

The Moderating Effect of SMEs Size on Competitive Advantage and the Performance of Small and Medium Enterprises in Mombasa Island

Keziah Kioria¹; Dr. Stanley Kavale²; Dr. Pamela Chebii³;

¹Department of Management Science & Entrepreneurship, Moi University

²Department of Entrepreneurship & Business, The Open University of Kenya

³Department of Management Science & Entrepreneurship, Moi University

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.9010377>

Received: 19 November 2024; Accepted: 26 November 2024; Published: 23 February 2025

ABSTRACT

Small and Medium Enterprises (SMEs) adopt different strategies to compete and survive. However, their failure rate is still unacceptably high. This study sought to examine the moderating effect of SMEs size on the relationship between competitive advantage and the performance of SMEs in Mombasa Island. The specific objectives of the study were; to determine the effect of cost-based competitive advantage, product differentiation and operation-based competitive advantage and the moderating effect of SME size on the relationship between competitive advantage and the performance of SMEs in Mombasa Island. The theory of competitive advantage, Resource-Based View Theory and Theory of performance were used. The study adopted an explanatory research design and the target population was 373 SMEs. Using Yamen's sample size determination formulae, a sample size of 193 SMEs was derived. Data was collected using a structured questionnaire from SME managers. The results showed that cost-based competitive advantage, product differentiation-based competitive advantage, production-based competitive advantage and SME size affect SME performance. Further, SME size moderates the relationship between cost-based competitive advantage, product differentiation-based advantage, operation-based competitive advantage and performance of SMEs. The study concluded that cost-based competitive advantage, product differentiation-based advantage, operation-based competitive advantage and firm size are critical factors in enhancing performance of SMEs in Mombasa. The study recommended that managers should employ cost-based competitive advantage, product differentiation-based advantage, operation-based competitive advantage and increase SMEs size so as to increase the performance of SMEs.

Key words: advantage, competitive, cost, differentiation, operation, performance, product, SMEs

INTRODUCTION

Performance, in the context of SMEs, is a multidimensional concept that encompasses various facets of organizational effectiveness and efficiency. One primary determinant of SME performance is their financial health. This aspect involves assessing the profitability, liquidity, and solvency of SMEs. Profitability measures such as return on assets (ROA) and return on equity (ROE) provide insights into how effectively SMEs utilize their resources to generate profits. Liquidity ratios like the current ratio and quick ratio gauge the SMEs' ability to meet short-term financial obligations, while solvency ratios assess their long-term financial stability. A healthy financial performance is often indicative of a well-managed SME with the capacity for sustained growth ((Mithas, et al, 2018). In addition to financial indicators, non-financial factors play a pivotal role in SME performance. Market positioning, customer satisfaction, and innovation capabilities are key determinants of competitiveness and growth. Successful SMEs exhibit an acute understanding of their target markets, leveraging market research and segmentation strategies to position their products or services effectively. High levels of customer satisfaction not only led to repeat business but also bolster brand reputation and trust. Moreover, innovation capabilities enable SMEs to adapt to changing market dynamics, develop new products or services, and remain competitive in the long term (Tan, & Sousa, 2020).

Size is a crucial factor in determining the type of firms, distinguishing between small and medium-sized enterprises (SMEs) and large enterprises. It is defined by employee numbers, turnover, and capital. Studies are divided on whether size is a constraint for enterprises or a source of opportunities. Size directly influences SMEs' performance and other growth elements, such as innovation, R&D investment, and technology adoption. Smaller firms tend to use more external advice, while larger ones face financial barriers and bureaucratic procedures. The relationship between size and performance and growth is complex, with some studies arguing for its constraint and others promoting its potential for growth.

Competitive advantage of any given organization can be achieved in production of goods and services in an efficient and effective manner when professionals adopt strategic planning practices. (Weske, 2019). Many firms both large and small have either outsourced or are starting to outsource in a bid to ensure sustainability with a focus on costs, overhead management and control, easier access to external professional services as well as restraining payroll. Knowledge of strategic competitive advantage has transformed SMEs to efficiently utilize their resources in an effective way through application of best practices of the industry as well as improvement of business processes, thus entering and creating new markets (Kolawole & Agha, 2020). Experts state that the management strategy of competitive advantage and performance is associated with market attractiveness and internal capabilities, it is described in the research Wheelen., et al., (2020) and Porter (2021). Wheelen., et al., (2020) and Robins (2021) explain that competitive advantage is influenced by the competitive strategy. While Hao-Ma (2019) states that the global competitive advantage can be achieved through a strategy of competition, cooperation, and co-option. The implementation of business strategy consists of competitive strategy and cooperative strategy effect on the performance of the company (Wheelen, et al., 2020). Competitive strategy also consists of cost leadership, cost focus and differentiation focus strategy and the creation of competitive strategies towards excellence affect performance. (Porter, 2021) state that the application of competitive strategy consists of cost leadership, differentiation, and focus affect the company's performance against.

Global Perspective on SMEs Performance

Small and medium enterprises contribute to more than one third of GDP in emerging and developing economies and account for 34% and 52% of formal employment respectively (OECD, 2018). The important roles SMEs play in the economy of every nation has continued to be crucial in broadening the sources of national income, improving the competitiveness and economic development and contributing to the sustainability, flexibility and resilience of economies (Harrigan, Ramsey & Ibbotson, 2021). Such roles include: entrepreneurship, innovation, productivity, competition, job creation, diversification, earning and growth in many economies of the world (Harrigan, et al., 2021). For any economy world over, small and medium enterprises contribute greatly to job creation, create significant domestic and export earnings, contribute to the universal wellbeing and welfare of economies and are key instruments in poverty reduction (OECD, 2021). Small and medium enterprises make important contributions to development of any countries, of the 350 million industrial-commercial units with over two billion staff currently working in the world, more than 90% of them are SMEs (Al-Swidi & Al Hosam, 2019). According to Organization for Economic Co-operation and Development (OECD), SMEs represent more than 95% of enterprises in the world and ensures 60 to 70% of employment. Formal SMEs contribute up to 45% of total employment and up to 33% of national income Gross Domestic Product (GDP) in developing or emerging economies (Moshe, 2019; OECD, 2020).

Inter-American Development Bank defines SMEs as having a maximum of 100 employees and less than \$3 million in revenue. In Europe, they are defined as having manpower fewer than 250 employees and United States define them with employees less than 500 (Natarajan & Wyrick, 2021). The impact of SMEs in established or developed economies or countries is also very key and is considered as the main source of employment and income generation (Oladapo & Onyeaso, 2019; Ong & Ismail, 2019). Similarly, the SMEs also has critical role in developing countries. In developing countries, a significant proportion of population is directly or indirectly dependent upon the SMEs. Hence, the input of SMEs is highly recognized at the global level and this has informed authorities around the world to give more focus on SMEs (Shelley, 2019). SMEs have been a driving force in the U.S. economy, contributing substantially to the GDP. In 2020, SMEs accounted for approximately 44% of total economic activity in the United States. SMEs have been a primary source of employment in the country. They have consistently generated a substantial portion of new jobs. In recent years, they were responsible for over 60% of net new job creation. The COVID-19 pandemic also had a differential impact, with

some SMEs pivoting successfully while others struggled. Survival rates for SMEs can be challenging due to various factors, including competition, market volatility, and financial constraints. Research has shown that about 20% of SMEs do not survive their first two years in business, and only about half make it past the five-year mark (Amel, Lee, Secatore, & Singer, 2020).

SMEs in the UK constituted a significant portion of the business ecosystem, accounting for around 99.9% of all private sector businesses. Their performance is vital not only for economic growth but also for job creation and innovation. In 2020, they generated an estimated turnover of £2.3 trillion, underscoring their economic significance. Employment statistics also shed light on their performance. SMEs have consistently been major employers, providing jobs for millions of people. In 2020, they employed around 16.8 million people, accounting for approximately 61% of the total private sector employment in the UK (Degryse, Matthews, & Zhao, 2018). In India, SMEs have historically contributed significantly to India's GDP. According to data from the Ministry of Micro, Small and Medium Enterprises (MSME), the sector's contribution to GDP was around 29% in 2020. SMEs have been a major source of employment in India, providing jobs to a substantial portion of the workforce. The MSME sector employs millions of people, and it is estimated that it generated around 11 crore (110 million) jobs in 2020. India had around 6.33 crore (63.3 million) registered MSMEs. This number includes micro, small, and medium-sized enterprises. SMEs play a crucial role in India's exports. Around 49% of the country's total exports were attributed to the MSME sector in 2020 (Ministry of Trade, 2021).

According to data from the Brazilian Institute of Geography and Statistics (IBGE) (2021), SMEs have consistently represented a significant portion of Brazil's economic landscape. SMEs accounted for a substantial portion of the GDP contributing around 27% to 30% of the total GDP. This underscores their importance in driving economic activity and providing employment opportunities. However, SMEs in Brazil have faced several challenges that have impacted their performance. One significant issue has been accessing financing. Data from the World Bank's Enterprise Surveys indicates that a notable percentage of SMEs in Brazil reported facing difficulties in obtaining credit.

Regional Perspective of SMEs Performance

It is important to note that SMEs are the main source of employment in established and emerging economies or nations alike, comprising over 90% of African business operations and contributing to over 50% of African employment and GDP (Okafor, 2019). Most scholars and researchers agree that the way out of poverty for Africa is through SMEs however, many of the SME businesses started in Africa do not last more than three years and do not contribute to a better economy for their countries. SMEs have played a crucial role in the South African economy. According to data available up to my knowledge cutoff in September 2021, SMEs accounted for a substantial portion of the country's GDP, contributing approximately 40% to 50% of total economic output. This demonstrates their substantial economic significance, making them a cornerstone of South Africa's business landscape (Rajagopaul, et al., 2020). They've provided employment opportunities for millions of South Africans, employing approximately 60-70% of the labor force in the formal sector. This has been particularly important in addressing unemployment, a persistent challenge in the nation (Fatoki, 2018).

In Nigeria, according to Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) (2020), SMEs account for a significant portion of Nigeria's business landscape. SMEs contribute around 50% of Nigeria's GDP and employ nearly 60 million people, making them a crucial driver of employment in the country. In recent years, the number of SMEs in Tanzania has been steadily increasing. According to the latest available data from 2021, there were approximately 4.3 million SMEs operating in the country. SMEs have consistently contributed around 27% to 30% of Tanzania's GDP over the past few years. This demonstrates their substantial role in driving economic growth and development in the country (Nkwabi, & Mboya, 2019).

Local Perspective on SMEs Performance

Small and medium enterprises constitute 98% of all business in Kenya, create 30% of the jobs annually as well as contribute 40% of the GDP. Approximately 720,000 new jobs were created, this is 86% of all new jobs in the 'Juakali' or informal SME sector in 2015 as compared to 120,000 (14%) in the formal sector the same year.

SMEs created 3.7 million in 1999 which grew to 12.6 million in 2015. The worth of SME's output is estimated at Ksh 3,371.7 billion against a national output of Ksh 9,971.4 billion representing a contribution of 33.8 per cent in 2015. In terms of gross value added, the SMEs are estimated to have contributed Ksh 1,780.0 billion compared to Ksh 5,668.2 billion for the whole national economy (Kenya National Bureau of Statistics, 2021). However, according to KNBS (2021), a total of 2.2 million SMEs were closed in Kenya in the last five years, 2016 inclusive and on average, businesses were closed at the age of three years and eight months.

Statement of the Problem

The competitive position or series of positions lead to superior and sustainable performance for SMEs of different sizes. For SMEs to retain competitive advantage, they need to examine their environment and respond accordingly (Mithas, Tafti & Mitchell, 2018). A significant proportion of SMEs in Mombasa face challenges in accessing financing. Statistical data indicates that 68% of SMEs have been denied loans in the past year due to stringent lending criteria. Additionally, 45% of SMEs reported interest rates exceeding 15%, affecting their ability to invest in expansion and modernization (KNBS, 2021). Statistical evidence shows that 72% of SMEs are struggling to maintain or increase their market share in the face of intensifying competition. This is reflected in the average profit margin, which has decreased from 14.5% to 9.3% over the past three years, a 36% decline. The compliance costs for SMEs are substantial. Statistically, 62% of SMEs report spending more than 15% of their annual revenue on compliance-related expenses (Dyer & Whetten, 2021). Additionally, the average time required to navigate regulatory procedures has increased by 27% in the last two years, affecting operational efficiency. Approximately 55% of SMEs report difficulty in finding employees with the necessary skills, leading to a 12% decrease in productivity over the last year (Kinunga, 2019). Based on the above studies it was evident that there exists a knowledge gap on the effect of competitive advantage on SMEs performance in Mombasa Island.

General Objective

The general objective was to investigate the moderating effect of SME size on the relationship between competitive advantage and performance of SMEs Mombasa Island

Specific Objectives

1. To determine the effect of cost-based competitive advantage on the performance of Small and Medium Enterprises in Mombasa Island.
2. To ascertain the effect product-differentiation based competitive advantage on the performance of Small and Medium Enterprises in Mombasa Island.
3. To examine the effect of operation-based competitive advantage on the performance of Small and Medium Enterprises in Mombasa Island.
4. To find out the moderation effect of SME size on the relation between competitive advantage and the performance of Small and Medium Enterprises in Mombasa Island

Null Hypothesis

H₀₁: Cost-based competitive advantage has no significant effect of on the performance of Small and Medium Enterprises in Mombasa Island.

H₀₂: Product-differentiation based competitive advantage has no significant effect of on the performance of Small and Medium Enterprises in Mombasa Island.

H₀₃ Operation based competitive advantage has no significant effect of on the performance of Small and Medium Enterprises in Mombasa Island.

H₀₄. Firm size has no significant moderating effect on the relation between competitive advantage and the performance of Small and Medium Enterprises in Mombasa Island

THEORETICAL FRAMEWORK

Theory of Competitive Advantage

Michael Porter proposed the theory of competitive advantage in 1985. The competitive advantage theory suggests that states and businesses should pursue policies that create high-quality goods to sell at high prices in the market. Porter emphasizes productivity growth as the focus of national strategies. This theory rests on the notion that cheap labor is ubiquitous, and natural resources are not necessary for a good economy. The competitive advantage theory attempts to correct for this issue by stressing maximizing scale economies in goods and services that garner premium prices. Porter (1985) views competitive advantage as arising from three generic approaches: low-cost leadership, differentiation and focus. In low-cost leadership, a firm strives for overall low-cost leadership. By differentiation strategy, a firm strives to create and market unique products for varied customer group. In a focus strategy, the firm strives to create special appeal to one or more groups of consumer or industry buyers, focusing on their cost or differentiation. Pearce and Robinson (2009) suggest that a low-cost leader is able to use its cost advantage to charge lower prices or to enjoy higher profits margins. By so doing, a firm is able to effectively defend itself in price wars, attack competitors on price to gain market share, or, if already dominant in the industry, simply benefit from exceptional returns. Despite the big contribution of the theory of competitive advantage, questions still linker as to what exactly is competitive advantage, and what is not competitive advantage. This is a big window for discussion by scholars and hence one of the key limitations of this theory.

Resource Based View Theory

The idea of the resource-based view is credited to Penrose (1959) from her description of the importance of firms' use of their resources to gain competitive advantage. This is an approach for analyzing competitive advantage in firms. It combines the internal or the core competencies in the internal perspectives of strategy. According to Barney (2007), it was developed to explain how organizations achieve sustainable competitive advantage. The resource-based view focuses on the idiosyncratic, costly-to-copy resources of the firm, and whose exploitation may give a firm competitive advantage. The major assumptions of the resource-based view are resource heterogeneity, which assumes that firms are bundles of products and services with firms possessing different bundles of these resources, and resource immobility, which assumes that some of these resources are either very costly to copy or imitate or either inelastic in supply (Barney, 2007). These resources can either be tangible or intangible and they include all assets, capabilities, competencies, organization processes, firm attributes, information, knowledge that are controlled by a firm and that enable it to conceive of and implement strategies designed to improve its efficiency and effectiveness (Pearce & Robinson, 1997; Barney, 2007). A big critique of this theory is how to differentiate resources and assets and how to convert assets into valuable resources; a big challenge for managers across the globe.

Theory of Performance

Theory of performance develops and relates foundational concepts to form a framework that can be used to explain performance as well as performance improvements (Idaho, 2018). Performance comprises both a behavioral and an outcome aspect. It is a multi-dimensional and dynamic concept. The behaviors may result in outcomes such as numbers of engines assembled, pupils' reading proficiency, sales figures, or number of successful heart operations. In many situations, the behavioral and outcome aspects are related empirically, but they do not overlap completely. Outcome aspects of performance depend also on factors other than the individual's behavior (Sonnetag & Frese, 2021). Performance measurement is a big challenge to organizations especially where benchmarking is not involved; thus, a big drawback of this theory.

EMPIRICAL REVIEW

Effect of Cost -Based Competitive Advantage on Performance

Abdelraheem, et al., (2021) found out that strategic costs contribute in reducing costs during the products design

stage. The companies have awareness in analyzing the competitive advantage situation to the competitor's cost's structure and the paints companies in Khartoum work to improve its operations and products continuously to decrease costs. Wang, et al., (2019) found out that higher level of IT Focus can lead to higher cost advantage when IT Focus is not at low level. When IT Focus is at low-level, higher-level IT Focus can deteriorate cost advantage. Nyakundi (2018) revealed that in order to for SMEs to grow in scale and profitability and also to compete favorably, they need to embrace Michael Porter's generic strategies of competitive advantage. Doe and Smith (2019) found a significant positive relationship between the adoption of a cost leadership strategy and SMEs performance. SMEs that implemented cost reduction measures experienced higher profitability, market share, and overall business performance compared to their competitors. This implies that cost leadership strategy can be an effective approach for SMEs to achieve better performance outcomes in a developing economy. Thus, SMEs should focus on cost reduction initiatives, such as streamlining operations, optimizing resource allocation, and negotiating favourable terms with suppliers, to gain a competitive advantage and enhance their performance. Lee and Williams (2021) found that cost-based competitive advantage positively influenced SMEs performance. Thus, SMEs that engage in continuous monitoring of the business environment, invest in information systems for real-time data analysis, and develop contingency plans to adjust their cost-based competitive advantage strategies based on changing market conditions are more likely to perform better.

Effect Product Differentiation Based Competitive Advantage on Performance

Kavale, et al., (2021) found out that product differentiation strategy has significant effects on corporate growth in MFIs in Kenya. Raharja, et al., (2021) found out generally the apparel industry in Bandung City applied the product differentiation strategy through form design, feature, quality, durability, style and reparability in reaching the competitive excellences when maturity phase of product. Githumbi (2021) found out that only product and service differentiation strategies are affecting performance of large rice milling.

Effect of Operation-Based Competitive Advantage on Performance

Hitt et al., (2020) examined resource-based view theory in operations management research and found out that RBT has become an important theoretical paradigm to address critical research questions in the field. To continue, with more theoretical advancement occurring in the coming years as RBT is still relatively new to operations management. Mwanyota, et al., (2020) found out that operational performance significantly mediates the association linking reverse logistics and a firm's competitive advantage. Johnson and Anderson (2018) found a positive and significant relationship between operation-based advantage and firm performance. Firms that achieved higher levels of operational excellence and efficiency experienced improved financial performance, increased customer satisfaction, and gained a competitive edge in the market. Harris and Wilson (2020) indicated that operation-based competitive advantage significantly influenced the performance of SMEs. SMEs that effectively managed their operations, optimized processes, reduced costs, and improved resource utilization experienced enhanced productivity, increased customer satisfaction, and improved financial performance.

Moderation Effect of SME Size on the Relation Between Competitive Advantage and SME Performance

The size of firms plays a significant role in the relationship between competitive advantage and performance. However, research has shown mixed results in the relationship between competitive advantage and performance moderated by the size of firms. Ketokivi and Schroeder (2004) and Morgan et al. (2004) report a significant moderating role of the size of firms, defined in terms of the number of employees and full-time employees. Ainuddin et al. (2007) find a non-significant moderating effect of the size of firms in the relationship between competitive advantage and performance. Chelliah, Pandian, Sulaiman Munusamy (2010) found that the size strengthens the relation between family ownership and number of employees. Hernández, Yañez-Araque and Moreno-García, (2020) found out a moderating effect of firm size on the influence of corporate social responsibility in the economic performance of micro-, small-and medium-sized enterprises with results showing a significant enhancing effect of size the relationship. Mabenge, Ngorora-Madzimure, and Makanyeza, (2022) explored the Dimensions of innovation and their effects on the performance of small and medium enterprises and found no significant influence of size on the relation between aggregate innovations on performance, however, the relation between marketing innovation was stronger in larger SMEs than smaller ones.

CONCEPTUAL FRAMEWORK

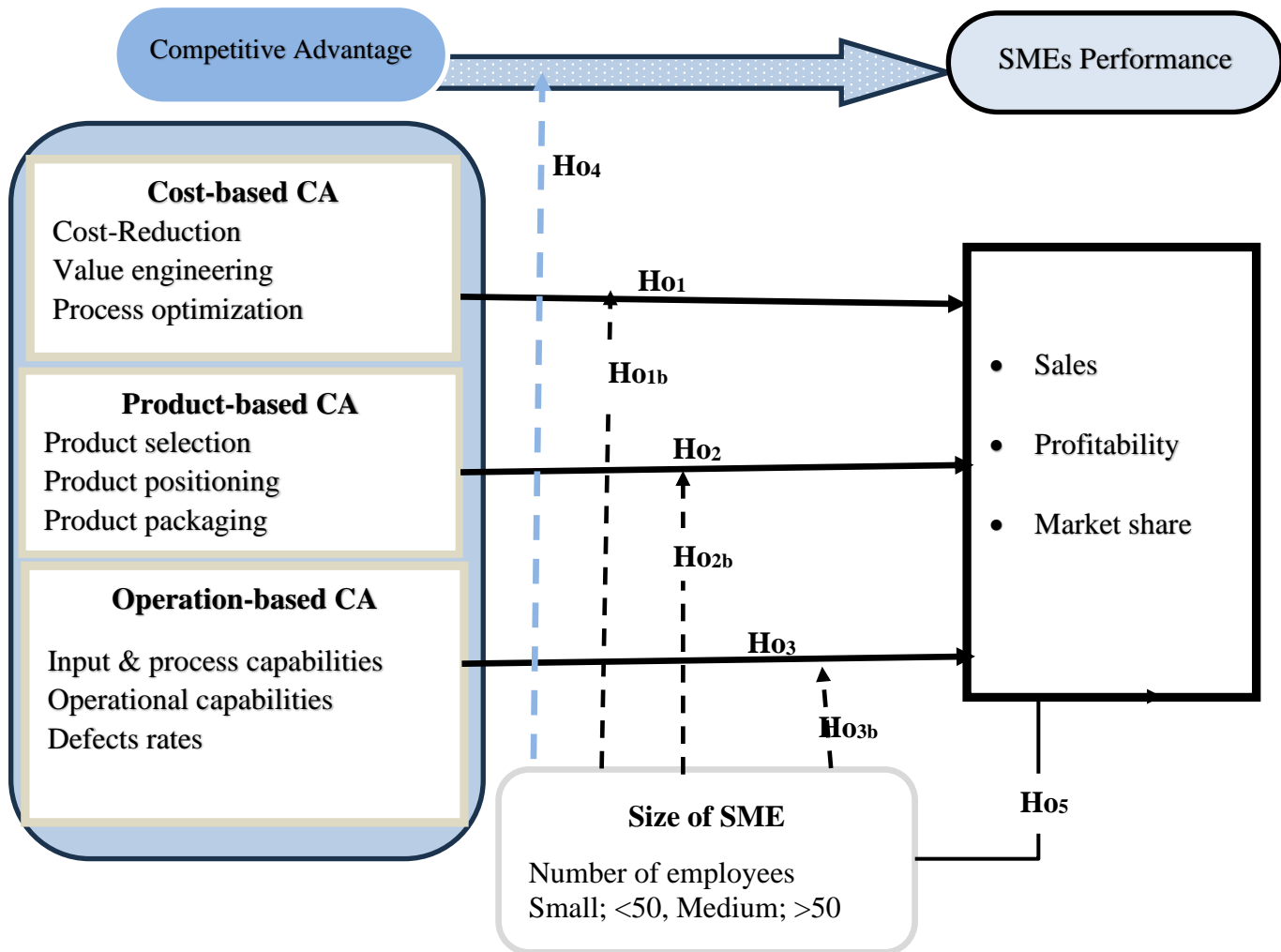


Figure 2. 1 Conceptual Framework

RESEARCH METHODOLOGY

The study adopted an explanatory research design as a blue print to guide the research process. In explanatory research design, this type of research design aims to identify and understand the relationships between variables, with a particular focus on causality and explaining why certain phenomena occur (Churchill et al., 2022). The target population of the study was 373 SMEs in Mombasa Island distributed across commercial and trade, light manufacturing and service sectors as per Mombasa County annual development plan, 2018/2019 financial year. The sample size was 193 SMEs arrived at using Yamane, (1967) sampling formulae. A structured questionnaire was used to collect primary data.

Data analysis was done using SPSS and descriptive and inferential statistics were generated. The study adopted the hierarchical multiple linear regression analysis model as represented below;

$$Y = \beta_{01} + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots \dots \dots (1)$$

$$Y = \beta_{02} + \beta_4 X_1 + \beta_5 X_2 + \beta_6 X_3 + \beta_7 SS \dots \dots \dots (2)$$

$$Y = \beta_{03} + \beta_8 X_1 + \beta_9 X_2 + \beta_{10} X_3 + \beta_{11} X_1 * SS + \beta_{12} X_2 * SS + \beta_{13} X_3 * SS \dots \dots (3)$$

Where; Y is the Performance, β_0 Is the Constant, β_1 β_2 β_3 & β_4 -Coefficients, X_1 is Cost-based Competitive Advantage, X_2 is Product Differentiation -Based Competitive Advantage, X_3 - Operation – Based Competitive Advantage and SS is SME Size which was also the moderator. The purpose of the model was therefore to

estimate 20 regression coefficients using OLS in MLRA.

RESULTS PRESENTATION

Validity and Reliability Test

Validity Test

Validity was assessed KMO statistics. The KMO value is greater than 0.7 as directed by Shrestha (2021). Also, the Bartlett statistic is significant suggesting the data is suitable.

Table KMO Results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.876
Bartlett's Test of Sphericity	Approx. Chi-Square	1846.578
	df	136
	Sig.	.000

Reliability Test

Reliability was tested using the Cronbach score and it's seen that all constructs have a value greater than 0.7 thus the results demonstrate adequate internal consistency Nunnally, (1977)

Table 4.1 Reliability Results

Measurement Scale	No. items	Cronbach
Cost-based Competitive Advantage	6	0.912
Product Differentiation -Based Competitive Advantage	4	0.827
Operation – Based Competitive Advantage	4	0.811
SME Performance	3	0.808

Descriptive Results of Study Variables

From the results the mean for cost based competitive advantage is 4.78 ± 1.274 and highest is for product differentiation based competitive advantage at 5.89 ± 1.147 . The most significant observation is the high variation in responded depicted by the high standard deviation that range from 1.147 to 1.921. The variability shows that the firms are heterogeneous and of the view that firms are heterogeneous because they possess heterogeneous resources, meaning that SMEs adopt differing strategies because they have different resource mixes. The skewedness and kurtosis show fairly normal distributed data. The skewedness and kurtosis are all less than unity for the four variables suggesting a significant departure from normality. This is a positive indication that the sampled SMEs fairly represent the SME population in Mombasa a county

Table Descriptive Results

	Mean	Std. Deviation	Skewness		Kurtosis	
				Std. Error		Std. Error
Cost Based Competitive advantage	4.78	1.274	.284	.188	-.563	.374
Product Differentiation Competitive advantage	5.89	1.147	.144	.188	-.782	.374

Operation Based Competitive advantage	5.78	1.921	.315	.188	-.251	.374
SMEs Performance	4.04	1.701	-.133	.188	-.738	.374

Source; Research data

Correlation Analysis Results

Correlation analysis was conducted to test the relationship between the independent and dependent variables and results are shown below.

Correlation Results

		Cost-Based CA	Product Differentiation	Operation Base CA	Performance
Cost-Base CA	Pearson Correlation	1			
	Sig. (2-tailed)				
Product differentiation CA	Pearson Correlation	.675**	1		
	Sig. (2-tailed)	.000			
Operation Based CA	Pearson Correlation	.597**	.696**	1	
	Sig. (2-tailed)	.000	.000		
Performance	Pearson Correlation	.555**	.691**	.679**	1
	Sig. (2-tailed)	.000	.000	.000	

Source; Research data

The results indicated that cost based competitive advantage, product differentiation competitive advantage and operation based competitive advantage were all positively and significantly correlated with SME performance. This implied that an improvement in cost based competitive advantage, product differentiation competitive advantage and operation based competitive advantage would increase SME performance.

HIERARCHICAL MULTIPLE LINEAR REGRESSION ANALYSIS RESULTS

Model Summary

The results show in model one that the adjusted R square is 0.712 implying that cost based competitive advantage, product differentiation competitive advantage and operation based competitive advantage account for 71.2% of variance in SME performance. This shows that the model explains a substantial role in performance in a complex interrelation of many interrelated factors. Model 2 shows that the adjusted model accounts for 70.9% of SME performance.

Table Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.848 ^a	.719	.712	.522
2	.849 ^b	.721	.709	.524

ANOVA

The results, indicate that the model is significant indicating that the competitive advantage indicators in the

model indeed are significant predictors of the SME performance. The model I with four main IVs is significant ($F_{4, 162} = 103.4, p = .000$) as well as model I ($F_{(7,159)} = 58.841$) indicating that the models are significant. These two results on model fitness using ANOVA suggests that the model quality is good and therefore sufficient in hypothesis test.

Table 4.2 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	112.728	4	28.182	103.473	.000 ^b
	Residual	44.122	162	.272		
	Total	156.850	166			
2	Regression	113.165	7	16.166	58.841	.000 ^c
	Residual	43.685	159	.275		
	Total	156.850	166			

Multiple Linear Regression Coefficients

Table 4.3 Multiple Linear Regression Analysis Coefficients

Model		Unstandardized		Standardized	t	Sig.	Hypothesis Decision
		B	Std. Error	Beta			
1	(Constant)	.427	.225		1.900	.059	
	Cost based CA	.422	.079	.457	5.326	.000	H01 rejected
	Product Differentiation CA	.240	.077	.253	3.130	.002	H02 rejected
	Operation based CA	.126	.058	.122	2.176	.031	H03 rejected
	SME Size	.117	.037	.112	3.162	.002	
2	(Constant)	.511	.251		2.031	.044	
	Cost based CA	.360	.085	-.054	-.705	.482	
	Product Differentiation CA	.241	.094	.236	2.558	.011	
	Operation Based CA	.290	.088	.276	3.298	.001	
	SME Size	.330	.088	.307	3.746	.000	
	CBCA * Size	.204	.086	.193	2.366	.018	H01b rejected
	PDBCA * Size	.145	.070	.123	2.071	.041	H02b rejected
	OBCA * Size	.057	.069	.060	.837	.404	H03b Not Rejected

The result confirmed that cost based competitive advantage, product differentiation competitive advantage and operation based competitive advantage positively affects SME performance. Further results indicate that SME size positively moderate the relationship between competitive advantage constructs and performance of SME in Mombasa County. This implied that by moderating the effect of competitive advantage with SME size, the performance of SMEs would increase. Al, the null hypotheses were rejected confirming that cost based competitive advantage, product differentiation competitive advantage and operation based competitive advantage significantly affect SME performance. Further, moderating the relationship with SME size would increase SME performance. The derived models were as follows;

$$Y1=.427+.422CBCA + .240PDCA + .126OBCA$$

$$Y2=.511+. 204CBCA.SS +. 145PDCA.SS +. 057OBCA.SS$$

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concluded that Cost based competitive advantage positively and significantly affect SME performance. In order to support the performance of SMEs and enable growth in sales, profitability, and market share, cost-based Competitive Advantage is crucial. Further, SMEs with access to low-cost raw materials, efficient technologies and processes, low costs for sales and distribution, and well-managed operations can enable the growth of SMEs. Further, SME size positively moderate the relation between competitive advantage and the performance of small and medium enterprises in Mombasa Island. Further, the study concluded that product differentiation based competitive advantage positively and significantly affect SME performance. It is necessary therefore that SMEs endeavor to succeed in product selection, Product positioning and Product packaging so as to be competitive and outperform their rivals. Also, SME size positively moderate the relation between product differentiation based competitive advantage and the performance of small and medium enterprises in Mombasa Island. Operation based competitive advantage positively and significantly affect SME performance. Therefore, it is important to enhance (SMEs) input & process capabilities, operational capabilities and reduce defects rates. The study did not find evidence that size moderate this positive relation. Therefore, it is concluded that the even small SMEs that have resource limitations, can achieve even substantial performance by strengthening their Operation Based Competitive Advantage.

Recommendation

The study recommends that managers should understand cost-based competitive advantage an important role in SME performance therefore it should be guarded and nurtured by the management so as to support their ability to increase sales, profitability, and market share. Also, the managers of SME should build sustainable product differentiation-Based capabilities so as to turnaround their performance in terms of sales, profitability and market share. Therefore, SMEs should enhance investment in product selection, Product positioning and Product packaging technologies and skills to build production-based CA. further, the managers of SMEs need to invest financially in human skills that are best in the sector in their Input & process capabilities, operational capabilities and reduce defects rates. Lastly, the managers should prioritize increasing SMEs size so as to enjoy economies of scale which in turn will increase their performance.

Policy Implications

The policy implications include that the county government should design policies that foster SMEs abilities to acquire inexpensive raw materials, acquire effective technologies necessary for protecting cost advantage of SMEs. Also, the government should consider a policy on zero rating of SMEs production process such facilities so as to encourage production efficiency and development of human skills. Lastly, the policy-makers should at all times involve SMEs when drafting policies as key stakeholders.

REFERENCES

1. Adefolake, A. (2021). Challenges to SME growth in Kenya. Retrieved from <https://www.howwemadeitinafrica.com/challenges-sme-growth-kenya/>.
2. Adhikari, A. & Gill, M. S. (2021). Impact of resources, capabilities and technology on market orientation of Indian B2B firms. *Journal of Services Research*, 11 (2), 75-98.
3. Ahmad, S. & Ramadan, H. (2021). The 14th Annual World Congress of the Academy for Global Business Advancement (AGBA). Eldoret, Kenya: Academy for Global Business Advancement. Retrieved from <http://www.agba.us/pdf/AGBA-2013-Conference-Proceedings-Volume-2.pdf>
4. Ahmad, S. (2020). Investigating the relationships between Distinctive Capabilities , Business Strategy and Performance of Malaysian Exporting SMEs. Victoria: University of South Australia.

5. Ahmed, N.U., Montagno, R.V. & Firenze, R.J. (2021). Operations strategy and organizational performance: an empirical study. *Int. J. Oper. Prod. Manag*, 16, 41-53.
6. Al-Swidi, A.K., & Al-Hosam, A. (2022). The effect of entrepreneurial orientation on the organizational performance: A study on the Islamic banks in Yemen using the partial least squares approach. *Arabian Journal of Business and Management Review (OMAN Chapter)*, 2(1), 73-84.
7. Amit, R., & Zott, C. (2022). Creating Value Through Business Model Innovation. *Journal of Hospitality Management*, 3(2), 45-61.
8. Asenge, E. L., & Agwa, T. R. (2018). Entrepreneurial competencies and entrepreneurial mindset as determinants of small and medium scale enterprises performance in Nigeria. *Global Journal of Management and Business Research*, 18(13), 1-11.
9. Babbie, E., R. (2020). *The Practice of Social Research*. NY: Cengage Learning.
10. Bindroo, V., Mariadoss, B., J. & Pillai, R., G. (2022). Customer Clusters as Sources of Innovation-Based Competitive Advantage. *Journal of International Marketing*, 20 (3), 17-33.
11. Child, J. (2022). Organizational Structure, Environment and Performance: The Role of Strategic Choice. *Sociology*, 6 (74), 452-460.
12. Creswell, J., W. (2018). *Research design: Qualitative, quantitative, and mixed methods* . Thousand Oaks, CA: Sage.
13. Drost, E., A. (2021). Validity and Reliability in Social Science Research. *International Perspectives on Higher Education Research*, 38 (1), 105-124.
14. Gamble, A., A. (2020). *Crafting and executing strategy : the quest for competitive advantage : concepts and cases*. Boston : McGraw-Hill/Irwin.
15. Jauch, L. R., & Kraft, K. L. (2021). Strategic Management of Uncertainty. *The Academy of Management Review*, 11 (4), 777.
16. Kenya National Bureau of Statistics. (2021). Micro, small and medium establishment (MSME) survey: basic report. Retrieved from Kenya National Bureau of Statistics: <http://www.knbs.or.ke/index.php?option=comphocadownload&view=category&id=137:micro-small-and-medium-enterprises-msmes&Itemid=599>
17. King, A.W. (2021). Disentangling inter firm and intra firm causal ambiguity: A conceptual model of causal ambiguity and sustainable competitive advantage. *Academy of Management Review*, 32, (1), 156-178.
18. Kinyua, A. N. (2019, Dec). Factors affecting the performance of small and medium enterprises in the jua kali sector in Nakuru Town. Unpublished PhD thesis, Nakuru: Egerton University, pp. 123-140.
19. Kolawole, I. O. & Agha, E. A. (2020). Achieving organizational performance through business process outsourcing. *European Scientific Journal*, 11 (4), 457 – 473.
20. Kothari, C. (2018). *Research Methodology: Methods and Techniques*. New Delhi: Age International Publishers.
21. Mithas, S., Tafti, A., & Mitchell, W. (2018). How a firm's competitive environment and digital strategic posture influence digital business strategy. *MIS quarterly*, 511-536.
22. Moshe, M. (2022, July). Strategic entrepreneurship and performance of small and medium enterprises in South Africa. Unpublished Masters Research paper, Johannesburg: University of the Witwatersrand, pp. 89-96.
23. Muia, F. (2021). Effect of competitive strategies on the performance of insurance companies in Kenya. Doctoral dissertation, United States International University-Africa, pp. 173-180.
24. Muiruri, K, F., Bwisa, H., Muturi, W, M., & Kihoro, J, M. (2021). Investigation of the adoption of strategic planning by small and medium sized manufacturing firms in Kenya. *International Journal of Economics, Commerce and Management*, 5(4), 11 - 17.
25. Munyaka, F. G., Ouma, B. O., & Ndirangu, A. W. (2020). Factors affecting the performance of small and medium scale poultry farming enterprises in Karuri, Kenya. *Research Journal of Finance and Accounting*, 6(9), 1-12.
26. Nabintu, N. (2018). Factors affecting the performance of small and micro enterprises Nabintu, N. (2013). Factors affecting the performance of small and micro enterprises. Unpublished Masters of Arts thesis, Nairobi: University of Nairobi, pp. 65-73.
27. Natarajan, G. S., & Wyrick, D. A. (2021). Framework for implementing sustainable practices in SMEs in the United States. *World Congress on Engineering*, (pp. 6-8). New York.

28. OECD. (2018). Strengthening SMEs and entrepreneurship for productivity and inclusive growth. Retrieved from <https://www.oecd.org/cfe/smes/ministerial/documents/2018-SME-Ministerial-Conference-Key-Issues.pdf>
29. OECD. (2020). Small and medium-sized enterprises: local strength, global reach. Retrieved from Organization for Economic Co-operation and Development : <http://www.oecd.org/cfe/leed/1918307.pdf>
30. Okafor, N. (2019). Challenges facing MSEs. *Business Management Journal*, 48 (4), 580-599.
31. Oladapo, V., & Onyeaso, G. (2022). An empirical investigation of the impact of luck on small business performance: dynamic panel data evidence. *Journal of Management & Marketing Research*, 5 (3), 29-41.
32. Ong, J. W., & Ismail, H. B. (2022). Entrepreneurial traits and firm serendipity-seeking on SMEs' performance: The effect of firm size. *Journal of Enterprising Culture*, 20 (3), 265-286.
33. Porter, M. (2021). *Competitive Advantage: Creating and Sustaining Superior Performance*. Boston: Harvard Press.
34. Rahman, M. (2021). Differentiation of services to achieve competitive advantage: airlines meeting the needs of the physically challenged persons. *Journal of Competition*, 45 (2), 451-460.
35. Ricardo, R., & Wade, D. (2021). *Corporate performance management: How to build a better organization through measurement driven strategies alignment*. Chicago, USA: Prentice Hall.
36. Rijamampianina, R., Abratt, R., Yumiko, E. (2018). A framework for concentric diversification through sustainable competitive advantage. *Journal of Management Decision*, 41(4), 362-371.
37. Sekaran, U., & Bougie, R. (2018). *Research Methods for Business: A skill Building Approach*. (6th ed.). West Sussex: Wiley & Sons.
38. Shelley, V. E. (2019). Factors hindering growth in small business. *Resource Management Review*, 13(1), 257-279.
39. Tan, Q., & Sousa, C. M. (2020). Leveraging marketing capabilities into competitive advantage and export performance. *International Marketing Review*, 32 (1), 78-102.
40. Thompson, P. & Martin, R. (2020). *Crafting and Executing Strategy*. New Delhi: Tata McGraw-Hill.
41. Wheelen, L. & Hunger, J., D. (2020). *Strategic Management and Business Policy concepts and Cases*. USA: Prentice-Hall International.
42. Wheelen, L., Hunger, T. & David, J. (2020). *Strategic Management and Business Policy concepts and Cases*. USA: Prentice-Hall International. Zahra, S. A., & Covin, J. G. (1993). Business strategy, technology policy and firm performance. *Strategic management journal*, 14(6), 451-478.
43. Aguinis, H., Beaty, J. C., Boik, R. J., & Pierce, C. A. (2005). Effect size and power in assessing moderating effects of categorical variables using multiple regression: a 30-year review. *Journal of applied psychology*, 90(1), 94.
44. Lwango, A., Coeurderoy, R., & Giménez Roche, G. A. (2017). Family influence and SME performance under conditions of firm size and age. *Journal of Small Business and Enterprise Development*, 24(3), 629-648.
45. Ismail, A. I., Rose, R. C., Abdullah, H., & Uli, J. (2010). The relationship between organizational competitive advantage and performance moderated by the age and size of firms. *Asian Academy of Management Journal*, 15(2), 157-173.
46. Batterton, K. A., & Hale, K. N. (2017). The Likert scale what it is and how to use it. *Phalanx*, 50(2), 32-39.
47. Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., Ray, S., ... & Ray, S. (2021). Moderation analysis. Partial least squares structural equation modeling (PLS-SEM) using R: A workbook, 155-172.