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Strategic Management Competitive Practices and Performance of Agro-Processing Small and Medium Enterprises in Nairobi City County, Kenya

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Abstract

Agro-processing Small and Medium Enterprises in Nairobi City County play a significant role in Kenya's economy through employment generation and food security enhancement. Despite their strategic importance, these enterprises face persistent performance limitations due to inefficiencies in strategic management competitive practices. This study examined the influence of strategic planning, competitive analysis, resource allocation, and adaptability to changing market environments on the performance of agro-processing SMEs in Nairobi City County, Kenya. The study was grounded in theoretical frameworks including the Balanced Scorecard Theory, Resource-Based View Theory, and Dynamic Capabilities Theory. A descriptive research design was adopted, targeting 177 registered agro-processing SMEs. A sample of 123 enterprises was selected using simple random sampling techniques. Primary data was collected through structured questionnaires administered to business owners and managers, achieving a response rate of 87.0% with 107 completed questionnaires returned. Data analysis employed descriptive and inferential statistical methods including correlation and multiple regression analysis using SPSS version 26. The findings revealed strong positive correlations between all strategic management competitive practices and SME performance. Multiple regression analysis showed that the four predictors collectively explained 79.6% of the variance in SME performance ($R^2 = 0.796$, $F = 99.156$, $p < 0.001$). All individual predictors made statistically significant contributions, with adaptability emerging as the strongest predictor ($\beta = 0.293$, $p < 0.001$), followed by competitive analysis ($\beta = 0.246$, $p < 0.001$), resource allocation ($\beta = 0.219$, $p = 0.001$), and strategic planning ($\beta = 0.209$, $p = 0.002$). The study concludes that strategic management competitive practices significantly influence the performance of agro-processing SMEs. The study recommends that SMEs should enhance competitive positioning through integrated strategic approaches. Policymakers should design support programs that strengthen strategic management capabilities. Future research should investigate technological adoption and external financing access as moderators of strategic practice effectiveness.

Keywords: *Strategic Management, Competitive Practices, Performance, Agro-Processing, Small Medium Enterprises*

1.1 Background of the Study

The Agro-processing sector serves as a critical pillar in Kenya's economic development, contributing substantially to employment generation, food security enhancement, and industrial growth acceleration. Agro-processing Small and Medium Enterprises (SMEs) play a particularly vital role in this ecosystem by adding value to raw agricultural outputs, thereby increasing shelf life, improving marketability, and boosting profit margins. These enterprises form the crucial bridge between farm production and consumer markets, helping to stabilize prices while reducing post-harvest losses that typically account for significant food wastage in developing economies. However, despite their strategic importance, agro-processing SMEs operate in an increasingly competitive landscape characterized by the influx of multinational corporations and cheaper imported processed goods. This competitive pressure necessitates the adoption of robust strategic competitive management processes to ensure survival, growth, and market relevance (KNBS, 2022). Strategic competitive management in this context involves a comprehensive approach encompassing cost optimization strategies, product differentiation techniques, innovative market positioning, technological adoption, and customer-centric relationship management - all of which collectively determine the operational success and sustainability of agro-processing ventures (Kariuki & Aduda, 2023).

A deeper analysis reveals that many agro-processing SMEs face multifaceted challenges that constrain their performance and growth potential. Internally, these enterprises frequently struggle with limited market penetration, inconsistent sales performance, weak brand equity, and operational inefficiencies that erode their competitive edge (Mutua et al., 2022). Externally, they grapple with volatile input prices, stringent regulatory requirements, inadequate processing infrastructure, and the disruptive impact of climate change on raw material supply. Financial constraints present another significant barrier, with many SMEs facing high borrowing costs, limited access to affordable credit, and cash flow management challenges that hinder their ability to invest in modern processing technologies or expand production capacity (Ochieng' & Were, 2023). These compounded challenges underscore the critical need for strategic management interventions that can enhance competitiveness while addressing both operational and market-oriented constraints, particularly in the context of Nairobi City County where market fragmentation and competitive pressures are most acute.

The measurement of agro-processing SME performance extends beyond simple financial metrics to include several key indicators that reflect competitive positioning and market strength. Market share expansion demonstrates an enterprise's ability to capture and retain customers in competitive markets, while sales growth trajectory indicates the effectiveness of marketing and distribution strategies. Customer satisfaction levels serve as a proxy for product quality and service delivery, whereas brand recognition and loyalty reflect long-term market positioning success (Ngugi & Kombo, 2022). Empirical evidence suggests that agro-processing SMEs that successfully implement strategic management competitive practices tend to exhibit higher customer acquisition rates, better market penetration, and improved customer retention metrics compared to their less strategic counterparts. Furthermore, those that prioritize innovation in product development, packaging, and distribution channels typically command premium pricing and enjoy stronger brand positioning in both domestic and export markets, demonstrating the tangible benefits of strategic management adoption (Mugambi & Kithinji, 2023).

Emerging trends in the global agro-processing sector are introducing new dimensions to competitive strategy that significantly impact SME operations. Sustainable production practices have transitioned from being optional to essential, as environmentally conscious consumers and stringent international trade regulations demand eco-friendly processing methods and sustainable supply chains. Technological integration, particularly the adoption of automation, IoT-enabled processing equipment, and blockchain for supply chain transparency, is becoming a key differentiator for forward-thinking agro-processing SMEs (Gichure & Nyang'au, 2024). Additionally, the growing emphasis on nutrition-enhanced food products and functional foods presents new opportunities for product innovation and market segmentation. This evolving landscape requires agro-processing SMEs to adopt dynamic strategic management approaches that can anticipate market shifts while maintaining operational efficiency and product quality standards, making adaptability to changing market environments increasingly critical for sustained competitiveness and survival.

Despite the recognized importance of strategic management competitive practices, a significant research gap persists regarding their influence on the performance of agro-processing SMEs in Nairobi City County. While studies have examined individual strategic practices in isolation, limited empirical evidence exists on how strategic planning, competitive analysis, resource allocation, and adaptability collectively influence SME performance in the distinct peri-urban context of Nairobi, where land scarcity, market fragmentation, and competitive pressure from both formal and informal actors create unique challenges. Additionally, although performance challenges and barriers to competitiveness are extensively documented, empirical evidence regarding how SMEs can utilize locally adaptable competitive strategies to address these challenges is scarce. This study therefore provides a comprehensive examination of how strategic management competitive practices influence the performance metrics of agro-processing SMEs, with particular focus on the synergistic effects of strategic planning, competitive analysis, resource allocation, and adaptability, aiming to develop a framework that can guide SME owners, policymakers, and industry stakeholders in making evidence-based decisions for enhancing competitiveness and achieving sustainable growth in Kenya's dynamic agro-processing sector (Omondi & Muthoni, 2024).

1.2 Statement of the Problem

Agro-Processing Small and Medium Enterprises (SMEs) in Nairobi City County play a pivotal role in Kenya's food security, employment creation, and economic growth. However, their potential remains largely untapped due to low adoption rates of Strategic Management Competitive (SMC) Practices, which are critical for enhancing efficiency, market competitiveness, and long-term sustainability. While leading agro-processing firms that have embraced SMC practices such as cost leadership strategies, digital supply chain optimization, product differentiation, and data-driven market penetration report 20-30% higher profitability and 15-25% greater market share (KNBS, 2023), the majority of SMEs continue to operate with outdated, reactive business models. A stark contrast exists between the 15% of agro-processing SMEs in Nairobi utilizing most modern competitive strategies including digital inventory management, value-added processing, and structured customer retention programs and the 85% still blending traditional and modern leading to inefficient approaches (OECD, 2023).

Agro-Processing Small and Medium Enterprises (SMEs) in Nairobi City County present an interesting case study in the varying degrees of Strategic Competitive Management (SCM)

Practices implementation and their corresponding performance outcomes. Research indicates a spectrum of SCM adoption, with approximately 15% of firms demonstrating comprehensive implementation, while the majority show partial adoption at different stages of maturity (OECD, 2023). This implementation continuum offers valuable insights into how varying levels of SCM adoption correlate with business performance metrics across the sector. A comparative analysis reveals significant performance differentials along this implementation spectrum. Firms with fully realized SCM frameworks consistently outperform their peers, achieving 20-30% greater profitability and 15-25% enhanced market penetration (KNBS, 2023). In operational efficiency, the most advanced implementers achieve 40-50% better post-harvest outcomes through integrated digital systems, while firms at earlier implementation stages show proportionally lower but still meaningful improvements (FAO, 2023). Financial performance follows a similar pattern, with complete SCM implementation correlating with 35-45% superior profit margins compared to partial implementation scenarios (KNBS, 2023).

The current implementation landscape presents several opportunities for sector-wide advancement. First, it demonstrates the tangible benefits that accrue at each stage of SCM maturity, providing a clear value proposition for continued development. Second, the performance gradient between implementation levels suggests significant potential for growth as firms progress along the adoption curve. Third, the demonstrated success of top implementers provides actionable models for other enterprises to emulate. Market projections indicate that as implementation quality improves sector-wide, Nairobi's agro-processing industry could see up to 60% market consolidation by more competitive firms by 2025 (KIPPRA, 2023), highlighting the transformative potential of enhanced SCM adoption.

This problem matters because it stunts the growth, profitability, and sustainability of these enterprises, perpetuating a cycle of underperformance that affects employment, food security, and economic development. Empirical studies confirm persistent performance disparities, with only dominant players demonstrating sustained productivity while the majority struggle with operational inefficiencies and market irrelevance (CAK, 2021). The synthesis of this evidence reveals a critical knowledge gap. While existing literature successfully documents these negative symptoms, it lacks a mechanism-focused investigation into the specific strategic practices, governance structures, and implementation approaches that determine SCM success or failure. Studies have predominantly focused on public enterprises or developed country contexts, leaving a critical gap in knowledge about the nuanced mechanisms through which strategic competitive practices influence performance in resource-constrained private SMEs. Without this granular understanding, Kenyan agro-processing SMEs lack an evidence-based framework to implement effective competitive strategies, leaving their growth and sustainability at risk. Therefore, this study sought to address this gap by investigating the underlying strategic management mechanisms of agro-processing SMEs. The ultimate rationale was to move beyond description and propose a structured framework of interventions focused on strategic planning, competitive analysis, resource allocation, and adaptability, empowering Kenyan agro-processing SMEs to transform strategic practices into genuine engines of sustainable performance.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective was to determine the relationship between Strategic Management Competitive Practices and Performance of Agro-Processing Small and Medium Enterprises in Nairobi City County, Kenya.

1.3.2 Specific Objectives

i. To determine the relationship between Strategic Planning and Performance of Agro-Processing Small and Medium Enterprises in Nairobi City County, Kenya.
ii. To evaluate the relationship between Competitive Analysis and Performance of Agro-Processing Small and Medium Enterprises in Nairobi City County, Kenya.
iii. To assess the relationship between Resource Allocation and Performance of Agro-Processing Small and Medium Enterprises in Nairobi City County, Kenya.
iv. To examine the relationship between Adaptability to Changing Market Environment and Performance of Agro-Processing Small and Medium Enterprises in Nairobi City County, Kenya.

2.0 Literature Review

This chapter reviews the existing literature on the variables under study, which include strategic planning, competitive analysis, resource allocation, and adaptability to changing market environment in relation to the performance of agro-processing Small and Medium Enterprises in Nairobi City County, Kenya.

2.1 Theoretical Framework

A theoretical framework provides an organized explanation of the concepts and relationships examined in a study and guides the interpretation of the independent and dependent variables (Kombo & Tromp, 2019). This study was informed by the Balanced Scorecard Theory, Resource-Based View Theory, Dynamic Capabilities Theory, Disruptive Innovation Theory, and Institutional Theory. Kaplan and Norton's (1992) Balanced Scorecard Theory explains organizational performance through four perspectives: financial performance, customer outcomes, internal processes, and learning and growth. The theory is relevant because it links strategic planning practices, including vision alignment, risk assessment, and priority setting, to organizational performance. The Resource-Based View Theory further argues that sustained competitive advantage depends on resources that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). In this study, the theory explains how rival benchmarking, market positioning, and opportunity scanning enable agro-processing SMEs to identify and use distinctive resources to improve performance.

Dynamic Capabilities Theory explains how organizations sense opportunities, seize them, and reconfigure their resources in response to environmental changes (Teece et al., 1997; Teece, 2007). The theory is relevant because agro-processing SMEs operate in changing technological, economic, and consumer environments that require continuous adjustment. Resource allocation practices, including budget optimization, asset utilization, and personnel deployment, enable firms to adapt their resource base and sustain competitiveness. Disruptive Innovation Theory complements this perspective by explaining how organizations respond to emerging technologies, changing customer needs, and new business models (Christensen, 1997). The theory suggests that

response speed, innovation adoption, and demand flexibility influence an organization's ability to exploit new market opportunities. Accordingly, it explains how adaptability to changing market conditions may enhance the performance and survival of agro-processing SMEs.

Institutional Theory explains how organizational practices are shaped by regulatory requirements, industry norms, cultural expectations, and market pressures (DiMaggio & Powell, 1983). Agro-processing SMEs may adopt strategic management practices not only to improve efficiency but also to comply with government policies, environmental standards, and customer expectations. Such pressures can influence financial performance, customer satisfaction, market share, and the overall effectiveness of strategic competitive practices. Collectively, the five theories provide a comprehensive foundation for the study. The Balanced Scorecard Theory explains strategic planning and performance measurement, while the Resource-Based View and Dynamic Capabilities theories explain resource utilization and organizational adaptation. Disruptive Innovation Theory addresses responsiveness to market and technological change, whereas Institutional Theory explains the external pressures influencing strategic decisions. Together, these theories clarify how strategic planning, competitive analysis, resource allocation, adaptability, and institutional conditions influence the performance of agro-processing SMEs.

2.2 Empirical Review

The empirical literature on strategic management competitive practices and SME performance reveals a complex and multifaceted relationship that varies across institutional contexts and geographical settings. Studies examining strategic planning consistently demonstrate that structured planning processes are transformative enablers of organizational performance. Muthoni and Karanja (2022) conducted a longitudinal study of 150 Kenyan Agri-SMEs over three years, combining quantitative surveys with in-depth financial record analysis. Their findings revealed that SMEs with documented, well-communicated strategic visions achieved 27% higher revenue growth compared to peers, along with 15% better employee retention rates. The study particularly highlighted how vision alignment helped SMEs navigate Kenya's 2021-2022 drought period more effectively through coordinated adaptation strategies. Similarly, Okafor et al. (2023) conducted a mixed-methods study in Nigeria with case studies of 20 Agri-processors, finding that leadership's ability to articulate and cascade visions improved access to financing by 33%, as lenders perceived better organizational coherence. Van der Merwe et al. (2022) conducted a rigorous study tracking 50 Agri-SMEs for three years, revealing that those prioritizing digital adoption achieved 35% higher productivity and 28% cost reductions through precision agriculture. Collectively, these studies underscore that strategic planning components—vision alignment, risk assessment, and priority setting are not merely facilitative but are foundational prerequisites for meaningful SME performance.

The literature on competitive analysis highlights the critical role of systematic competitor evaluation in enhancing organizational competitiveness. Silva et al. (2023) conducted a rigorous Brazilian study surveying 200 horticultural SMEs, employing Data Envelopment Analysis (DEA) to compare technical efficiency across 15 performance dimensions. The research revealed that top-quartile SMEs engaging in systematic competitor benchmarking achieved 18% lower water costs by adopting drip irrigation methods from market leaders. Similarly, Le and Nguyen (2022) conducted a Vietnamese longitudinal study tracking 150 fruit export SMEs over 24 months, finding that those analyzing competitors' export documentation strategies reduced shipment delays by 30% and increased overseas sales by 42%. Tesfaye et al. (2021) conducted an Ethiopian case-control

study of 120 coffee SMEs demonstrating that those positioning as "single-origin" producers secured 15% higher prices and 20% faster inventory turnover through geographic indication branding. Hernández-López (2023) conducted a Mexican retail audit study across 50 supermarkets finding that organic-certified SME products gained 31% more shelf space and 25% higher sales velocity than conventional equivalents. These findings collectively suggest that hands-on competitive analysis, cross-cultural market understanding, and structured opportunity scanning are powerful catalysts for developing competitive competencies and fostering market expansion.

Research examining resource allocation reveals a virtuous cycle of cumulative advantage. Kigozi et al. (2023) conducted a comprehensive Ugandan study tracking 120 Agri-SMEs for two years using regression analysis, finding that those allocating 20%+ of budgets to post-harvest storage infrastructure reduced spoilage losses by 37% and increased net margins by 15 percentage points. The research highlighted how mobile-based accounting tools like QuickBooks helped SMEs improve budget adherence from 58% to 82% accuracy. Singh and Verma (2022) conducted an innovative Indian study analyzing 150 SMEs through IoT sensors and found that those participating in equipment-sharing platforms increased machinery utilization from 45% to 78%, reducing unit production costs by 22%. The study also revealed that SMEs tracking asset performance through digital dashboards achieved 30% faster maintenance response times. AGRA (2023) conducted a Ghanaian longitudinal study following 80 Agri-processing SMEs for 18 months, documenting that those implementing structured skills development programs achieved 29% higher export compliance rates and 20% lower staff turnover. These studies illustrate that strategic resource allocation generates operational efficiencies, reduces costs, and builds institutional resilience.

The literature on adaptability to changing market environments emphasizes the critical role of organizational flexibility in sustaining performance. Contreras et al. (2022) conducted a groundbreaking Chilean study analysing 90 fruit export SMEs during supply chain disruptions, finding that those using WhatsApp Business for real-time coordination reduced response times to weather shocks by 63% compared to traditional communication methods. The research highlighted how SMEs with decentralized decision-making structures adapted 40% faster to market changes. Benbrahim et al. (2023) conducted a comprehensive Moroccan study tracking 60 tomato-growing SMEs over three seasons, documenting that drip irrigation adopters achieved 1.8 times higher yields with 30% water savings. Phongphitak et al. (2021) conducted a longitudinal Thai study following 120 Agri-SMEs through COVID-19 disruptions, finding that those with flexible operations (modular processing equipment, multi-skilled staff) recovered revenues three times faster than rigid competitors. The research showed SMEs maintaining 20-30% buffer capacity could pivot to online sales 50% faster. These findings underscore that institutional autonomy, supportive cultures, and strategic policies are essential for translating resources and opportunities into tangible organizational performance.

The synthesis of this empirical evidence reveals that while each factor strategic planning, competitive analysis, resource allocation, and adaptability independently contributes to SME performance, their combined effect is synergistic and mutually reinforcing. However, significant gaps remain in understanding how these factors interact within the specific context of Kenyan agro-processing SMEs, where resource constraints, competitive pressures, and institutional capacity limitations create unique challenges. Studies have predominantly focused on public enterprises or developed country contexts, leaving a critical gap in knowledge about the nuanced mechanisms through which strategic competitive practices influence performance in resource-

constrained private SMEs. This study addresses this gap by examining the complex interplay between strategic planning, competitive analysis, resource allocation, and adaptability in shaping the performance of agro-processing SMEs within Nairobi City County, Kenya.

2.3 Conceptual Framework

A conceptual framework provides a structured outline that visually and narratively connects the key variables under investigation, thereby grounding the study in established theoretical constructs (Mugenda & Mugenda, 2019). It serves as a network of linked concepts that provide a comprehensive understanding of the phenomena being studied, illustrating the presumed relationships between independent and dependent variables (Kivunja, 2018).

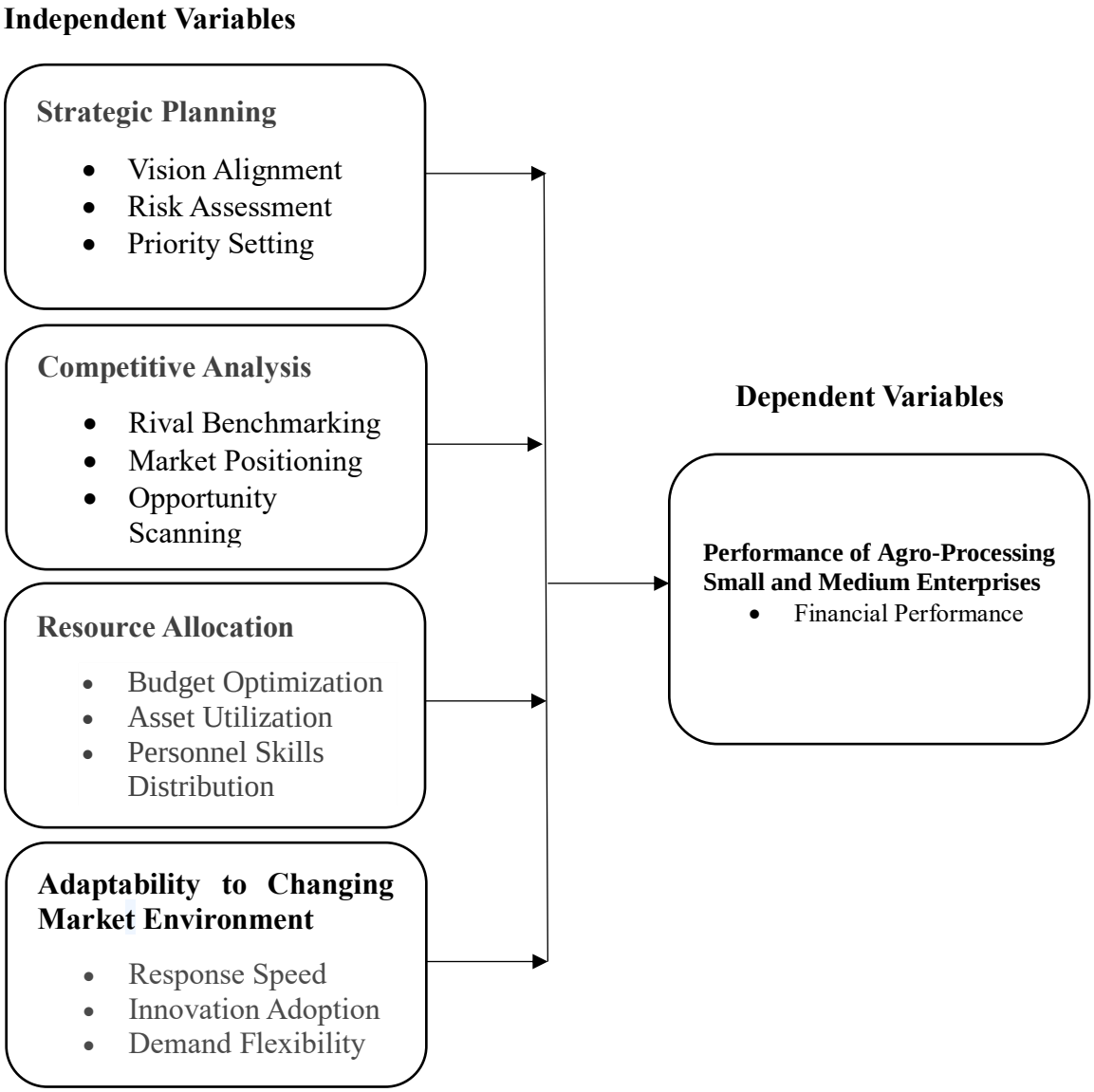

Figure 1: Conceptual Framework

3.0 Research Methodology

This study employed a descriptive research design to systematically investigate the influence of strategic management competitive practices on the performance of agro-processing Small and Medium Enterprises (SMEs) in Nairobi City County, Kenya. The target population comprised 177 agro-processing SMEs registered and licensed by the Nairobi City County Licensing Department, with a sample of 123 enterprises selected using simple random sampling techniques to ensure proportional representation across the sector. Primary data was collected using structured questionnaires administered to business owners and managers, while secondary data was gathered from institutional records and financial statements. A pilot study involving 17 respondents (approximately 10% of the sample) was conducted to refine the research instruments, with reliability assessed using Cronbach's Alpha (threshold of 0.7) and validity established through content, face, and construct validity using Exploratory Factor Analysis with Kaiser-Meyer-Olkin (KMO) measures and Bartlett's Test of Sphericity.

Data analysis was performed using SPSS version 26, generating descriptive statistics including frequencies, percentages, means, and standard deviations, as well as inferential statistics comprising Pearson correlation and multiple regression analysis. The study employed the regression model $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$ to determine relationships between the independent variables (strategic planning, competitive analysis, resource allocation, and adaptability) and the dependent variable (performance of agro-processing SMEs). Diagnostic tests including normality (Kolmogorov-Smirnov and Shapiro-Wilk), multicollinearity (VIF), and autocorrelation (Durbin-Watson) were conducted to validate the data. Ethical considerations were strictly observed throughout the study, with informed consent obtained from all participants, confidentiality maintained through data anonymization, secure storage protocols implemented, and participants' rights to withdraw from the study at any time clearly communicated.

4.0 Research Findings and Discussion

This section presents the findings of the study, data analysis, data presentation, and data interpretation. The study sought to establish whether strategic planning, competitive analysis, resource allocation, and adaptability to changing market environment influence the performance of agro-processing Small and Medium Enterprises in Nairobi City County, Kenya.

4.2 Inferential Statistics

Inferential statistical analysis involves objectively and quantitatively summarizing data, determining which data patterns are significant, and making inferential statements about the relationships between strategic management competitive practices and the performance of agro-processing SMEs. The Pearson correlation analysis and regression analysis were conducted under inferential analysis in this study.

4.1.1 Correlation Analysis

Correlation refers to the strength and direction of a linear relationship between two variables (Leavy, 2017). The correlation coefficient ranges from -1.00 to +1.00. Table 10 presents the correlation analysis for the study variables.

Table 1: Correlation Analysis

		Performance	Strategic Planning	Competitive Analysis	Resource Allocation	Adaptability
Performance	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	107				
Strategic Planning	Pearson Correlation	.768**	1			
	Sig. (2-tailed)	.000				
	N	107	107			
Competitive Analysis	Pearson Correlation	.802**	.708**	1		
	Sig. (2-tailed)	.000	.000			
	N	107	107	107		
Resource Allocation	Pearson Correlation	.784**	.685**	.723**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	107	107	107	107	
Adaptability	Pearson Correlation	.821**	.699**	.741**	.732**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	107	107	107	107	107

The findings reveal strong and statistically significant positive relationships between all four independent variables and the performance of agro-processing SMEs. The Pearson correlation coefficients range from .768 for strategic planning to .821 for adaptability, and all are significant at the 0.01 level (p = .000). Adaptability shows the strongest correlation with performance (r = .821), followed by competitive analysis (r = .802), resource allocation (r = .784), and strategic planning (r = .768). These findings suggest that among the four strategic processes, adaptability to changing market environments has the most potent direct association with SME performance in this context. Further, the correlation matrix reveals that the independent variables are also moderately to strongly intercorrelated with each other, with coefficients ranging from .685 to .741. This pattern suggests a synergistic relationship where these strategic processes do not operate in isolation but rather reinforce one another. The combined influence of these interlinked strategic processes creates a multiplicative effect on SME performance, where the whole is greater than the sum of individual parts

Table 2: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.892a	.796	.788	.29563

The model summary in Table 2 shows an R-Squared value of 0.796, indicating that 79.6% of the variation in SME performance is explained by the combined effect of strategic planning,

competitive analysis, resource allocation, and adaptability to changing market environment. The adjusted R-square of 0.788 confirms the model's predictive power. The ANOVA results in Table 4.17 confirm the model is statistically significant (F = 99.156; p = 0.000).

Table 3: Analysis of Variance

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.654	4	8.664	99.156	.000b
	Residual	8.880	102	.087		
	Total	43.534	106			

a. Dependent Variable: Performance of Agro-Processing SMEs

b. Predictors: (Constant), Adaptability*, Strategic Planning, Competitive Analysis, Resource Allocation*

The coefficients in Table 4 reveal that adaptability to changing market environment is the strongest unique contributor to SME performance (Beta = 0.293, B = 0.271), followed by competitive analysis (Beta = 0.246, B = 0.224), resource allocation (Beta = 0.219, B = 0.196), and strategic planning (Beta = 0.209, B = 0.187). All variables are statistically significant at $p < 0.01$, confirming their individual contributions to SME performance. The constant value of 0.567 (p=0.000) indicates that even without considering strategic management competitive practices, a baseline level of performance exists, possibly from individual entrepreneurial initiative and existing operational structures.

The finding that adaptability emerges as the strongest predictor suggests that investing in organizational flexibility and responsiveness provides the most significant direct return when strategic, analytical, and resource contexts are controlled for. This refines earlier single-variable analyses and confirms that while strategic planning is a necessary catalyst, the depth of organizational adaptability and response capability is the most consistent predictor of sustainable SME performance (Kipkorir & Nyamongo, 2023). The relatively lower but still significant coefficient for strategic planning (Beta = 0.209) indicates that a large portion of its initial effect in the simple regression was shared with the other variables, as planning is used to create opportunities, strengthen resource allocation, and support adaptability. Its continued significance (p=0.002) confirms that strategic planning remains indispensable.

Similarly, competitive analysis (Beta = 0.246) and resource allocation (Beta = 0.219) demonstrate that even when controlling for other factors, the presence of specific competitive intelligence capabilities and efficient resource deployment independently and substantially boost performance. Studies confirm that in a mature business system, no single factor operates in a vacuum; the potency of strategic planning is mediated by resource efficiency, and the value of competitive analysis is determined by the pre-existing adaptability available to act upon it (Chebet & Oloo, 2022). The implication is that Kenyan agro-processing SMEs must adopt a coordinated, multi-pronged strategy where strategic investments are explicitly tied to adaptability programs, resources are designed to maximize competitive intelligence, and organizational structures are agile enough to support the performance that all other factors collectively enable.

Table 4: Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.567	.152		3.730	.000
	Strategic Planning	.187	.058	.209	3.224	.002
	Competitive Analysis	.224	.061	.246	3.672	.000
	Resource Allocation	.196	.057	.219	3.439	.001
	Adaptability	.271	.059	.293	4.593	.000

Optimal Regression Model

Performance of Agro-Processing SMEs = 0.567 + 0.187(Strategic Planning) + 0.224(Competitive Analysis) + 0.196(Resource Allocation) + 0.271(Adaptability**)**

5.0 Conclusions

The study concludes that strategic management competitive practices significantly influence the performance of agro-processing SMEs in Nairobi City County, with the four strategic processes collectively explaining 79.6% of performance variance. Strategic planning ensures organizational activities cohesively support long-term goals through vision alignment, risk assessment, and priority setting, enabling SMEs to navigate challenges and achieve higher revenue growth, better customer retention, and significantly higher survival rates beyond five years compared to peers lacking formal planning processes. Competitive analysis, through rival benchmarking, market positioning, and opportunity scanning, enables SMEs to establish achievable performance goals, secure price premiums through differentiation, and penetrate regional and global value chains more effectively than those lacking competitor intelligence systems. The study further concludes that resource allocation, encompassing budget optimization, asset utilization, and personnel skills distribution, drives operational efficiency and productivity, with efficient resource allocation explaining a substantial portion of the productivity gap between African and Asian SMEs. Ultimately, adaptability to changing market environment emerges as the strongest predictor of SME performance, underscoring that response speed, innovation adoption, and demand flexibility are the most critical determinants of sustained competitiveness in the dynamic and often unpredictable agro-processing sector, where climate change increases weather volatility and consumer preferences shift rapidly.

5.0 Recommendations

Based on these findings, the study recommends that agro-processing SME owner-managers prioritize the development of integrated strategic management frameworks that simultaneously address strategic planning, competitive analysis, resource allocation, and adaptability. Specifically, SMEs should invest in structured strategic planning processes with documented visions, formal risk assessment mechanisms, and dynamic priority setting that balances short-term operational needs with long-term capacity building. SME associations and agricultural extension services

should develop training programs equipping owner-managers with skills in systematic competitor intelligence, market positioning strategies, and opportunity scanning using digital tools and market information platforms. Government agencies and financial institutions should provide incentives and credit products supporting SME investments in asset optimization technologies, skills development programs, and flexible production systems, recognizing that these capabilities significantly enhance enterprise resilience and competitiveness. Additionally, policymakers should review regulatory frameworks to identify and address institutional barriers that delay compliance adaptation, streamline certification processes that enable premium positioning, and facilitate peer-to-peer learning networks and innovation hubs where SMEs share experiences with technology adoption and learn from successful implementers. Finally, future research should investigate the influence of technological adoption and digital transformation on the relationship between strategic practices and SME performance, as well as the influence of external financing access on the relationship between resource allocation and performance outcomes.

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