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**PENETRATION STRATEGIES AND COMPETITIVE ADVANTAGE OF CEMENT
 MANUFACTURING FIRMS IN NIGERIA**

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Abstract

Gaining and sustaining competitive advantage using strategic management tools such as penetration tools is very important to strategic management scholars and practicing managers. Hence, a study on penetration strategies and competitive advantage of cement manufacturing firms in Nigeria provides insights in management science and economic research. This study therefore examine the effect of penetration strategies on the competitive advantage of cement manufacturing firms in Nigeria. Three major firms operating in Nigeria were used for the study. A survey research design was adopted while using a total population of 395 management staff from the three firms. 395 copies of questionnaire were sent out and 356 were correctly filled and returned. The data collected were analysed using frequencies, percentages, simple linear and multiple linear regression analysis. The results revealed that there is statistically significant relationship between pricing and competitive advantage (p -values <0.01). Also, product quality improvement, shared statistically significant relationship with competitive advantage (p -values <0.01). This revealed that a hybrid model or strategy should be used to achieve significant competitive edge to strengthen its findings, multiple regression model with all the indicators was statistically significant with competitive advantage (p -value <0.001) and improved with an R^2 value 0.317. Hence, concluded that penetration strategies have statistically significant effect on competitive advantage and recommend that cement manufacturing firms in Nigeria should use a combination of the various penetration strategies rather than one to enjoy significant growth in their competitive edge.

Key Words: Penetration Strategies Competitive Advantage, Pricing, Product Quality Improvement

1. Introduction

Penetration strategy is a key element of strategic management aimed at securing competitive advantage, boosting growth, and expanding market share (Uforo *et al.*, 2022). Penetration strategies, as used in strategic management, concentrate on strengthening a business's position in current markets through higher sales, client acquisition, or the expansion of products or services to boost market offerings (Ekanem *et al.*, 2023). Hence, the types, theoretical underpinnings, applications, difficulties, and real-world actions and outcome gotten from penetration strategies formed the focus of carrying out this research. The essence is to emphasize on the significance of these strategies within the larger framework of strategic management by assessing their contribution to the accomplishment of long-term competitive advantage. This is important because businesses

need to constantly adjust and improve their strategies to gain and maintain a competitive advantage which is very important in today's highly competitive environment. One essential method for accomplishing competitive advantage is adopting and using a penetration strategy.

Penetration strategy is a systematic way towards gaining a higher market share (Bukoye *et al.*, 2023). It is a measure of how much a product or service is preferred by customers in relation to the market's competition (Subrahmanyam & Arif, 2022). It is also a unique approach towards increasing a company's total market share (Subrahmanyam & Arif, 2022). Hence, firms in various industries especially manufacturing industry strive to use penetration strategies for their benefit. These firms can achieve penetration strategy through pricing strategies, product improvement, increased distribution, aggressive marketing and

promotion, and customer loyalty programmes. These strategies are significantly relevant to all manufacturing firms. In manufacturing companies, pricing strategies are essential for maintaining a balance between profitability and competitiveness in the market (Ekankumo & Thankgod, 2024).

One popular tactic is cost-plus pricing; here the businesses set prices by raising the cost of production by a predetermined amount. It guarantees that all expenses are met and a profit margin is realised, but a shift in market conditions might not guarantee competitiveness in all circumstances. In value-based pricing, prices are considered on the perceived value to the customer (Bavaza, 2017). The essence is to maximize profit by capturing consumer surplus, but the difficulty is in comprehending customer preferences and willingness to pay. Another option is the competitive pricing where prices are set in relation to competition. In a bid to gain market share, penetration pricing starts out cheaply to draw clients and set the stage for eventual price increases. Although this strategy can swiftly create a presence in the market, it may have an immediate negative effect on profits. By gradually lowering prices to attract more price-sensitive customers, skimming pricing, on the other hand, sets high initial prices to capitalise on early adopters. To optimise initial profits, this tactic makes use of novelty and perceived exclusivity. Manufacturing companies can accomplish sustainable competitive advantage, improve market positioning, and navigate competitive environments by skilfully integrating these strategies (Ekankumo & Thankgod, 2024).

Improving their products is a major source of competitive advantage in manufacturing organisations. The consistent improvement of product quality, features, and performance, set the firms apart from rivals and better serve their clientele. Product innovation and improvement based on consumer feedback and technological advancements entails investing in research and development (R&D). Enhancing a product can provide a number of competitive advantages (Fairholm & Card, 2019; Akintayo *et al.*, 2021). It assists in preserving client loyalty by attending to their changing needs and resolving current problems. Higher prices for better products often translate into higher profit margins for

manufacturing businesses. Improved product performance or features can also act as barriers to entry for rivals, solidifying a company's leadership in the industry. Frequent innovations and updates can also strengthen a company's brand by establishing it as a leader in the industry and drawing in clients who appreciate high-end products or cutting-edge technology. Yet, businesses must strike a balance between innovation and cost control to maintain a competitive advantage through product improvement. It is imperative to integrate new technologies efficiently and optimise production processes. Therefore, constant product development ensures a company's long-term relevance in the market by adjusting to changes and establishing industry standards, which in turn strengthens a firm's competitive edge.

Nigeria's manufacturing sector have had a difficult time maintaining competitiveness and sustainable growth in the market. However, effective penetration strategies have a direct impact on manufacturing firms' ability to acquire and maintain a competitive advantage. The utilization of penetration strategies is one of the main factors influencing firms' success in Nigeria. Notwithstanding the growth potential of Nigeria, many manufacturing companies find it difficult to create and perfect plans that can enable them successfully enter both domestic and foreign markets.

This challenge is caused by a number of problems. First, there is a seemingly lack of infrastructure, limited access to financing, and fluctuating raw material costs. Second, the need for manufacturing companies to constantly modify their strategies because of the competitive landscape. This landscape is characterised by new players, technological breakthroughs, and shifting consumer preferences. Third, there is a lack of thorough research on how penetration strategies such as cost leadership, pricing, product quality improvement, customer experience analysis and distribution capabilities can help manufacturing firms operating in Nigeria to maintain a competitive edge over the period.

In view of this, little is known about how these companies can use penetration strategies to boost their competitiveness and maintain growth in the face of local, national, and international

competition. There seems to be poor managerial skills in understanding the strategic use of penetration strategic especially conflicting these strategic processes with marketing function. The lack of knowledge of this strategic management tool poses a significant obstacle and gap in the quest of achieving sustainable competitive advantage by these cement manufacturing firms. Hence, the need to examine the effect of penetration strategies, as a strategic management tool on competitive advantage of manufacturing firms in Nigeria.

The following null hypotheses were used in this study:

- H0₁** Pricing strategy has no significant effect on competitive advantage of cement manufacturing firms in Nigeria.
- H0₂** There is no significant effect of improving product quality strategy on competitive advantage of cement manufacturing firms in Nigeria.

2. Literature Review

2.1 Conceptual Definitions

2.1.1 Penetration Strategy

A penetration strategy, often referred to as market penetration, is a growth strategy where a company seeks to increase its market share for existing products or services in existing markets. This typically involves competitive pricing, promotional efforts, increased distribution, and efforts to attract customers from competitors. The strategy is one of the four growth options in Ansoff's Matrix, which categorizes growth strategies based on product and market dimensions (Dahunsi, 2023). Penetration strategies are generally considered low-risk, as they focus on familiar markets and proven products. Companies often use this approach to gain a competitive advantage through economies of scale, brand loyalty, or aggressive pricing tactics (Dahunsi, 2023). This strategy is particularly effective in saturated markets where competition is intense, and customer switching can be incentivized through value-based offers.

Over time, the idea of strategy has changed, with different definitions appearing in various contexts. Strategy is a high-level plan with military terminology that aims to achieve goals under uncertainty (Barad, 2018). Dalcher (2018)

draws attention to the term's widespread use in business by providing definitions that place an emphasis on long-term success planning in a variety of contexts, including business and war.

The most important definition of strategy is put forth by Van den Steen (2018), that strategy is the smallest possible set of decisions that, in competitive interactions especially, optimally guide other decisions. Dahunsi, (2023), offers a final definition that draws on systems theory. In this perspective, strategy is a program or programs that aim to accomplish specific objectives. It connects organisational theory to strategy and elucidates the importance of structure to strategic evaluations. Thus, we can define penetration strategy as the smallest possible set of decisions that provide guide to decisions that ensure increase in market share of a firm. It a crucial element that enhances growth of manufacturing firms in Nigeria (Sawoko, 2017). A well-crafted and implemented penetration strategy has a cause effect on competitive advantage in organisation especially in manufacturing firms (Fairholm and Card, 2019; Akintayo *et al.*, 2021; Dahunsi, 2023). However, penetration strategies are seen in the firms' actions in pricing strategy, product quality strategy and the strategies the firms use to enhance an effective distribution capability. These elements also have causal effect on competitive advantage in manufacturing firms (Ekanem *et al.*, 2024).

2.1.2 Competitive advantage

Competitive advantage refers to the factors that allow a company to produce goods or services more effectively or efficiently than its competitors. This advantage can arise from a variety of sources, including unique resources, capabilities, or market positioning that set a company apart from its competitors, thereby enabling it to outperform them and generate superior profits. In business strategy, Porter (1985) introduced the concept of competitive advantage through two primary strategies: cost leadership and differentiation. Cost leadership allows a company to be the lowest-cost producer in its industry, while differentiation enables it to offer unique products or services that justify a premium price (Porter, 1985). These strategies enable firms to achieve higher market share and profitability

compared to their competitors. Porter further elaborated on the importance of competitive advantage in his seminal work *Competitive Advantage: Creating and Sustaining Superior Performance* (1985), where he emphasized that sustainable competitive advantages are often based on the resources and capabilities a firm has, rather than on temporary factors like technology or market trends. More recent scholars have expanded on this framework. For instance, Barney's Resource-Based View (RBV) (1986) suggests that a firm's internal resources such as physical assets, human capital, and organizational culture are keys to sustaining a competitive advantage. Barney argues that for resources to provide a sustainable competitive advantage, they must be valuable, rare, inimitable, and non-substitutable (VRIN criteria). The RBV highlights the role of intangible assets, like knowledge and brand reputation, in contributing to long-term success.

Dynamic Capabilities Theory, advanced by scholars like Teece *et al.* (2007), adds another dimension to the understanding of competitive advantage by emphasizing the ability of firms to adapt to rapidly changing environments. According to this theory, competitive advantage is not solely about having the right resources at a given point in time but also about a firm's capacity to reconfigure its resources and capabilities in response to external changes. In today's increasingly globalized and technology-driven marketplace, competitive advantage has evolved beyond traditional frameworks.

2.1.3 Pricing Strategy and Competitive Advantage of Manufacturing Firms in Nigeria

Pricing strategy is essential for maintaining a competitive edge in the ever-changing manufacturing landscape, particularly in developing markets like Nigeria (Wawaka, 2018). Nigeria offers manufacturing companies both challenges and opportunities due to its rapidly growing population and changing economic and socio-political landscape. It is imperative that businesses hoping to prosper in this complex environment comprehend the subtleties of pricing strategy and its role in gaining a competitive edge (Ogbari *et al.*, 2023). The common pricing strategies in

manufacturing industry are cost-based, competitive, value-based, penetration and skimming pricing. "Cost-based pricing" bases prices on the cost of production plus a profit margin. This approach is especially pertinent in Nigeria because of the country's infrastructural difficulties and fluctuating raw material costs. Variable costs like labour, energy, and logistics—must be taken into consideration by manufacturers since they are frequently greater than in other areas (Adigbola *et al.*, 2022).

Setting prices based on what rivals are charging is known as competitive pricing (Sani *et al.*, 2014). This strategy is crucial in Nigerian markets where there are lots of competitors and comparable goods. Value-based pricing places more emphasis on determining prices in accordance with the customer's perceived value than it does with production costs alone. Businesses that sell distinctive products with exceptional features or superior quality frequently employ this strategy (Akasin *et al.*, 2017). Fixing lower prices at first to quickly gain market share with the goal of raising prices once a customer base is established is known as penetration pricing. This is a particularly strategy for new companies entering the Nigerian or new market, who want to draw clients away from more established rivals. A new or innovative product, skimming pricing means charging a high initial price and progressively reducing it over time (Bukoye *et al.*, 2023).

Pricing is a differentiator in the Nigerian manufacturing market. Cost effectiveness is one of the main strategies used by manufacturing companies to obtain a competitive advantage. Businesses can offer lower prices than rivals while still remaining profitable by implementing cost-based pricing. This is possible if the business is able to lower production costs through enhanced processes, economies of scale, and/or strategic sourcing. Nigerian manufacturers can attain cost advantages through technology investment, operational streamlining, and supply chain optimisation. This allows them to offer competitive pricing and increase their market share.

2.1.4 Improving Product Quality and Competitive Advantage of Manufacturing Firms in Nigeria

In Nigeria's manufacturing industry, where there is fierce competition and changing consumer demands, enhancing product quality is essential to obtaining and maintaining a competitive edge (Akintayo *et al.*, 2021; Bukoye *et al.*, 2023). This is so because manufacturers find that prioritising product quality not only improves brand image but also fosters customer loyalty and operational effectiveness (Mogbolu, 2022). In the manufacturing industry, a key component of competitive advantage is product quality. Superior products can set a business apart from its rivals, support premium pricing, and increase client retention (Ukpabio *et al.*, 2017). Building a reputation for exceptional quality can have a substantial positive impact on the market in the Nigerian industry where manufacturers' standards of quality can differ greatly. In essence, superior products either surpass or match customer expectations, resulting in increased customer satisfaction and recurring business. Building a strong customer base and improving brand reputation can be achieved by providing consistent quality in Nigeria, where consumer trust is highly valued (Fairholm & Card, 2019).

Product quality has the potential to be a significant differentiator in a crowded market. Manufacturers who prioritise quality can set themselves apart from rivals who might provide lower-quality substitutes. This kind of differentiation works especially well in markets where customers are prepared to pay more for better products.

2.2 Theoretical Review

Penrose's (1959) Resource-Based View Theory served as the foundation for this investigation. It makes the assumption that a corporation will perform better if it has control over its resources. It emphasise firm inherent capabilities in utilising organisational resources to its strategic and competitive advantage. This theory was enhanced to accommodate the increasing demand and intense competition as experience in the Nigerian manufacturing industry (Barney, 1986). The improvement assertions were that the firm can concentrate on the qualities of the resources to maintain a firm's competitiveness and competitive advantage. It posits that a firm's unique capabilities

and resources are the fundamental source of its competitive advantage (Barney, 1986). Furthermore, Barney (1986) argued that every company has a large number of tangible and intangible assets but that it is the skilful and systematic use of these resources that differentiates the firms. According to Barney (1986), if all businesses had the same resources and utilise it in the same way, there would be no variation in their competitiveness and profitability. Rumelt (1984) argued and enhanced Barney's view by suggesting that a firm can achieve future competitiveness by developing distinctive and implicit capabilities that define its strategy and resources utilisation. This is major way of gaining competitive advantage.

In essence, Resource-Based view theory suggests that firms' capabilities to effectively utilise their inherent resource is the differentiating factors and a source of competitive edge in the Nigerian manufacturing industry. The crafting and use of these resources result in developing effective penetration strategies to enhance firm's competitiveness. Therefore, the strategies must be non-substitutable, imperfectly imitable, valuable, and very rare (Barney, 1986). Through firms' competencies and skills there could be the developing innovative technology systems for a competitive advantage. This will ensure they can meet customers need with distinctive services and products (Teece *et al.*, 2007). The theoretical framework ensure that firms using knowledge, competencies and inherent skills as key resources get a competitive edge over their rivals in a dynamic and increasingly complex Nigerian manufacturing industry.

2.3 Empirical Review

Katty *et al.*, (2025) in their study examined the relationship between perpetual inventory and Supply Chain performance of cement manufacturing firms in Nigeria. They used a survey research design and studied five (5) cement manufacturing companies in Nigeria. Data was collected using a structured questionnaire and sample 30 managers. They employed descriptive and inferential statistics for data analysis. Their findings showed that perpetual inventory has statistically significant effect on supply chain performance in Cement manufacturing firms in

Nigeria. They concluded that perpetual inventory affect supply chain performance of Cement manufacturing firms in Nigeria and recommended that that Cement manufacturing firms should adopt perpetual inventory for enhanced distribution of their products. This study illustrated how inventory affects the supply chain of cement manufacturing firms in Nigeria. It also shows that distribution management is a strategy to improve performance.

The significant impact and legacy of Ansoff in the field of strategic management were examined by Puyt *et al.*, (2024). He discovered that Ansoff presented innovative ideas such as long-range planning and the Ansoff matrix. His lasting influence on strategic management research is demonstrated by their reliance on the archives at the Ansoff Institute at the University of Twente. They discussed Ansoff's comprehensive approach to strategic change, which is still applicable in today's dynamic organisational environments, and included paper reviews of his foundational works, such as his influential publication Corporate Strategy (1965). By honouring Ansoff's contributions, they discovered that he emphasises the value of strategic frameworks in directing modern management issues in the face of unheard-of levels of change and uncertainty. According to them, the Ansoff Matrix is still helpful in strategic analysis and decision making in contemporary times.

Ekankumo & Thankgod (2024) examined the effect of differentiation capability on the customer experience of selected consumer goods companies listed in Nigeria. He used a cross-sectional survey method and a total of 20 consumer products firms for his study. He drew a sample of 378 using the Research Advisor Table. To address the issue of non-response, appropriate measures were taken, leading to the inclusion of an additional 113 respondents, representing 30% of the original sample. This adjustment resulted in a final sample size of 491. A total of 491 questionnaires were sent to the respondents, resulting in a response rate of 97.76 per cent. His findings showed that applying differentiation capability in a firm lead to increase competitiveness and favourable customer experience. Hence, he recommended that there is a need for technology adoption to cut production costs and establish a durable competitive advantage.

Ogbari *et al.*, (2023) carried out a study to examine the effect of supply chain management on organizational performance of Dangote Cement Company Gboko, Benue State, Nigeria. Their specific objectives were to examine the effect of supplier relationship on performance of Dangote Cement; and to ascertain the effect of transport and distribution management on performance of Dangote Cement Company Gboko, Benue State Nigeria. Using a survey research approach and questionnaire for data collected. Their sample size was 295 respondents of the company. Using descriptive and inferential statistics, their findings showed that supplier relationship, transportation and distribution management had significant and positive effect on performance of Dangote Cement Company Gboko. They concluded that supply chain management- transportation, distribution and supplier relationship management are important for cost effectiveness, and market share. This implies that performance and competitive advantage can be enhanced through these indicators. They recommended Dangote Cement can increase competitiveness by improving transport and distribution management.

3. Methodology

3.1 Research Design

The survey research design was used for this study, as it was appropriate for sourcing the primary data required. This involved developing surveys that were distributed to respondents.

3.2 Population of the Study

The population of the study consisted of three Hundred and Ninety-five (395) management staff of Dangote Cement, Bua and Lafarge Africa Plc cement manufacturing firms operating in Nigeria. The selection of these three organizations is based on their status as the largest cement companies in Nigeria, their long-standing presence of over 20 years in the industry, and their significant market share.

Strategic processes and decision-making involved the management staff of the organizations; therefore, this study employed a Total Population Sampling Technique. This technique, a type of purposive sampling, involves selecting the entire

population for the study. Accordingly, all three hundred and ninety-five (395) management staff members were included in the research.

3.3 Data and Sources

The primary data were sourced through surveys/questionnaire. A structure questionnaire was distributed to the management staff of the selected manufacturing firms. A 30-item questionnaire was developed and adapted for this study. The five-point Likert rating scale was selected for this study, where 4 = very likely, 3 = likely, 2 = unlikely, 1 = very unlikely and 0 = neutral; it was incorporated into the questionnaire. The scale used in this study was between 0 and 4 as a weight on the response supplied by the respondents. 0 was considered the lowest score, while 4 was the highest score. The Likert-scale options and the questions (items) in the questionnaire were designed to test the likelihood of occurrence.

3.4 Method of Data Analysis

The responses from the questionnaire were analyzed using descriptive statistics (mean, frequency, and percentages) to provide an overview of the penetration strategies employed by manufacturing firms. Further, inferential statistics, specifically regression analysis and correlation analysis, were employed to determine the relationship between penetration strategies and the attainment of competitive advantage. This analysis tested hypotheses on the impact of different strategies on firm performance. The tool for data analysis was Statistical Package for the Social Sciences (SPSS), and Excel was used for data entry, coding, and statistical analysis.

4. Results and Discussion

4.1 Analysis to Examine the Effect of Pricing Strategy on Cement Firms Competitive Advantage in Nigeria.

Table 1: Pricing Strategy's Effect on Competitive Advantage

Item (s)	Neutral	Very Unlikely	Unlikely	Likely	Very Likely
	0	1	2	3	4
Q1 Cement manufacturers adjust their prices based on market demand and competition.	28 (7.9)	40 (11.2)	4 (1.1)	190 (53.4)	94 (26.4)
Q2 Brand reputation plays a significant role in the pricing strategy of cement manufacturers.	22 (6.2)	95 (26.7)	84 (23.6)	119 (33.4)	36 (10.1)
Q3 Cement manufacturers with lower production costs are able to offer more competitive prices.	0	2 (0.6)	34 (9.6)	82 (23.0)	238 (66.9)
Q4 Cement manufacturing companies that adopt innovative pricing strategies have a clear competitive advantage.	10 (2.8)	92 (25.8)	120 (33.7)	102 (28.7)	32 (9.0)
Q5 Cement manufacturers that focus on sustainable practices have a competitive pricing advantage.	26 (7.3)	2 (0.6)	46 (12.9)	88 (24.7)	194 (54.5)

Source: Researcher's Computation, (2025).

Table 1 show the responses received from the respondents on the effect of price strategy's effect on the competitive advantage of cement manufacturing firms operation in South-South Nigeria. The respondents were of the cement manufacturing firms engaged in price adjustment in reaction to the market demand and competition. One hundred and ninety (190) respondents, representing

53. 4 per cent, said that the firms would likely adjust price in face demand and competition to again competitive advantage. While 94 (26.4 per cent) said that it is very likely that the firms will adjust their prices. In another question (questions 2) the respondents were asked if brand reputation play significant role in the pricing strategy of the cement manufacturing firms in South-South Nigeria, 155

(43.5 per cent) agreed that it is likely and very likely that brand reputation will play significant in pricing strategy of the manufacturing firms in Nigeria while 179 (50.3 per cent) said that it is unlikely that brand reputation will play significant role in pricing strategy. This implies that among cement manufacturing firms in Nigeria there is no clear cut assertion that brand reputation will play significant role in pricing strategy. When the respondents were asked if the firms with lower production cost will offer more competitive prices in Nigerian cement market, three hundred and twelve (312) respondents were in agreement that the firms with lower production cost will likely and very likely offer competitive prices in the cement manufacturing companies. When asked if cement manufacturing companies that adopt innovative pricing strategies have a clear competitive advantage, 212 respondents said that it was very unlikely and unlikely to be true while 134 suggested that it is

very likely to be true. This implies that it only how successful the innovative strategies are that creates the competitive edge for cement manufacturing firms in south-south Nigeria. The respondents were also asked if cement manufacturers that focus on sustainable practices have a competitive pricing advantage in response to this question. 286 (79.2 per cent) of the respondent agreed that it is very likely and likely to be true. This strong affirmation shows that firms with sustainable practices are bound to create sustainable competitive advantage in the cement manufacturing firms in Nigeria.

4.2 Survey Response on Improving Product Quality Strategy's effect on Competitive Advantage in Cement Manufacturing Firms in Nigeria.

The responses received from the respondents in the survey on the effect of improving product quality strategy on competitive advantage of the selected firms is presented in Table 2

Table 2: Improving Product Quality Strategy's Effect on Competitive Advantage

Item (s)	Neutral	Very Unlikely	Unlikely	Likely	Very Likely	
		0	1	2	3	4
Q6	Improving the quality of raw materials used in cement production would significantly enhance product quality.	10 (2.8)	92 (25.8)	32 (9.0)	102 (28.7)	120 (33.7)
Q7	We increase the frequency of quality control checks during production to improve the consistency of cement quality.	0	0	2 (0.6)	68 (19.1)	286 (80.3)
Q8	We strengthen relationships with suppliers to ensure high-quality inputs for a positive impact on the company's product quality.	14 (3.9)	2 (0.6)	76 (21.3)	97 (27.2)	167 (46.9)
Q9	Introducing innovative packaging solutions that ensure the preservation of cement quality would provide a competitive advantage.	2 (0.6)	22 (6.2)	4 (1.1)	149 (41.9)	179 (50.3)
Q10	We use stronger focus on customer feedback and market research would help cement companies improve both product quality and competitive advantage.	8 (2.2)	40 (11.2)	47 (13.2)	149 (41.9)	112 (31.5)

Source: Researcher's Computation, (2025).

Table 2 shows the responses received from respondents when asked if the improving product quality as a strategy will lead to a competitive advantage on cement manufacturing firms Nigeria. When asked if improving the quality of raw materials used in cement production would

significantly enhance product quality. 222 (61.4 per cent) agreed that it will likely and very like lead to an improvement in the product quality of the manufacturing firms. When the respondents were asked if they increase the frequency of quality control checks during production to improve the

consistency of cement quality, 354 (99.4 per cent) were in agreement that their firms carried frequent control checks to improve product quality for a competitive edge. Also, for quality to be achieved in manufacturing organisations, there was need to build a strong relationship with suppliers to understand the importance of supplying quality inputs, thus, the respondents were asked if they strengthen relationships with suppliers to ensure high-quality inputs for a positive impact on the company's product quality in their responses, 264 (74.1 per cent) said that they will very likely and likely strengthen their relationship with their suppliers to achieve this goal. When asked if introducing innovative packaging solutions that ensure the preservation of cement quality would provide a competitive advantage, 328 (92.2 per cent) were in affirmative that innovative packing will maintain the quality of their product. This implies that quality and innovation brought into packaging cements will lead to improving the

sustained quality of the product until it gets to the users. Also, customer focus initiatives is a way of gaining and maintaining competitive advantage in manufacturing firms, hence, the respondents were asked if they use stronger focus on customer feedback and market research as a tool that would help cement companies improve both product quality and competitive advantage, 271 (73.4 per cent) of the respondents said that they would likely and very likely use customer focus as a tool for product quality strategy. This implies that firms who are customer focused in their strategies can create and maintain a competitive edge in the industry. Thus, improving product quality as a strategy can create competitive advantage in cement manufacturing companies in Nigeria.

Hypothesis One

H0₁ Pricing strategy has no significant effect on competitive advantage of cement manufacturing firms in Nigeria.

$$\text{COMADV} = \beta_0 + \beta_1 \cdot \text{PS} + \varepsilon$$

Table 3: Hypothesis one model

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.209 ^a	.044	.041	1.72791		
a. Predictors: (Constant), PS						
ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	48.084	1	48.084	16.105	.000 ^b
	Residual	1056.927	354	2.986		
	Total	1105.011	355			
a. Dependent Variable: COMADV						
b. Predictors: (Constant), PS						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Const.)	14.696	.534		27.502	.000
	PS	.153	.038	.209	4.013	.000
a. Dependent Variable: COMADV						

Source: Researcher's Computation, (2025).

To ascertain if Pricing Strategy was significant predictors of competitive advantage on cement manufacturing firms in Nigeria, a simple linear

regression analysis was performed. The model explained only 4.4% of the variance in competitive advantage can be explained by pricing strategy (R^2

=.044, Adjusted R^2 =.041) and was statistically significant ($F = 16.105$, $p < .0.05$). These results imply that pricing strategy has statistically significant influence on the competitive advantage of cement manufacturing firms in Nigeria. Hence, the null hypothesis that pricing strategy has no significant effect on competitive advantage of manufacturing firms in Nigeria is hereby rejected and the alternate hypothesis that pricing strategy has significant effect on competitive advantage of

cement manufacturing firms in Nigeria is hereby accepted.

Hypothesis Two

H0₂ There is no significant effect of improving product quality strategy on competitive advantage of cement manufacturing firms in Nigeria.

$$\text{COMADV} = \beta_0 + \beta_1. \text{IPQ} + \varepsilon$$

Table 4: Hypothesis Two Model

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.487 ^a	.237	.235	1.54302		
ANOVA ^a						
Model	Sum of Squares		df	Mean Square	F	Sig.
1	Regression	262.170	1	262.170	110.113	.000 ^b
	Residual	842.842	354	2.381		
	Total	1105.011	355			
a. Dependent Variable: COMADV						
b. Predictors: (Constant), IPQ						
Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta			
1	(Constant)	11.192	.542		20.667	.000
	IPQ	.377	.036	.487	10.493	.000

a. Dependent Variable: COMADV

Source: Researcher's Computation, (2025).

To ascertain if the effect of improving product quality as a strategy was significant predictor of competitive advantage on cement manufacturing firms in Nigeria, a simple linear regression analysis was performed. The model explained only 23.7% of the changes in competitive advantage (R^2 =.237, and was statistically significant ($F = 110.113$, $p < .0.05$). These results imply that improving product quality strategy has statistically significant influence on the competitive advantage of cement manufacturing firms in South-south Nigeria. Hence, the null hypothesis that there is no significant effect of improving product quality strategy on competitive advantage of cement manufacturing firms in Nigeria is hereby rejected and the alternate hypothesis that there is significant effect of

improving product quality strategy on competitive advantage of cement manufacturing firms in Nigeria is hereby accepted.

5. Conclusion and Recommendations

Manufacturing companies looking to enter and grow in competitive markets, penetration strategies remain essential (Puyt *et al.*, 2024; Olubiyi, 2024; Aditse *et al.*, 2025; Katty *et al.*, 2025). This study examined the effect of key penetration strategy dimensions, price strategy, product quality improvement on cement manufacturing firms' competitive advantage in an emerging economy such as Nigeria. The strategies were examined separately and using empirical data and linear regression models. The study found a statistically

significant correlation between pricing strategy, product quality improvement on competitive advantage. This suggests that these factors work together to shape cement manufacturing firms in Nigeria's ability to gain a competitive edge (Korubo & Adetayo *et al.*, 2021; Daniel *et al.*, 2021; Ge *et al.*, 2021; Onuoha, 2021).

Based on the findings of the study, the following recommendations were made:

- i Cement manufacturing firms in Nigeria should not rely on only pricing strategy as a tool for gaining a competitive advantage.
- ii Despite the importance of improving product quality strategy cement manufacturing firms in Nigeria should consider this strategy as the ultimate strategy for achieving competitive advantage.

REFERENCES

- Adigbole, E. A., Abogun, S., Adegbola, E. A., Oladipo, O. A. and Fakile, S. (2022). Strategic cost management and competitive advantage in selected Nigerian manufacturing companies. *Nigerian Journal of Accounting and Finance*, 14(2), 139 – 165.
- Akasin, E., Abubakar, I., & Mohammad, H. I. (2017). Linking product line strategies to competitive advantage: An empirical study of Nigerian food and beverages industry. *SEISENSE Journal of Management*, 6(2). Retrieved from <https://journal.seisense.com/index.php/jom/article/view/166>
- Akintayo, T C., Akinlabi, S. A., Okokpujie, I. P, Ishola, F. and Akinlabi, E. T. (2021). Advanced manufacturing technology in Nigeria: a review. IOP Conference Series: Material Science and Engineering, 1107. Doi:10.1088/1757-899x/1107/1/012115.
- Barad, D. (2018.). Pricing strategy optimization in Nigeria. Retrieved from <https://novatiaconsulting.com/pricing-strategy-optimization-in-nigeria>
- Baridula, N.M.N. and Mekuri-ndimel R.B. (2021). Factors influencing small and medium enterprises performance. *International Journal of Economics, Commerce and Management*. IV(1), 379-391. Retrieved from <http://ijecm.co.uk/s>
- Barney , A.(1986). Resource Base View and Competitive advantage and its impact. *International Journal of Research Studies in Management*. ResearchGate+2Academia+2emaj.pitt.edu+2ASP JournalsIDEAS/ RePEcResearchGate.
- Bavaza (2017). Penetration pricing., Retrieved from [https:// en.wikipedia.org/ wiki/ Penetration pricing](https://en.wikipedia.org/wiki/Penetration_pricing).
- Bukoye, J. A., Muritala, T. A., Hadiza, S., Nwoye, M. I. and Ogedemgbe, F. A. (2023). Impact of penetration strategy on the performance of manufacturing industry in Northwest Nigeria. *Journal of Human Resource and Sustainability*, 11(3), 472 – 473.
- Dahunsi, O. J. (2023). Competition and Innovation in Nigeria's manufacturing industry: a cause-effect relationship. *Journal of Management Research*, 23(1), 41 – 50.
- Dalcher, R. (2018). Dynamic pricing. In *Wikipedia, The Free Encyclopedia*. Retrieved from https://en.wikipedia.org/wiki/Dynamic_pricing
- Ekanem U.A., Akpan B.B., Ekanem G.U., & Edem E.A. (2023) Green Operation Practice and Organizational Performance in Selected Manufacturing Firms in Akwa Ibom State, Nigeria, *European Journal of Business and Innovation Research*, 11,(4,) 59-73
- Ekankumo, B. and Thankgod, O. (2024). Market penetration strategies and organizational growth in Nigeria manufacturing sector. *International Journal of Economics, Commerce and Management*, 12 (2), 280 – 402.
- Fairhalm E. A., and Card, O. (2021). Supply chain management, competitive advantage and

- organizational performance in the Nigerian manufacturing sector. *Oradea Journal of Business and Economics*, 6(2), 57–68. Retrieved from <https://ideas.repec.org/a/ora/jrojbe/v6y2021i2p57-68.html>.
- Katty et al., (2025) Analysis of competitive advantage and its relevance to SME sustainability: a case of Nigerian manufacturing industry. *Journal of Entrepreneurial and Business Diversity*, 3(3), 61-82.
- Ogbari, M. E., Olulu, B.S. and Kehinde, B. E. (2023). Analysis of competitive advantage and its relevance to SME sustainability: a case of Nigerian manufacturing industry. *Journal of Entrepreneurial and Business Diversity*, 3(3), 61-82.
- Penrose, E. T. (1959). *The Theory of the Growth of the Firm*. Oxford University Press. 322-352.
- Puyt, R.W., Antoniou, P.H. and Caputo, A. (2024). The Ansoff archive: Revisiting Ansoff's legacy and the holistic approach to strategic management. *Strategic Change*.33(6), 513 – 518.
- Sani, G., Izediuno, O. L., Eugenia, I. N., Akande, B. B., Adunola, A. M., Bamigbaiye-Elatuyi, O., Oladunke, A. O., ... Theodore, N. I. (2014). Integration strategies and competitive advantage in manufacturing sector: Evidence from Ogun State, Nigeria. *International Review of Management and Marketing*, 14(4), 103–112. Retrieved from <https://econjournals.com/index.php/irmm/article/view/16205>
- Sarwoko, E. (2017). Strategi Pertumbuhan Usaha Kecil Menengah (UKM). *urnal ekonomi odernisasi*, 13(1), 46–52. <https://doi.org/10.21067/jem.v13i1.1764>
- Segoria, A.K. and moncayo, S.B. (2017). Competitive Strategy Orientation and Innovative. *International Review of Management and Marketing*, 14(4), 103–112.
- Setiawan, E.A. (2022). Marketing strategies and the performance of small and medium enterprises in Akwa Ibom state, Nigeria. *British Journal of Marketing Studies*, 4(5), 51-62.
- Subrahmanyam, S. and Arif, S. A. (2022). Penetration pricing strategy and customer retention – an analysis. *The Journal of Positive Psychology*, 6 (5), 7058 – 7072.
- Teece, David J., Gary Pisano, and Amy Shuen. (2007) "Dynamic Capabilities and Strategic Management." *Strategic Management Journal*, 18(7) 509-533.
- Uforo, A. E., Malachi, U. U. and Don, B. (2022). Maintenance management and organizational performance in selected manufacturing firms, Akwa Ibom State, *International Journal of Business and Management Review*, Vol.10, No.4, pp.37-59.
- Ukpabio, M. G., Siyanbola, W. O. and Oyeibisi, T. O. (2017). Technological innovation and performance of manufacturing firms in Nigeria. *International Journal of Innovative Research and Advanced Studies (IJIRAS)*, 4(11), 10 – 19.
- Uttong, B. G., Ekanem, U. A., and Uwa, K. L. (2024). Blue Ocean Strategy and Sustainable Competitive Advantage in Fast Moving Consumer Good Industry in Nigeria. *International Journal of Advanced Academic Research*, 10(8), 71-87.
- Van, D.S. (2018). The Impact of Marketing Strategies on Customers Satisfaction- A Study of Nigeria Bottling Company (NBC) Yola Depot, Nigeria. *International Journal of Research in Psychology*. 3(2), 33- 64.
- Wawaka, G. E. and Muchelule, Y. (2018.). Effect of pricing strategies on competitive advantage of selected cement manufacturing firms in Kenya. *The Strategic Journal of Business & Change Management*, 5(2), 1254 – 1266.