizational outcomes; firms require the ability to recognize, interpret, and act on them.

Research Gaps

Several studies have established that entrepreneurial agility significantly influences SME growth. Although previous studies have established that entrepreneurial agility is associated

with business performance, competitiveness, adaptability, and SME growth, important gaps remain in the literature.

The first gap identified from the empirical review is that most of the studies examined entrepreneurial agility in relation to outcomes such as firm performance, innovation, resilience, or international performance. For example, Siddique et al. (2025) looked at SME performance, Korry et al. (2025) focused on innovation and entrepreneurial resilience, Junaedy et al. (2026) examined international business performance, and Kuhbanani et al. (2026) focusedon innovation performance. Miočević and Arslanagić-Kalajdžić's (2024) study provided more direct evidence by linking agility to sales growth.

However, sales growth represents one dimension of enterprise growth and does not necessarily capture broader growth dimensions such as expansion of markets, customers, employees, production capacity, assets, or overall business operations. There is limited empirical evidence examining entrepreneurial agility in relation to SME growth as a distinct and multidimensional outcome, rather than treating growth as synonymous with general firm performance.

The second gap from the review was the contextual gap. The studies you identified were conducted in different national contexts. For example, Miočević and Arslanagić-Kalajdžić (2024) provide evidence from their study context outside Kenya. Siddique et al. (2025) examined SMEs in Pakistan, Korry et al. (2025) examined weaving SMEs in Bali, Indonesia, Junaedy et al. (2026) examined Indonesian commodity-trading SMEs and lastly, Kuhbanani et al. (2026) examined SMEs in the context of AI adoption and innovation. Therefore, the findings cannot automatically be generalized to Kenyan SMEs because entrepreneurial practices and the effects of agility may be influenced by institutional, economic, technological, and market conditions. This shows that there is limited empirical evidence on the relationship between entrepreneurial agility and SME growth within the Kenyan context, particularly among enterprises operating in Nairobi Metropolitan.

The third gap identified was the sectorial gap. The existing studies involve different types of SMEs, including weaving enterprises and commodity-trading businesses. These sectors differ substantially from food and beverage manufacturing SMEs. The fourth gap from the empirical review is the population gap. Previous research has largely examined heterogeneous SME populations, with limited empirical attention to the specific population of small and medium-sized food and beverage manufacturing enterprises.

Furthermore, although the Resource-Based View provides a basis for conceptualizing entrepreneurial agility as a dynamic capability, its application in explaining SME growth within the Kenyan food and beverage manufacturing context remains insufficiently examined. The present study therefore addresses the outcome, contextual, sectorial, and theoretical gaps by examining the relationship between entrepreneurial agility and the growth of small and medium-sized food and beverage manufacturing enterprises in Nairobi Metropolitan, Kenya.

MATERIALS AND METHODS

This study adopted descriptive and explanatory research designs. Mixed designs was applied in collecting, analysing and integrating as well as reporting on both qualitative and quantitative strands of data. This study focused on all registered food and beverage manufacturing SMEs in Nairobi County.

According to Kenya Association of Manufacturers (KAM, 2024) report, there are 139 registered food and beverage manufacturing SMEs in the Nairobi Metropolitan Area. The

present study used a purposive sampling technique to obtain the required sample size. The researcher purposively selected all business owners from the 139 food and beverage SMEs in Nairobi Metropolitan Area. Purposive sampling allowed the researchers to select participants who possess specific knowledge or characteristics relevant to the research question, leading to rich, in-depth data and focused insights (Palinkas et al., 2015). The main data collection instrument for this study was a questionnaire. A questionnaire was used in this study because it allows for the systematic collection of data from a large number of respondents efficiently. Data analysis was guided by the objective of the study, research question and hypothesis. Cronbach Alpha statistics were used to test the reliability of data. Descriptive statistics such as frequency distribution, mean, and standard deviation were used in analysis of data. This was followed by inferential statistics of correlation, Analysis of variance (ANOVA) and linear regression analyses. The results were presented in figures and tables. A linear regression model was used in determining relationship between entrepreneurial agility and SMEs growth as indicated below:

$Y = \beta 0 + \beta 1 X 1,$

where Y = SMEs growth

β0 is the Y Intercept.

X 1 is the independent variable – Entrepreneurial Agility ε is the Error term.

FINDINGS

Response Rate

The research was conducted among business owners in 139 registered food and beverage manufacturing SMEs in Nairobi Metropolitan Area. The researcher distributed 139 questionnaires. The researcher was able to gather 107 fully completed and filled questionnaires, which were used for statistical analysis. The response rate for this research was 76.98%. According to Sekaran and Bougie (2016), for analysis, a response rate of 50% or higher is considered good and it offers a strong basis for the study.

Table 4.1: Response Rate

Questionnaire	Frequency	Percentage
Returned	107	76.98
Un-returned	32	23.02
Total	**139**	**100**

Demographic Analysis

Gender of the Respondents

The respondents were asked to indicate their gender. Results in Table 4.2indicated that 60 respondents (56.1%) were male and 47 respondents (43.9%) were female. This implies that men constitute a significant percentage in the majority of the small and medium-sized food and beverage Enterprises in Nairobi Metropolitan Area.

Table 4.2: Gender of the Respondents

Gender	Frequency	Percent (%)
Male	60	56.1
Female	47	43.9
Total	**107**	**100**

Age of the Respondents

The respondents were asked to indicate their age bracket. Results in Table 4.3indicate that 1(0.9 %) of the respondents were aged between 25 years and below, and those aged between 25-35 years were 17(15.9%). 47.7% were aged between 36-35 years. Those aged 46 years and above were 38(35.5%). This implies that majority 83.2% of the business owners were energetic enough to carry out the business operations.

Table 4.3: Age of the Respondents

Age of Respondents	Frequency	Percent (%)	Cumulative Percent (%)
25 Years and Below	1	0.9	0.9
25 - 35 Years	17	15.9	16.8
36 - 45 Years	51	47.7	64.5
46 Years and Above	38	35.5	100
Total	**107**	**100**	**100**

Level of Education

The respondents were asked to indicate their level of education. Results in Table 4.4 show that 73.3% of the respondents were from the university level. Only 26.7 % were from technical levels. The researcher, therefore, concluded that the respondents involved in the study were knowledgeable enough and therefore could be relied on to give relevant information relating to the researcher's objective. These findings corroborate with the findings of Nguyen and Mohamed (2021), who observed that having a higher level of education was associated with better performance in management roles, including higher job satisfaction and better decision-making skills.

Table 4.4: Level of Education of the Respondents

Level of Education	Frequency	Percent (%)
Technical Level	28	26.7
University Level	77	73.3
Total	**105**	**100**

Descriptive Findings for Entrepreneurial Agility and Growth of Small and Medium Sized Food and Beverage Manufacturing Enterprises

Table 4.5 represents the results for entrepreneurial agility as the independent variable. The results indicate that most of the respondents agreed with all the statements about entrepreneurial agility. The overall mean was 4.41 and the standard deviation was 0.24. The results above show that 45.2% of the respondents both agreed and strongly agreed that they foresee that new market opportunities are in developing new products, 31.8 disagreed while 22.4 were neutral. 58.9% of the respondents agreed or strongly agreed that they are aware that improvements in their existing products may exceed customer needs, 20.5% were in disagreement while 20.6% were undecided.

In addition, 72.9% of them agreed and strongly agreed that they are keen on competitors whose products compete with their products, 7.5% disagreed while 16.8% were neutral. Furthermore, 72.9% of the respondents both agreed and strongly agreed that they are well aware of the risks that could arise from creating a new product, 12.1% of then disagreed while 15.1% felt neutral. Also, 85.0% of the respondents agreed or strongly agreed that they are aware of business resources and knowledge needed to develop a new

product, 2.8% disagreed while 12.1% were neutral. 63.6% agreed or strongly agreed that they can identify and react effectively to the market opportunities at the firm level, 15.8% disagreed with the statement while 20.6% of the felt undecided.

Others, 95.3% of the respondents agreed or strongly agreed that they usually take advantage of unanticipated market possibilities and difficulties as soon as they arise, others represented by 2.8% disagreed while 1.9% of the respondents were neutral. Those who agreed or strongly agreed that being vigilant with environmental changes has helped respond to market changes in a better way were 64.5%, 14.0% while 21,5 were neutral. When asked whether flexibility has enabled their business to enjoy a competitive advantage, 53.2% both agreed and strongly agreed, 26.1% were in disagreement while 20.6% were neutral. The overall mean of 4.41 implies that the respondents agreed with the statements about entrepreneurial agility while standard deviation of 0.24 implies that the responses were less varied. The findings imply that the business owners have capacity to predict, envision and take advantage of unanticipated market possibilities and difficulties.

The respondents were asked to indicate some of the new market opportunities that helped them grow their businesses. Most of the respondents indicated that they have used artificial intelligence to monitor stock levels which helps in ensuring that the stock is always available to provide products to clients as needed. Others indicated that there has been many events which helped them sell their products. Also, respondents stated that the need of premium brands, has helped them adjust to premium products, the need for diversified products enabled them adjust and the profitability grew. The responses indicate that the business owners had developed their entrepreneurial agility which helped them survive in turbulent technological environment. The responses are also supported by the study of Haylemariam et al. (2024) who opined that entrepreneurial agility is vital for SMEs in that it enhances performance of firms and that organizations should continuously update their entrepreneurial ability. The researchers further advised that the firms that develop their entrepreneurial agility usually enjoy competitive advantage and they are able to respond to market changes in a better way.

Table 4.5: Descriptive Findings for Entrepreneurial Agility

S/N	Statement	SD	D	N	A	SA	Mean	SD
1	We foresee that new market opportunities are in developing new products.	11 (10.3%)	23 (21.5%)	24 (22.4%)	29 (27.1%)	20 (18.7%)	4.47	0.55
2	We are aware that improvements in our existing products may exceed customer needs.	10 (9.3%)	12 (11.2%)	22 (20.6%)	34 (31.8%)	29 (27.1%)	4.5	0.52
3	We are keen on competitors whose products compete with our products.	3 (2.8%)	5 (4.7%)	18 (16.8%)	45 (42.1%)	33 (30.8%)	4.26	0.75
4	We are well aware of the risks that could arise from creating a new product.	3 (2.8%)	10 (9.3%)	16 (15.1%)	40 (37.4%)	38 (35.5%)	4.57	0.5
5	We are aware of business resources and knowledge needed to develop a new product.	0 (0.0%)	3 (2.8%)	13 (12.1%)	58 (54.2%)	33 (30.8%)	4.37	0.49
6	We can identify and react effectively to market opportunities at the firm level.	7 (6.5%)	10 (9.3%)	22 (20.6%)	40 (37.4%)	28 (26.2%)	4.37	0.49
7	We usually take advantage of unanticipated market possibilities and difficulties as soon as they arise.	0 (0.0%)	3 (2.8%)	2 (1.9%)	56 (52.3%)	46 (43.0%)	4.36	0.66
8	Being vigilant with environmental changes has helped respond to market changes in a better way.	3 (2.8%)	12 (11.2%)	23 (21.5%)	47 (43.9%)	22 (20.6%)	4.44	0.5
9	Flexibility has enabled our business to enjoy a competitive advantage.	13 (12.1%)	15 (14.0%)	22 (20.6%)	30 (28.0%)	27 (25.2%)	4.54	0.5
	Overall Mean=4.41 SD=0.24							

Correlation Finding for Entrepreneurial Agility and the Growth of Small and Medium Sized Food and Beverage Manufacturing Enterprises in Nairobi Metropolitan, Kenya.

Correlation analysis was used to show the direction and strength of relationships between variables. It determines whether two or more variables are related. The Pearson Correlation Coefficient test was employed to examine the relationship between growth of small and medium sized food and beverage manufacturing enterprises and entrepreneurial agility. The results in Table 4.6 showed that entrepreneurial agility had a strong positive relationship with the growth of small and medium sized food and beverage manufacturing enterprises ($r = 0.778$, $p<0.05$). This indicates that as the entrepreneurial agility of the business owners increases, the growth of small and medium sized food and beverage

manufacturing enterprises also increases.

Table 4.6: Correlation Findings for Entrepreneurial Agility and the Growth of Small and Medium Sized Food and Beverage Manufacturing Enterprises in Nairobi Metropolitan, Kenya

	Growth	Entrepreneurial Agility
Growth	1	.778**
Sig. (2-tailed)	-	0
N	107	107
Entrepreneurial Agility	.778**	1
Sig. (2-tailed)	0	-
N	107	107

Simple Linear Regression Findings for Entrepreneurial Agility and Growth of Small and Medium Sized Food and Beverage Manufacturing Enterprises in Nairobi Metropolitan

Simple regression analysis was used to find out whether an independent variable predicts a given dependent variable. Three tables were typically provided by regression analysis, which include the model summary table, ANOVA table, and Coefficients table (Mutua, 2020). The study ascertained whether entrepreneurial learning and growth of small and medium sized food and beverage manufacturing enterprises in Nairobi Metropolitan are related. The following model was used to estimate this relationship: OLS Model:

$y = \beta 0+\beta 1X1 + e$

Model summary Findings for Entrepreneurial Agility and Growth of small and medium sized food and beverage manufacturing enterprises in Nairobi Metropolitan

From the Model Summary Table 4.7, the values shown are .778 and .605 for R and R^2, respectively. R is the correlation coefficient, which shows the strength of the relationship between the predictor and outcome variables. R-squared is the coefficient of determination in a simple regression model. The researcher had to square R (0.778) so as to get R-squared (0.605). The R-squared value of 0.605 indicates that 60.5% of the variation in the growth of small and medium sized food and beverage manufacturing enterprises in Nairobi Metropolitan could be accounted for by the predictor variable (Entrepreneurial agility). Despite this meaningful influence, a small portion (39.5%) of the variability remains unaccounted for, suggesting the involvement of other factors not included in the model.

Table 4.7: Model Summary Results for Entrepreneurial Agility and Growth of Small and Medium Sized Food and Beverage Manufacturing Enterprises in Nairobi Metropolitan

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778a	0.605	0.601	1.23945

ANOVA Findings for Entrepreneurial Learning and Growth of Small and Medium Sized Food and Beverage Manufacturing Enterprises in Nairobi Metropolitan

It is also known as Analysis of Variance. It uses the F-test to indicate if the independent variable has a significant relationship with the dependent variable or not. If the p-value is less than 0.05, the independent variable has a significant relationship with the dependent variable. If the p-value is more than 0.05, then the independent variable has no significant relationship with the dependent variable. By regressing the growth of small and medium sized food and beverage manufacturing enterprises in Nairobi Metropolitan on entrepreneurial agility, the

study sought to determine whether entrepreneurial agility significantly predicts the growth of small and medium sized food and beverage manufacturing enterprises in Nairobi Metropolitan.

Results in Table 4.8 indicate that entrepreneurial agility significantly predicts the growth of small and medium-sized food and beverage manufacturing enterprises in Nairobi Metropolitan, as shown by the F-test and the low p-value: $F(1, 105) = 160.512$, $p<.001$.

Table 4.8: ANOVA Findings for Entrepreneurial agility and Growth of Small and Medium Sized Food and Beverage Manufacturing Enterprises in Nairobi Metropolitan

Model	Source	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	246.583	1	246.583	160.512	.000[b]
	Residual	161.304	105	1.536		
	Total	**407.888**	**106**			

a. Dependent Variable: Growth
b. Predictors: (Constant), Entrepreneurial Agility

Model Coefficient Findings for Entrepreneurial Agility and Growth of Small and Medium Sized Food and Beverage Manufacturing Enterprises in Nairobi Metropolitan

Furthermore, the study aimed to quantify the influence of entrepreneurial agility on the growth of small and medium sized food and beverage manufacturing enterprises in Nairobi Metropolitan. The model coefficient Table 4.9 indicates that the predictor variable's coefficient is significant, with P-values below 0.05. Keeping all other variables constant, this suggests that, on average, there is a 0.629 unit increase in the growth of small and medium sized food and beverage manufacturing enterprises in Nairobi Metropolitan for every unit rise in entrepreneurial agility.

Further, the coefficient Table 4.9 was used to derive the model equation connecting the predictor and outcome variable. The study used an unstandardized coefficient (B) (Mutua, 2020). According to the results, entrepreneurial agility was a significant predictor of growth of small and medium sized food and beverage manufacturing enterprises in Nairobi Metropolitan; hence, the fitted model was:

SMEs Growth $=6.719 + 0.629$ Entrepreneurial Agility $+ e$

The overall results suggest that entrepreneurial agility is a significant predictor of growth of small and medium sized food and beverage manufacturing enterprises in Nairobi Metropolitan. Therefore, increasing the level of entrepreneurial agility among business owners will be associated with higher levels of growth of small and medium sized food and beverage manufacturing enterprises in Nairobi Metropolitan.

Table 4.9: Coefficient Findings for Entrepreneurial Agility and Growth of Small and Medium Sized Food and Beverage Manufacturing Enterprises in Nairobi Metropolitan.

Model	Variables	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	6.719	2.026	-	3.317	0.001
	Entrepreneurial Agility	0.629	0.05	0.778	12.669	0.000

a. Dependent Variable: Growth

Growth of Small and Medium-Sized Food and Beverage Manufacturing Enterprises

Table 4.10 demonstrates results for the growth of Small and Medium Food and Beverage Manufacturing Enterprises in Kenya as the dependent variable. The results are for the statements for this variable (M=4.10, SD=0.53). The percentages of all the statements about growth of Small and Medium Food and Beverage Manufacturing Enterprises in Kenya are presented below. The results indicate that most of the respondents agreed with all the statements. 40% of the respondents agreed or strongly agreed that the net profit of their company has increased in the last three years. Additionally, 48.6% of the respondents both agreed and strongly agreed that their company effectively controls unnecessary expenses. Moreover, 56.1% of the respondents both disagreed and strongly disagreed that the company's net profit margin was satisfactory. Further, 26.2% agreed that their company has a larger market share in the sector, 25.2% felt neutral while 20.6% disagreed. The results also indicate that 59.4% of the respondents both agreed and strongly agreed that their company has expanded into new markets.

In addition, 74.7% both agree and strongly agreed that their customers prefer their products more than those of their competitors. When asked about the satisfaction of their current net asset level, 33.6% indicated they were not satisfied, 25% were neutral while 22.4% indicated that they were satisfied. 34.6% of the respondents felt neutral that the value of their business assets has grown over the last three years, while 47.7% both agreed and strongly agreed. Lastly, most of the respondents, 53.2% both disagree and strongly disagree that their current net asset level is sufficient for their business needs. The overall mean of 4.10 implies that the respondents agreed with the statements about growth of Small and Medium Food and Beverage Manufacturing Enterprises in Kenya while standard deviation of 0.53 implies that the responses were less varied. The findings agree with the study of Neneh and Zyl (2017) who noted that increase in the size of the business is attained through increased sales, market share, return on investment, profitability, value-added and employment growth.

Table 4.10: Growth of Small and Medium Sized Food and Beverage Manufacturing Enterprises

S/N	Statements	SD	D	N	A	SA	M/SD
1	The net profit of my company has increased in the last three years.	1 (0.9)	15 (14.1)	16 (15.0)	40 (37.4)	35 (32.7)	M = 4.29 SD = 0.73
2	Our company effectively controls unnecessary expenses.	6 (5.6)	22 (20.6)	27 (25.2)	35 (32.7)	17 (15.9)	M = 4.43 SD = 0.56
3	The company's net profit margin is satisfactory.	32 (29.9)	28 (26.2)	29 (27.1)	12 (11.2)	6 (5.6)	M = 3.89 SD = 0.98
4	Our company has a larger market share in the sector.	16 (15.0)	22 (20.6)	27 (25.2)	28 (26.2)	14 (13.0)	M = 4.07 SD = 0.78
5	Our company has expanded into new markets.	3 (2.8)	18 (16.8)	23 (21.5)	37 (34.6)	26 (24.3)	M = 4.18 SD = 0.55
6	The customers prefer our products more than those of our competitors.	2 (1.9)	7 (6.5)	18 (16.8)	47 (43.9)	33 (30.8)	M = 4.12 SD = 0.71
7	I am satisfied with my current net asset level.	8 (7.5)	36 (33.6)	27 (25.2)	24 (22.4)	12 (11.2)	M = 3.88 SD = 1.02
8	The value of my business assets has grown over the last three years.	3 (2.8)	16 (15.0)	37 (34.6)	22 (20.6)	29 (27.1)	M = 4.07 SD = 0.80
9	My current net asset level is sufficient for my business needs.	27 (25.2)	30 (28.0)	13 (12.1)	25 (23.4)	12 (11.2)	M = 3.98 SD = 0.95
	Overall Mean	4.1					
	Overall SD	0.53					

Findings for the Measurements for Growth of Small and Medium-Sized Food and Beverage Manufacturing Enterprises

a) Findings for Net Profits

The study established the trend in growth of small and medium sized food and beverage manufacturing enterprises using the net profit generated for three years thus between 2022-2024. The respondents were required to indicate the profits they made every specific year. The study involved the use of mean net profit per year in order to plot a line graph to determine the growth trend. The findings are in the Figure 4.1. In the first year 2022, the net profit was 13,004,591.84. In the year 2023, the net profit declined seriously to 4,853,693, indicating that most business were almost at closure. This decline can be attributed to the several significant new business regulations and amendments which Kenyan government introduced in the year 2023 (Finance Act, 2023). For example, the Turnover Tax (TOT) rate increased from 1% to 3% of gross sales. In the year 2024, the profits gradually increased to 7,288,100. It can be seen that the profits made by food and beverage manufacturing SMEs declined between 2022 and 2023. From the year 2023 the net profits gradually increased up to the year 2024. This implies that the growth of small and medium sized food and beverage manufacturing enterprises is not steady.

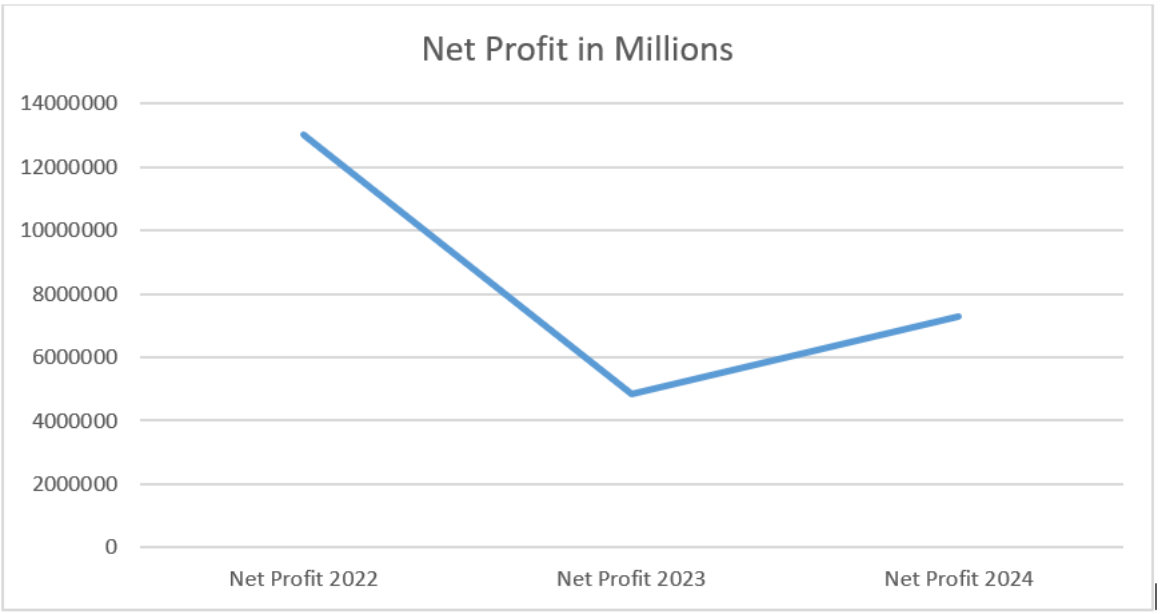


Figure 4.1 Net Profit

b) Findings for Market Share

Another growth measure used in the study was market share. Respondents were asked to indicate their market share. The study used the mean averages of their market share for each year to show the trend in market share earned. The results obtained are presented in Figure 4.2. Based on the results, food and beverage manufacturing SMEs experienced growth in market share. The average market share in 2022 was around 5.59%, increasing to approximately 7.20% in 2023 and further to around 9.58% in the year 2024. This implies that food and beverage manufacturing SMEs have registered growth in market share over the study period.

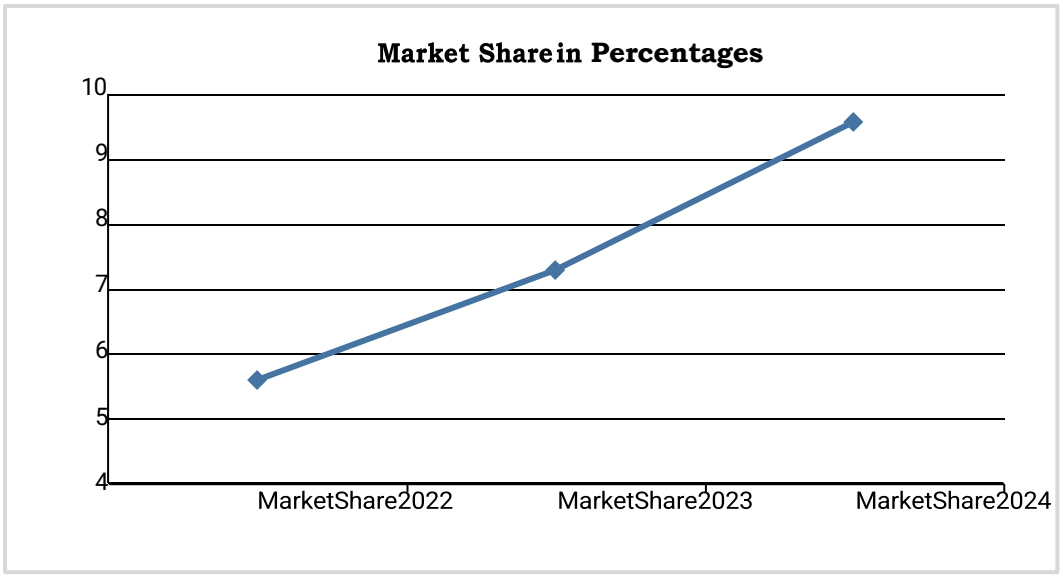


Figure 4.2: Market Share

c) Findings for Net Assets

The study also measured the growth of small and medium sized food and beverage

manufacturing enterprises using net assets. Respondents were asked to indicate their annual sales volume over the last three years from 2022 to 2024. The average

volumes of the net assets for each year was used to observe the trend recorded by the enterprises in terms of their net assets. A line graph was used to show trends in net assets recorded by the enterprises from 2022 to 2024. Figure 4.3 presents the results obtained. In the year 2022 the total value of the net assets was 23339795.92. In the following year 2023, the net asset value increased to 40750000 and in the last year 2024 the net asset value increased to 46021139.19. These findings show that SMES have grown, though slowly, in terms of net assets over the years.

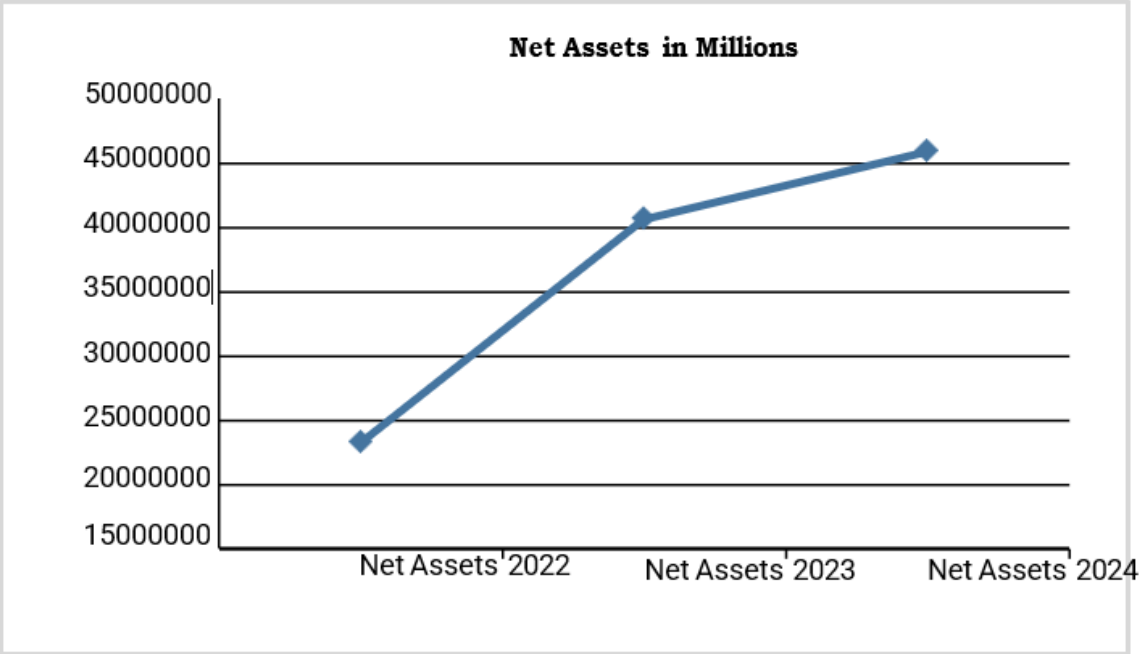


Figure 4.3: Net Assets

Findings for Area of Specialization

Results in Figure 4.4 showed that 21.5% of the firms were specialized in Cocoa, chocolate, and sugar confectionery, 15.9% firms specialized ingrain mill products, while 10.3% were specialized in dairy products. 7.5% were specialized in bakery products and meat and meat products. The purpose of examining firm specialization was to determine which specific sectors in the food and beverage industry within Nairobi were most actively involved in innovation. The findings imply that the majority of the F& B firms within Nairobi are specialized within the non-alcoholic beverage sector and are more actively involved in innovation. The results on firm's specialization are shown in figure 4.4

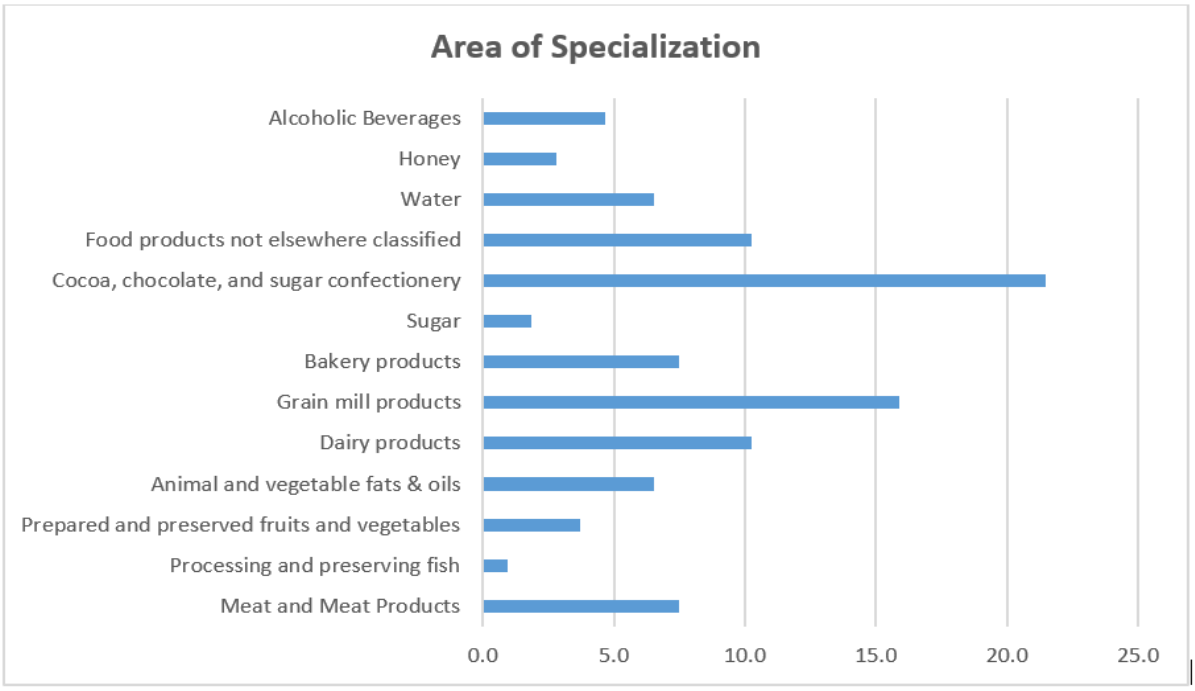


Figure 4.4: Area of Specialization

Discussion of Findings

The objective was to establish the influence of entrepreneurial agility on growth of Small and medium-sized food and beverage manufacturing enterprises in Nairobi Metropolitan Area. Previous research and literature have reported that entrepreneurial agility is vital for SMEs as it enhances SMEs growth. This shows that organizations should continue to develop their entrepreneurial capabilities. Descriptive findings revealed that a substantial number of the respondents agreed with all the statements used to assess entrepreneurial agility. Specifically, most of them agreed that new marketing opportunities are in developing new products, they were aware that improvements in existing products may exceed customer needs and they are keen on the competitors.

They also indicated that they were aware of the risks that could arise from creating a new product, were knowledgeable about the resources and expertise required to develop it, and indicated readiness and internal capability. Others indicated that they can effectively identify and react to market opportunities at the firm level and they usually take advantage of unanticipated market opportunities and challenges as soon as they arise. Further, they indicated that they are vigilant with environmental changes and flexibility has enabled them to enjoy a competitive advantage.

The correlation findings showed that entrepreneurial agility had a strong positive relationship with the growth of F & B manufacturing SMEs. The simple linear regression analysis from the model summary findings indicated that entrepreneurial agility is an important predictor of SMEs growth. The ANOVA results revealed that entrepreneurial agility has a statistically significant effect of SMEs growth and the Coefficient results showed that entrepreneurial agility significantly and positively influences SMEs growth. The null hypothesis stating that there is no significant influence of entrepreneurial agility on growth of Small and medium-sized food and beverage manufacturing enterprises in Nairobi Metropolitan, Kenya was rejected and the alternative hypothesis stating that there is a significant influence of entrepreneurial agility on the growth of small and medium sized food and beverage

manufacturing enterprises was accepted.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The objective of the study was to establish the influence of entrepreneurial agility on the growth of small and medium-sized food and beverage manufacturing enterprises in the Nairobi Metropolitan Area (NMA). Based on the findings, the study concludes that entrepreneurial agility has a significant and strong positive effect on firm growth.

The descriptive findings revealed that the majority of respondents demonstrated high levels of agility. They indicated that they actively explore new marketing opportunities, develop new products, improve existing offerings to exceed customer expectations, and closely monitor competitors. Respondents also reported being aware of potential risks associated with innovation, understanding the resources and expertise required for product development, and possessing the internal readiness to implement new ideas.

Furthermore, they indicated that they can effectively identify and respond to emerging market opportunities, take advantage of unexpected changes, remain vigilant to environmental shifts, and leverage flexibility to gain competitive advantage.

The correlation analysis revealed a strong positive relationship between entrepreneurial agility and SME growth. Regression analysis confirmed that entrepreneurial agility is an important predictor of growth. The ANOVA results further demonstrated that entrepreneurial agility has a statistically significant effect on SME growth, while the coefficient results showed that it significantly and positively influences firm performance. In conclusion, entrepreneurial agility is a key driver of SME growth. Firms that are proactive, innovative, flexible, and responsive to environmental changes are more likely to achieve sustained growth and competitive advantage. Strengthening entrepreneurial agility within food and beverage manufacturing SMEs can therefore significantly enhance their performance and long-term sustainability in Nairobi Metropolitan Area.

Recommendations

The study reported that entrepreneurial agility has a significant and strong positive influence on the growth of food and beverage (F&B) manufacturing SMEs in Nairobi Metropolitan Area (NMA). Given that entrepreneurial agility is a key driver of SME growth, food and beverage manufacturing SMEs in Nairobi Metropolitan Area should prioritize building proactive, flexible, innovative, and responsive practices.

Strengthening entrepreneurial agility will enhance competitiveness, operational efficiency, and the long-term sustainability of SMEs in a dynamic and rapidly changing business environment.

REFERENCES

Adam, N. A., & Ararifi, G. (2021). Innovation practices for survival of small and medium enterprises in the COVID-19 times: The role of external support. *Journal of Innovation and Entrepreneurship, 10*(15).

Bougie, R., & Sekaran, U. (2020). *Research methods for business: A skill-building approach* (8th ed.). Wiley.

Central Bank of Kenya. (2023). *2022 MSME FinAccess business survey report*. Central Bank of Kenya.

European Commission. (2021). *Annual report on European SMEs 2020/2021: Digitalisation of SMEs*. Publications Office of the European Union.

Gathoni, M. B., Evangeline, G., & Doreen, M. (2021). Entrepreneurial competence and growth of micro-small enterprises in Kiambu County, Kenya. *Journal of Entrepreneurship & Project Management, 1*(2), 1-13.

Hamdan, A., Ghura, H., Alareeni, B., & Hamdan, R. K. (2021). Entrepreneurship growth in emerging economies: New insights and approaches. *Journal of Sustainable Finance & Investment, 12*(1), 1-12.

Haylemariam, L. G., Oduro, S., & Tegegne, Z. L. (2024). Entrepreneurial agility and organizational performance of IT firms: A mediated moderation model. *Journal of Entrepreneurship, Management and Innovation, 20*(2), 75-92. https://doi.org/10.7341/20242024

Junaedy, A., Kaihatu, T. S., & Tambunan, D. B. (2026). How entrepreneurial agility drives international performance in commodity-trading SMEs. *Jurnal Minds: Manajemen Ide dan Inspirasi, 13*(1), 197-210. https://doi.org/10.24252/minds.v13i1.64858

Khan, S., & Rehman, S. (2023). Entrepreneurial agility: A key to notch sustainable business performance in IT enterprises of Pakistan. *International Management Research and Emerging Sciences, 13*(3).

Korry, P. D. P., Armanu, Sudjatno, & Wijayanti, R. (2025). The agility of SME entrepreneurs and its impact on innovation and entrepreneurial resilience. *Ikonomicheski Izsledvania, 34*(3), 112-129.

Kuhbanani, A. Z., Dana, L.-P., Bolandian, M. H., Kalyani, Z. N., & Parsanejad, M. (2026). When does AI adoption enhance SME innovation performance? The roles of absorptive capacity, entrepreneurial agility, and digital maturity. *Journal of Global Entrepreneurship Research, 16*(1), 1-24. https://doi.org/10.1007/s40497-026-00560-w

Miočević, D., & Arslanagić-Kalajdžić, M. (2024). The role of agility and sales orientation ambidexterity in SME sales growth: Transition country perspective. *Journal of Business-to-Business Marketing, 31*(3), 303-321. https://doi.org/10.1080/1051712X.2024.2358238

Mirkovski, K., von Briel, F., Lowry, P. B., et al. (2024). Achieving entrepreneurial growth despite resource and capability constraints: The role of service intermediaries. *Small Business Economics, 62*, 353-380. https://doi.org/10.1007/s11187-023-00777-z

Mutuku, A. K., Kiilu, B. N., Mathuku, P., & Auka, D. O. (2022). Effect of entrepreneurial skills on organizational performance of small and medium enterprises in Nakuru City, Kenya. *International Journal of Economics and Business Administration, X*(3), 156-173.

Mutua, M. (2020). *Handbook for research methodology: Quantitative, mixed and qualitative methodologies*. Aura Books.

Mwangi, M. M. A., & Ngugi, K. (2014). Influence of entrepreneurial orientation on growth of

micro and small enterprises in Kerugoya, Kenya. *European Journal of Business Management, 1*, 417-438.

Neneh, B. N., Van Zyl, J. H., & Van Noordwyk, A. (2016). Gender differences in entrepreneurial orientation and performance: Evidence from South Africa. Conference paper presented at the Southern African Institute for Management Scientists (SAIMS), Pretoria, South Africa, 4-7 September 2016.

Njuguna, E., & Juma, D. (2024). Growth strategies and performance of food and beverage manufacturing firms in Nairobi County, Kenya. *International Journal of Social Sciences Management and Entrepreneurship, 8*(4), 1031-1047.

Oketch, J. O., & Okeyo, W. (2024). Policy implications for performance of small and medium enterprises in Kenya. *African Journal of Emerging Issues, 6*(11), 1-14. Retrieved from http://ajoeijournals.org/

Peng, L., & Liu. (2022). How social network influences the growth of entrepreneurial enterprises: Perspective on organizational and personal network.

Riaz, S., Yanqing, W., Ishaq, M. I., Raza, A., & Siddiqui, R. A. (2024). Role of social networks and entrepreneurial success: Understanding the dynamics of knowledge acquisition and green entrepreneurial orientation. *Journal of Cleaner Production, 468*, 143065. https://doi.org/10.1016/j.jclepro.2024.143065

Siddique, S., Ali, W., Ali, S., & Sohail, M. (2025). Influence of entrepreneurial agility on SME projects performance: The mediating role of effectuation and the moderating role of environmental dynamics. *ACADEMIA International Journal for Social Sciences, 4*(4), 3081-3093. https://doi.org/10.63056/ACAD.004.04.1163

Zulganef, Z., Pratminingsih, S. A., & Rianawati, A. (2023b). Leveraging strategic intuition to . *Journal Siasat Bisnis, 27*(1), 49-60.