

Distribution Channel and Market Performance of Noodles Brand in Adamawa State Nigeria: The Mediating Role of Customer Loyalty

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Abstract

This study investigates the influence of distribution channels on market performance with customer loyalty as a mediating variable in the noodles industry of Adamawa State, Nigeria. Recognizing the competitive nature of the fast-moving consumer goods (FMCG) industry, the research sought to determine how wholesale, retail, and online sales channels contribute to market outcomes and the extent to which customer loyalty strengthens these relationships. A survey research design was adopted, and data were collected from 265 respondents drawn from channel partners across the noodle's distribution chain, including sales representatives, distributors, sub distributors, retailers and consumers. Structured questionnaires were used to capture perceptions of distribution practices, loyalty, and performance. The data were analyzed using Smart PLS 3, employing a segmented approach to simple mediation analysis. Reliability and validity of the constructs were confirmed through Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE), while discriminant validity was established using the Heterotrait Monotrait (HTMT) criterion. The results revealed that wholesale, retail, and online sales channels each had significant positive effects on market performance, with the online sales channel exerting the strongest influence. Similarly, all three distribution channels significantly predicted customer loyalty, with online platforms again demonstrating the greatest effect. Customer loyalty itself was found to significantly enhance market performance and to mediate the relationship between distribution channels and performance. Effect size analysis further indicated that online sales channels contributed the most to explaining variance in performance outcomes. The model explained 85.7% of the variance in market performance and 28.3% of the variance in customer loyalty, demonstrating strong explanatory power. The study concludes that distribution channels are not merely logistical mechanisms but strategic levers that shape both loyalty and performance. The findings are theoretically grounded in Porter's Value Chain Theory, Service-Dominant Logic, and the Resource-Based View, and they provide practical implications for managers seeking to optimize distribution strategies and build enduring customer relationships in Nigeria's noodles industry.

Keywords: Distribution Channel; Customer Loyalty; Market Performance; Wholesale Distribution Channel; Retail Distribution Channel; Online

Introduction

The global instant noodle market is projected to grow significantly; the global market size for instant noodles in 2024 is valued at USD 61.08 billion and it is projected to hit USD 98.46 billion by 2032. The Asia Pacific region is dominating at 85 percent, followed by Europe at 6 percent, Latin America at 5 percent, and Africa at 4 percent (Fortune Business Insights, 2025).

The African instant noodles market size is valued at USD 1.2 billion in 2024 and it is projected to hit USD 1.7 billion by 2030. The World instant noodles association in its recent data in 2023 revealed that the noodles market is projected to increase by USD 9.67 billion at a compounded annual growth rate of 3.2% between 2023 and 2028.

In 2023 Nigeria's noodles consumption was put at an average serve of 3 billion. This is attributed to the increasing prices of other carbohydrate diet like rice. Nigerians have alternated with noodles pushing the countries consumption rate to the global rank of 10th in the world. The noodles market in Nigeria has experienced significant growth and transformation since the introduction of Indomie Instant Noodles in Nigeria in 1988 by Indofood's in partnership with Tolaram Group. The noodles market was valued at approximately N200 billion (around \$500 million) in 2022 (Research and Markets, 2023). The growth in the noodles sector in Nigeria is attributed to rising population and increased urbanization, this has led to increase in the demand for quick and easy to eat meal. There are over 16 brands of noodles in the market today. Indomie instant noodles have a dominant market share of 67.7 percent as of 2025 (Kantar world panel 2025). The value of noodles in Nigeria formal market rose year on year by 38.2 percent to N427.2 billion in 2023 and the sales volume of noodles also rose to 266,600 metric tons in from 263,700 tons in 2023 (Business Day, 2024).

Customer loyalty not only guarantees repeat business but also acts as a critical measure of the effectiveness of marketing strategies and initiatives (Oliver, 2023; Kumar & Shah, 2022). Customer loyalty extends beyond the mere act of repeat purchase; it represents a profound emotional bond between consumers and the brand which can drive increased sales, bolster brand equity and enhance profitability. Loyal customers are not merely inclined to advocate for a brand and recommend it to others, but they also demonstrate resilience in their commitment even in the face of competitive challenges. As a result, the performance of noodles brand and indeed any brand can be significantly influenced by the depth of their customer loyalty (Chaudhuri & Holbrook, 2023). The Fast-moving consumer goods (FMCGs) industry is characterized by intense competition and rapidly changing consumer preferences, necessitates effective marketing strategies for sustained success. Marketing performance, metrics that would be our focus is sales performance.

Distribution is the process of making a product or service available for the consumer or business users that need it. It involves the movement of goods and services from the manufacturer to the end user, encompassing various channels and intermediaries that facilitate this process (Kotler & Keller 2021). Distribution channel is a system of interconnected organization that collaborates to deliver a product or service to consumers or business buyers, ensuring accessibility and convenience (Amstrong & Kotler, 2021). The growth of distribution channel was made possible because company's need to move product to consumers. Every manufacturer needs consumers to remain in business. It is often impracticable for manufacturers to reach every consumers directly without the assistance of channel intermediaries (Chopra & Meindi, 2022). The success of a firms product in the market is dependent on the effectiveness of its distribution structure and how well they align with environmental conditions (Kumar & Singh, 2023). Channel strategy plays an important role in how firms gain or loss their position in the market, especially in a highly competitive industry. It follows, therefore, that the firm must understand the competitive landscape in which it operates if it must succeed. A well thought out distribution strategy maximizes market exposure for product while minimizing cost (Smith & Jones, 2023). An effective and efficient distribution strategy provides a framework for how resources should be allocated to established channels that connect producers with consumers to ensure that the products and related services are accessible to consumers/target markets. These strategies focus on developing effective channel arrangement that facilitates the movement of products to consumers by determining the appropriate channel structure and intermediaries. It is essential that distribution channels and strategies create competitive advantage by ensuring that products are visible, available and accessible to consumers. To achieve this, it requires the implementation of an efficient physical distribution pattern which may include strategically positioning of sales representatives and a robust distribution system (Ogunleye & Chukwu, 2023). The role of distribution channels includes the gathering and dissemination of information of marketing research and intelligence as well as the facilitation of

physical distribution and negotiation process (Kumar & Singh, 2022) (Johnson & Lee, 2021). It also enhances communication between producers and consumers thereby improving the overall market efficiency (Bagozzi et al., 2023). Indomie Instant Noodles brand, as a prominent player in the noodles sector, provides an intriguing case for studying its distribution channel in Adamawa state, Nigeria particularly the mediating role of customer loyalty. The brand's success can be attributed to its innovative marketing campaigns, pricing strategies, and strong customer engagement initiatives (Ferrell & Hartline, 2019). Previous studies on distribution channel and performance include Distribution channel structure and performance (Kitainage & Jamaio, 2020), Channel distribution strategy and satisfaction (Somuyiwa Et al., 2021), Channel Management and Performance of table water companies in Benue metropolis (Nyitamen et al., 2024). However, the existing studies often overlook the mediating role of customer loyalty in the relationship between distribution channel and performance. Understanding how customer loyalty operates as a mediator is essential for gaining insights into the mechanism that explains how channel partners in fast moving consumer goods (FMCGs) influence their marketing performance (Chaudhari & Holbrooks, 2022). While there is existing literature on distribution strategy and performance, there is a research gap regarding the specific dynamics in fast moving consumer goods (FMCGs) especially in the noodles sector with a focus on the mediating role of customer loyalty. In line with the following, the present study aims to fill this gap by providing a clear understanding of the interactions among distribution channel, customer loyalty, and performance of Noodles brand in Adamawa State, Nigeria.

1.2 Statement of the Problem

The Distribution channel has been plagued by several practical problems that have significantly affected the marketing performance.

There is also the proliferation of low-priced noodles in the market. These noodles have provided succor to most homes that cannot afford the premium priced Indomie instant noodles thus posing a great threat to the market share of Indomie brand. (Orunko, 2023)

Added to this, is the reluctance to adopt online transactions platform. Many channel partners exhibit reluctance to adopt modern online transactions platforms. This hesitation can be attributed to the fear of cyber threats and data privacy (Smith & Jones, 2023). Trust in online platforms is crucial for its adoption (Nguyen & Tran, 2022). This lack of trust deters channel partners for its adoption. Digital literacy amongst channel partners plays a significant role for its adoption (Ogunleye & Adebayo, 2024). Infrastructural challenges such as internet connectivity and technological infrastructure can hinder the adoption of an online platform (Adesina & Ojo, 2023).

There is also the lack of redistribution vans by the distributors. The lack of redistribution vans has limited the ability of the distributors in bridging the supply gap with their respective customers, most often customers are located at quite a distance and can only be reached through vans or other means of transport which is not available to most distributors thus leading to loss of sales and customers' patronage.

The distribution channel for Indomie Instant Noodles in Adamawa State, Nigeria, presents a compelling area of study due to the existing practical gap that have not been adequately addressed in current literature. Despite the popularity of Indomie Instant noodles brand in the state, there is a notable absence of research that delves into the distribution channels Indomie instant noodles including major distributors (Multipro consumer products limited) wholesalers, sub distributors and retailers. This lack of insight hinders the development of effective marketing interventions tailored to the unique dynamics of the Indomie distribution network in Adamawa State, Nigeria. The choice of Adamawa state for the research is informed by the need to gain insights into consumer behaviour in the state. Understanding how local customs, traditions and economic conditions influence consumer preference and purchase decisions particularly in fast moving consumer goods (FMCGs) like Indomie instant noodles.

The findings from the research can also help in evidenced based policy formulation by understanding threats, challenges and opportunity stakeholders can develop interventions to address specific needs of the population. Furthermore, in the increasingly competitive instant noodle market, the role of distribution strategies in driving performance is well-documented (Abinav, 2023). However, the impact of predicting factors such as quality service, accessibility and convenience, brand reputation and technological integration have been shown to significantly influence customer loyalty and

consequently, performance (Ogunleye & Adebayo, 2023; Chukwu & Nwankwo, 2022; Ibrahim & Bello 2024; Nwankwo & Eze, 2022). Moderating factors such as customer demographics and economic condition (Okwu & Nwankwo, 2024; Aliyu & Usman, 2023), and mediating factors particularly customer loyalty, which are critical factors in the success of distribution strategies, is often overlooked (Bello & Ibrahim, 2023). For instance, Indomie, the most popular brand of noodles in Nigeria, owes its success not only to its effective distribution channel, which ensures its availability and accessibility (Somuyiwa et al., 2021), but also to the loyalty of its customers. This loyalty, fostered through targeted distribution strategies, can significantly enhance performance by increasing purchase frequency or basket size (Carluccio et al., 2021). Thus, an empirical gap exists in understanding of how distribution/ place strategy relates to performance within the context of Indomie Instant Noodles distribution in Adamawa State, Nigeria. While existing studies explore the impact of distribution strategies on performance (Astuti et al., 2018; Kartawinata & Wardhana, 2013; Suhandi, 2020), few incorporate the crucial mediating effect of customer loyalty (Al Karim et al., 2023). The incorporation of customer loyalty as a mediator becomes necessary because it will provide a practical insight into the need for maintaining and sustaining customer relationships, which in turns has direct implication for trade channel partners willing to build brand loyalty and enhance their position in the market. There is also the need to expand the existing empirical body of knowledge by shedding light into the impact of distribution channel on performance of trade partners of Indomie instant noodle. Interestingly, the studies found in the context of instant noodles were conducted mainly in Indonesia (Devina & Rahayu, 2022; Mulyaning, 2016; Tamara, 2014). The few studies found in Nigeria do not examine the link between distribution channel and performance on channel partners of Indomie Instant Noodles, let alone employing the mediating effect of customer loyalty (Akpabio, 2008; Nnawuihe & Ogbu, 2019). To the best of the researcher's knowledge, investigation into this relationship has not been narrowed to Africa, particularly the Nigerian noodles sector. Even if such a study exists, the researcher was unable to come across it. Narrowing the study to the distribution channel of Indomie Instant Noodles will provide some basis of comparison with the previous findings. Hence, the study is contributing to the literature on distribution channel and performance of channel partners. Therefore, the present study will investigate the effect of specific marketing strategies on marketing performance. Empirically, the study will examine customer loyalty as mediator in these relationships. Contextually, the study will use channel partners along the Indomie Instant Noodles distribution network in Adamawa State, Nigeria.

Literature Review.

Market Performance

Marketing performance enables marketers to be able to assess the effectiveness of their marketing initiative in aligning with the objective that was outlined in the marketing plan. As a result, managers and leaders of firms are interested in defining their indicators for judging the performance of marketing initiatives. Sukardi et al. (2021) demonstrated that marketing performance is a description and analysis of the outputs of marketing operations activities in the company by comparing the level of progress made to the objectives set for such activities. Goudarzi et al. (2019) defines marketing performance as the field through which its indicators determine the organization's position among competitors by adopting innovative marketing activities that help the organization to enhance its competitive position and instill the brand in the minds of its current and potential customers. The competitive theory indicates that marketing performance is a process that consists of identifying sources of superiority and core competencies related to the organization's resources and its ability to acquire, implement, and develop business market opportunities; evaluating positions of superiority resulting from the design and implementation of innovative marketing strategies; and knowing the financial and non-financial results obtained from the exploitation of resources (Afriyie et al., 2019).

Distribution Channel

Distribution channels are the pathway through which goods and services move from producers to consumers. These channels are made up of channel partners including wholesalers, distributors, retailers and online platforms that facilitate the movement of goods and information in the market. According to Kotler and Keller (2022) distribution channels are important for creating value by making products available at the right place, at the right time and the right quantity. Distribution

channel has metamorphosed to include both traditional and digital pathways, reflecting the shift in consumer behaviour and advancement in technology. Kumar & Reinartz (2023) stressed that organizations must adapt their distribution strategies to leverage digital innovation, ensuring they remain competitive in the increasingly dynamic landscape.

For this study, distribution channel is defined as the series of channel partners through which products and services move from the manufacturer to the final consumer. The channel partners include wholesalers, retailers, agents and digital platforms that facilitate the purchase and delivery of products to the market.

Wholesale Distribution Channel

Wholesaler/Distributor plays a very important role in the distribution channel by acting as a link between the manufacturer and the retailers or other businesses. They buy in large quantities from the producers and sell in small quantities which helps in the flow of goods and services. This function also allows for better inventory management, cost efficiency and reduction in the number of transactions between the producers and retailers. Wholesalers contribute immensely to the overall performance of the distribution channel by ensuring that products are available where and when they are needed, thereby enhancing customer satisfaction. (Bowersox et al., 2022). The performance of wholesalers is measured using matrixes like inventory turnover, order fulfillment and customers service level. Kotler and Keller (2022). noted that inventory management is important for wholesalers as it directly impacts their ability to meet customers needs and maintain profitability. Added to this order fulfillment rate is an indication of the operational efficiency of the wholesaler which reflects their capacity to deliver product timely and accurately. Wholesalers are adopting e-commerce solutions and data analytics to better understand consumer preferences and trends. This technological shift improves operational efficiency and allows for personalized services thereby increasing customers satisfaction and customer loyalty. (Chaffy & Ellis Chadwick, 2023). Wholesalers that provide comprehensive support to their customers is more likely to achieve long term relationship and sustainable growth in a competitive market. However, the competitive business landscape has prompted wholesalers to provide market intelligence, financing options and logistics support which enhances their performance.

Retail Distribution Channel

Retailers are the final link in the distribution channel. They directly connect the manufacturer and wholesaler to the consumer. Their main function is to sell goods and services to the final consumers. They provide a crucial interface for customer interaction and experience. The performance of retailers is very important not only for their own success and continued existence but also, for the overall health of the distribution channel. Effective retailing strategy enhances Customer satisfaction and customer loyalty. These are essential prerequisites for long-term profitability (Kotler & Keller, 2022).

The key performance matrix for retailers is sales growth, which reflects their ability to attract and retain customers. Retailers need to take advantage of changing consumer preferences and market trends if they must remain competitive. The performance of retailers is also enhanced through their ability to manage channel partners relationship effectively. Stronger partnerships with suppliers and wholesalers can lead to better pricing, improved product availability and enhanced service level. (Verhoef et al., 2023). It must be stressed that as business environment continue to change retailers must leverage on technology and innovation to enhance operational efficiency and customers satisfaction.

Online Sales Channel

The continuous rise of online platforms has significantly improved the performance of commerce and consumer interactions. Platforms like e-commerce, websites, social media and mobile applications have become a vital tool for businesses seeking to enhance their performance and reach out to a wider audience. The COVID-19 pandemic paved the way for the acceleration of digital platform, with many consumers shifting to online shopping due to its convenience and for safety. This has made a lot of business invest heavily on online platforms, which has led to increased competition and innovation in the digital marketplace. (McKinsey & Company, 2021). Understanding consumer

behaviours through online platforms enables organizations to enhance customer satisfaction and customer loyalty which impact on sales and performance. (Chaffy, 2022). Social media platforms have become a veritable tool for brand building and consumers interactions. However, the reliance on online business also poses challenges for businesses. (Kumar & Gupta, 2022) noted that businesses must pay special attention to security measures and transparent data practice if they must maintain consumer confidence in their online platform.

Customer Loyalty

The concept of customer loyalty has evolved over time, reflecting shifts in consumer behavior and marketing paradigms. Originating from early observations of repeat business, loyalty was initially considered a transactional outcome. However, its conceptualization expanded with the advent of relationship marketing in the late 20th century. Scholars such as Berry and Parasuraman (1991) introduced the idea that loyalty extends beyond repeat purchases, emphasizing the relational aspects and the enduring commitment between the customer and the brand.

The multifaceted nature of customer loyalty is evident in the diverse definitions put forth by scholars. Reichheld and Sasser (1990) define loyalty as the propensity of a customer to continue patronizing a particular product or service, driven by satisfaction and a perceived lack of viable alternatives. In contrast, Oliver (1999) emphasizes the affective and attitudinal components, characterizing loyalty as a deeply rooted commitment and preference for a brand, transcending mere repeat transactions.

Customer loyalty comprises behavioral, attitudinal, and cognitive dimensions, each offering unique insights into the depth and nature of the customer-brand relationship (Keeling, 2022). The behavioral dimension involves repeat purchases and consistent patronage (Jacoby & Chestnut, 1978). The attitudinal dimension encompasses customer satisfaction, trust, and brand preference, reflecting the emotional and psychological connection (Dick & Basu, 1994). The cognitive dimension includes elements like brand awareness and perceived quality, indicating the customer's informed decision making process (Yi & Jeon, 2003).

Wholesale Distribution Channel and Market Performance

A substantial number of empirical studies have explored how wholesale distribution channels influence market performance across various industrial and national contexts. Wholesale distribution plays a crucial role in ensuring product accessibility, competitive pricing, and market reach, key determinants of firm performance, particularly in fast-moving consumer goods (FMCG) industries in emerging economies.

Anderson and Coughlan (2021) conducted a study aimed at examining the strategic role of channel management on marketing performance among 250 distribution firms in the United States manufacturing sector. Using multiple regression analysis, the study found that wholesalers with wellstructured distribution networks achieved higher market penetration, profitability, and customer retention rates. Their results demonstrated that wholesale efficiency acts as a core determinant of market success by facilitating product flow and maintaining consistent customer service standards.

In another study, Wang, Yang, and Zhao (2022) analyzed data from 312 logistics and wholesale firms in China to determine the effect of wholesale logistics optimization on market growth. The researchers employed structural equation modelling (SEM) to test their hypotheses and discovered that firms integrating technology-driven wholesale systems exhibited significant improvements in sales growth, customer satisfaction, and market responsiveness. The findings underscored that wholesale channel efficiency strengthens a firm's adaptability to market fluctuations, thus improving its overall market performance.

Ngugi and Ogotu (2020) examined 165 FMCG firms operating in Kenya to investigate how distribution channel structures relate to market performance. Using hierarchical regression analysis, they found a significant positive relationship between wholesale network reliability and sales performance. The study emphasized that wholesale intermediaries are critical in ensuring product availability, especially in rural and semi-urban regions where retail networks are underdeveloped. This finding is highly relevant to Nigeria, where the wholesale segment bridges geographical and infrastructural gaps in the noodles market.

Afolayan and Ogunnaike (2021) conducted a quantitative study involving 198 FMCG firms in Lagos and Ogun States, Nigeria. The study aimed to assess how distribution channel strategies affect market

penetration and customer retention. Using multiple regression analysis, their findings indicated that wholesalers contribute substantially to expanding market coverage and increasing brand visibility. Specifically, firms that relied on robust wholesale networks reported higher sales volume and customer loyalty levels compared to those emphasizing only retail or online sales channels. Therefore, the following hypothesis was proposed to the relationship success.

HO1: There is no significant effect of wholesale distribution channel on market performance of Indomie instant noodles in Adamawa State.

Retail Distribution Channel and Market Performance

Taking a segmental approach, the retail distribution channel is pivotal for translating upstream availability into consumer-facing presence that drives sales, market share, and brand penetration in the noodles category. Evidence from Nigerian FMCG contexts consistently shows that retail coverage, shelf presence, and replenishment discipline strengthen market performance by improving access, reducing stockouts, and reinforcing habitual purchase. In Lagos State, Adefulu and Adeniran (2019) quantified the effect of channel strategy on marketing performance among consumer goods firms, using a survey of sales and marketing staff (population of 592) and multiple regression analysis to test outcomes such as market share and sales volume. They reported a significant positive effect of channel strategy on marketing performance, underscoring that retail-facing choices, coverage, dealer management, and logistics reliability, translate into measurable gains in market outcomes, which is directly relevant to retail distribution in noodles where ubiquity and freshness matter for repeat purchases (Adefulu & Adeniran, 2019).

Focusing explicitly on the consumer-facing actors in the noodles category, Haruna et al. (2024) examined marketing strategies (product, price, place, promotion) and marketing performance for Indomie Instant Noodles in Adamawa State, with customer loyalty as a mediating variable. The study used structured questionnaires administered to distribution channel actors and analyzed the data with regression techniques. Findings showed that place strategy, operationalized through effective retail distribution, significantly increases market performance, and customer loyalty mediates this relationship, implying that reliable retail presence does not only push volume but also builds loyalty that sustains performance over time (Haruna et al., 2024). For noodles brands, this confirms that consistent retail availability across neighborhood shops, kiosks, and modern trade is central to maintaining share in a low-involvement, high-frequency purchase category. Therefore the following hypothesis was proposed to be tested.

HO2 : There is no significant effect of retail distribution channel on market performance of Indomie instant noodles in Adamawa state.

Online Sales Channel and Market Performance

The online sales channel has emerged as a critical driver of market performance in Nigeria's consumer goods sector, particularly as digital adoption accelerates across urban and semi-urban markets. Empirical studies highlight that e-commerce platforms, social media marketplaces, and direct-to-consumer websites are reshaping how firms engage with customers, build loyalty, and generate revenue. For instance, Iwarue and Asanga (2025) conducted a study on the impact of online sales channels on business performance in Nigeria. The study's objective was to assess how online platforms influence customer engagement and revenue generation. Using a survey questionnaire distributed to 75 entrepreneurs, of which 54 responses were valid, the authors analyzed the data with descriptive statistics and regression techniques. The findings revealed that businesses that strategically adopt and diversify online sales channels experience increased revenue and competitive advantage. The study concluded that embracing comprehensive digital strategies, including websites and social media, is indispensable for sustaining performance in today's dynamic business environment (Iwarue & Asanga, 2025).

In the Nigerian context, online marketing and advertising have also been shown to influence consumer behavior and market outcomes. Reuben, Omula, and Harold (2024) examined the prospects and challenges of online marketing and advertising in Nigeria. Guided by three research objectives, the study relied on secondary data from books, journals, and newspapers, which were qualitatively

analyzed. The findings indicated that the internet and communication technologies are transforming consumer buying behavior, expanding access to goods and services, and redefining how businesses operate. However, infrastructural challenges such as unstable electricity supply and high data costs were identified as barriers to maximizing online sales performance. Despite these challenges, the study concluded that online platforms remain a powerful tool for enhancing market performance when supported by enabling infrastructure and compelling digital content (Reuben et al., 2024). Therefore the study propose to test the hypothesis

HO3: There is no significant effect of Online distribution channel on market performance of Indomie instant noodles in Adamawa state.

2.5.7 Customer Loyalty and Market Performance

Customer loyalty consistently emerges as a powerful driver of market performance across Nigerian industries, with empirical evidence linking loyalty to higher sales, market share, and profitability. In the Nigerian commercial banking sector, Obananya (2020) examined how service quality dimensions, tangibility, reliability, responsiveness, and assurance, shape loyalty. Using a survey of three banks per state in the South-East, a population of 1,800, and a Borg and Gall-derived sample of 353 respondents, the study applied multiple regression analysis and found each dimension significantly influenced loyalty, implying that sustained service excellence elevates loyalty and, by extension, market outcomes for service-intensive firms.

In manufacturing FMCG, Olayinka et al. (2024) analyzed the association between customers' loyalty and sales performance at Dangote Sugar Refinery, focusing on emotional loyalty and service quality loyalty. Employing a survey with 84 respondents and testing hypotheses via Pearson's product-moment correlation at the 0.05 level using SPSS, the study reported significant positive relationships between both loyalty forms and sales performance. These findings reinforce the view that cultivating emotional attachment and service quality perceptions translates into measurable performance gains in Nigeria's competitive FMCG landscape.

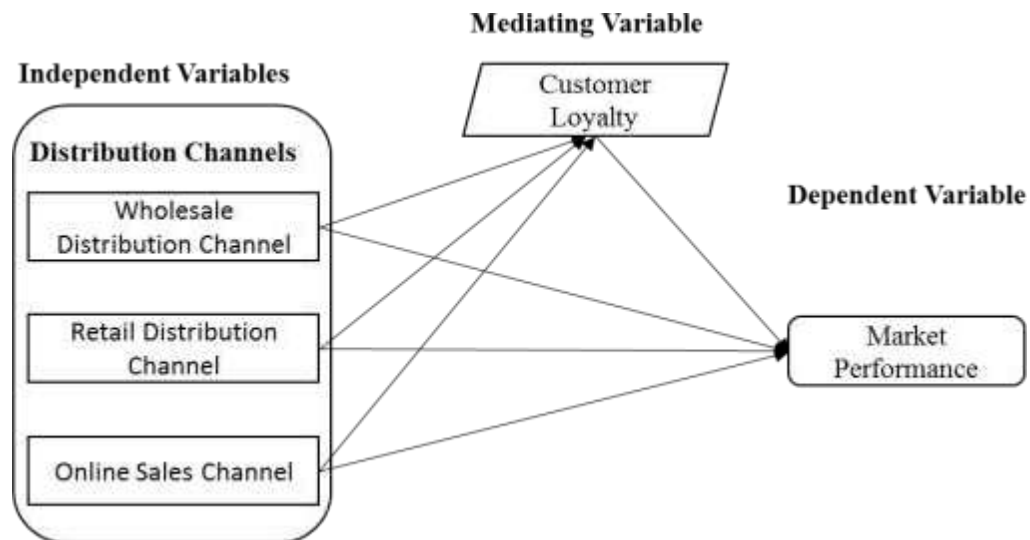
From the consumer incentives angle, Osarenmwinda and Ekanem (2024) investigated loyalty programs' effects on repeat purchase behavior among FMCG consumers in Esan West LGA, Edo State. The study adopted a survey design, used Krejcie and Morgan to determine a sample of 59 from a population of 76, and analyzed responses with percentage analysis and correlation. Results showed that 80% of consumers agreed rewards increase purchase frequency, and correlation analysis confirmed a strong positive relationship between reward incentives and repeat purchase behavior ($r = 0.682$), ($p < 0.01$)), indicating that well-designed, easy-to-redeem programs can lift retention and, consequently, market performance. Therefore , the following hypothesis was proposed to be tested.

HO4: *There is no significant effect of customer loyalty on market performance of Indomie instant noodles in Adamawa state.*

2.6 Research Framework

Relying on previous empirical investigations and the relevant gaps identified in the literature, a proposed conceptual framework for the study, presented in Figure 1, was developed demonstrating the role of distribution channel types on performance with customer loyalty as mediator

Figure 1 Research Framework



Source: Researcher's Compilation 2025

2.7 Theoretical Review

This study is anchored on three interrelated theoretical perspectives, Porter's Value Chain Theory, Service-Dominant Logic (SDL), and the Resource-Based View (RBV), which together provide a comprehensive framework for understanding how distribution channels and customer loyalty influence market performance in the Nigerian noodles sector.

Taken together, these three theories provide complementary perspectives. Porter's Value Chain explains the operational importance of distribution channels in creating value; SDL highlights the relational and co-creative role of distribution in fostering loyalty; and RBV underscores the strategic importance of loyalty as a resource that sustains competitive advantage. By integrating these perspectives, the study provides a robust theoretical foundation for understanding how distribution strategies and customer loyalty jointly drive market performance in the noodles industry of Adamawa State.

Methodology

This study adopted a descriptive survey research design. A descriptive survey design is chosen for its suitability in capturing the prevailing conditions, attitudes, and perceptions of the target population (Creswell, 2012). This design allows for the systematic collection and analysis of data to gain insights into the relationships between variables of interest.

Population of the Study

The study population comprises 876 channel partners involved in the distribution channel of Indomie Instant Noodles in Adamawa State. As shown in Table 1, these channel partners include Sales Teams of Multipro Consumer Products Limited, Distributors, Sub-distributors, and Retail Outlets selling noodles and the end consumers.

Table 1 Population of the Study

S/N	Subgroups	Population	Proportion (%)
1	Sales Team of MCPL	47	5.4
2	Distributors	16	1.8
3	Sub-Distributors	211	24.0
4	Retail Outlets Selling Noodle	219	24.9
5	Consumer	385	(43.8)
			(Rely on Cochran1977)for infinite
	Total	878	

Source: The Multipro consumer product Ltd., (Jan, 2025)

3.4 Sample of the Study

The sample size for this study is determined using Krijcie and Morgans (1970) table for determining sample size. According to Krijcie and Morgan (1970) with the total population of 878 distribution partners, 265 would be selected as representative for the population.

Table 2 Proportionate Stratified Sampling

S/N	Subgroups	Population	Proportion (%)	Sample
1	Sales Teams of Multipro Consumer Products Limited	47	5.4%	14
2	Distributors	16	1.8%	5
3	Sub-Distributors	211	24.0%	64
4	Retail Outlets Selling Noodles	219	24.9%	66
5	Consumers	385	43.8%	116
	Total	878	100	265

Source: The Multipro consumer product Ltd., (2025)

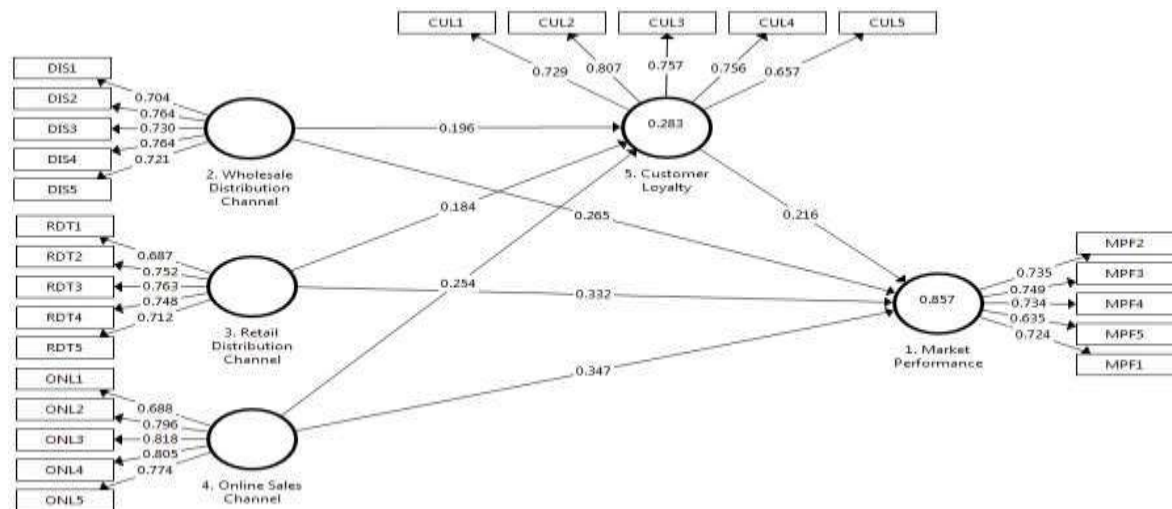
Results

The results of data analysed using PLS-SEM path modelling. The main results of the present study are presented in two main sections. First, the measurement model was assessed to determine the internal consistency reliability, convergent validity and discriminant validity. Results of structural model are also reported (i.e. level of the R-Squared values, significance of the path coefficients, and effect size).

Table 1,0 Descriptive Statistics of Study Variables

Mean	Std Deviation	1	2	3	4	
1. Market Performance	3.98	0.367	1			
2. Wholesale Distribution Channel	3.97	0.507	0.741	1		
3. Retail Distribution Channel	3.99	0.462	0.787	0.637	1	
4. Online Sales Channel	4.02	0.575	0.756	0.492	0.548	1
5. Customer Loyalty	4.07	0.511	0.637	0.439	0.448	0.451

Figure 2 Measurement Model (Outer Model)



Variable	Code	Loading	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
1. Market Performance	MPF1	0.724	0.763	0.768	0.840	0.514
	MPF2	0.735				
	MPF3	0.749				
	MPF4	0.734				
	MPF5	0.635				
2. Wholesale Distribution Channel	DIS1	0.704	0.790	0.793	0.856	0.543
	DIS2	0.764				
	DIS3	0.730				
	DIS4	0.764				
	DIS5	0.721				
3. Retail Distribution Channel	RDT1	0.687	0.785	0.785	0.853	0.537
	RDT2	0.752				
	RDT3	0.763				
	RDT4	0.748				
	RDT5	0.712				

4. Online Sales Channel	ONL1	0.688	0.835	0.839	0.884	0.604
	ONL2	0.796				
	ONL3	0.805				
	ONL4	0.774				
	ONL5	0.818				
5. Customer Loyalty	CUL1	0.729	0.803	0.824	0.860	0.552

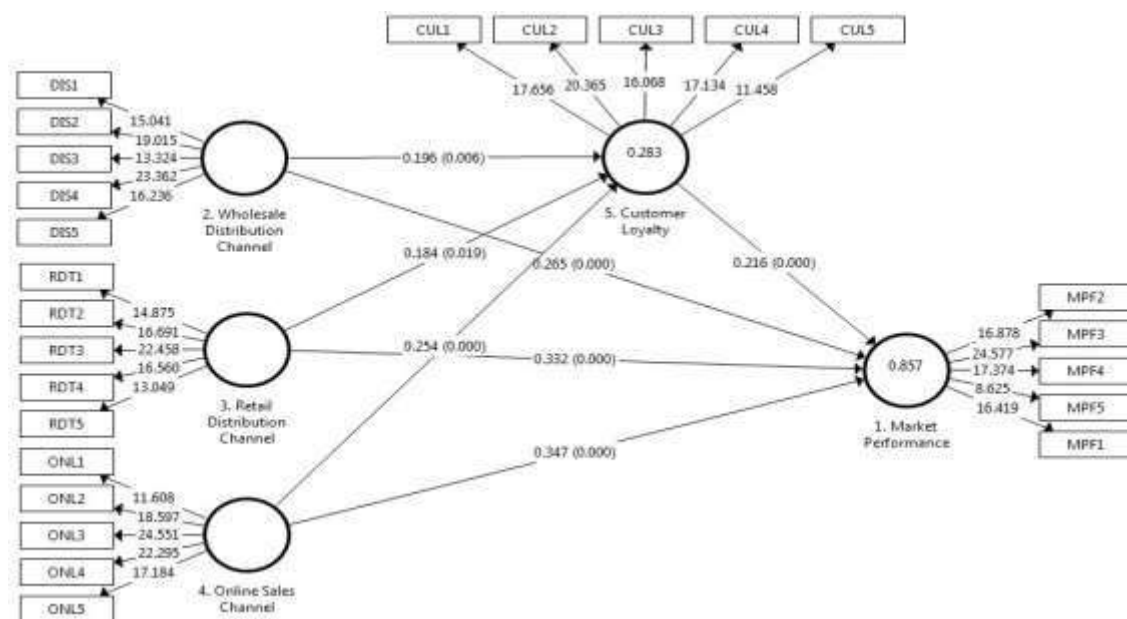
CUL2	0.807
CUL3	0.757
CUL4	0.756
CUL 5	0.657

Table 12 Discriminant Validity using Hetero trait mono trait (HMTM) Criteria

	1	2	3	4	5
Market Performance					
Wholesale Distribution channel	0.842				
Retail Distribution Channel	0.895	0.795			
Online Sales Channel	0.833	0.605	0.673		
Customer Loyalty	0.804	0.508	0.511		

4.5 Structural Model

Figure 3 Structural Model (Inner Model)



4.6 Hypothesis Testing

To test the study hypotheses, the bootstrapping resampling procedure was employed. Bootstrapping is a non-parametric technique that generates repeated random samples (with replacement) from the original dataset to estimate the precision of path coefficients. This approach is particularly useful in mediation analysis as it provides robust estimates of indirect effects and their significance levels without relying on normal distribution assumptions (Hair et al., 2019). In this study, the bootstrapping procedure produced standard errors, *t*-statistics, and *p*-values for each hypothesized path, thereby enabling reliable statistical inference.

The model fit was assessed using the coefficient of determination (R^2) values. For the endogenous construct Market Performance, the R^2 value was 0.857, indicating that approximately 85.7% of the variance in market performance is explained by wholesale distribution, retail distribution, online sales channels, and customer loyalty. This represents a very strong explanatory power, suggesting that the model provides a good fit to the data. Similarly, the R^2 value for Customer Loyalty was 0.283, meaning that 28.3% of the variance in loyalty is explained by the three distribution channels. While this is a moderate level of explanatory power, it still demonstrates that distribution strategies play a meaningful role in shaping customer loyalty.

The results of the hypothesis testing are presented in Table 13. For direct effects, H1 was rejected, showing that the wholesale distribution channel significantly influences market performance ($\beta = 0.265$, $t = 6.140$, $p < 0.001$). H2 was also rejected, with the retail distribution channel exerting a stronger effect on market performance ($\beta = 0.332$, $t = 7.254$, $p < 0.001$). Similarly, H3 rejected, that the online sales channel has the strongest direct effect on market performance ($\beta = 0.347$, $t = 8.846$, $p < 0.001$). These findings highlight that all three distribution channels significantly contribute to market outcomes, with online sales emerging as the most influential.

The results also rejected H4, showing that customer loyalty significantly predicts market performance ($\beta = 0.216$, $t = 6.143$, $p < 0.001$).

Table 13 Results of Simple Mediation Analysis (Segmented Approach)

Hypothesis	Path	Original sample (o)	Standard deviation (STDEV)	T Statistic (O/STDEV)	P Value	R Square	Decision
H1	Wholesale distribution channel >Market performance	0.265	0.043	6.140	0.000	0.857	Rejected
H2	Retail distribution channel >Market Performance	0.332	0.046	7.254	0.000		Rejected
H3	Online sales channel>Market performance	0.347	0.039	8.846	0.000		Rejected
H4	Customer Loyalty	0.216	0.035	6.143	0.000		Rejected

Table 14 Effect Size

Path	f square
Wholesale Distribution Channel -> Market Performance	0.269
Retail Distribution Channel -> Market Performance	0.393
Online Sales Channel -> Market Performance	0.530
Customer Loyalty -> Market Performance	0.234

4.8 Discussion

The results of this study confirm that wholesale, retail, and online distribution channels significantly influence both customer loyalty and market performance, with loyalty further mediating these relationships. These findings are broadly consistent with prior empirical studies in Nigeria's FMCG sector and can be explained through established theoretical frameworks.

The significant effect of the wholesale distribution channel on market performance (H1) is consistent with Adefulu and Adeniran (2019), who found that channel strategy significantly improved marketing performance among consumer goods firms in Lagos State. Similarly, Sanusi (2023) reported that channel structure, intermediary management, and relationships were positively associated with sales performance in Ibadan FMCGs. The present study reinforces these conclusions in the Adamawa noodles market, showing that wholesale distribution remains a critical driver of performance. This aligns with Porter's Value Chain Theory, which emphasizes outbound logistics as a primary activity that creates value and competitive advantage. Logically, wholesalers ensure broad coverage and reliable product flow, which directly enhances sales outcomes.

The strong positive relationship between the retail distribution channel and market performance (H2) also resonates with Haruna et al. (2024), who found that place strategy (retail availability) significantly influenced performance in the Indomie noodles distribution channel, with loyalty acting as a mediator. Likewise, Eshiett and Eshiett (2021) demonstrated that customer loyalty was strongly tied to retail patronage in Nigeria. The present findings extend these insights by showing that retail outlets are not only points of sale but also critical touchpoints for building trust and repeat patronage. This is consistent with the Service-Dominant Logic (Vargo & Lusch, 2004), which views value as co-created through firm-customer interactions at the point of service delivery.

The finding that the online sales channel had the strongest direct effect on market performance (H3) reflects the growing importance of digital platforms in Nigeria's consumer markets. This is in line with Ochuko and Falilat (2023), who found that digital marketing practices significantly enhanced customer loyalty for Jumia Nigeria, and Iyadi et al. (2024), who reported that omni-channel strategies improved loyalty in e-commerce platforms. The present study extends these insights to the noodles sector, showing that online platforms not only build loyalty but also directly drive performance. From a theoretical standpoint, this aligns with the Resource-Based View (RBV), as digital distribution capabilities represent valuable and hard-to-imitate resources that enhance competitiveness. Logically, online platforms reduce transaction costs, expand reach, and provide convenience, thereby boosting both loyalty and performance.

The results also confirmed that customer loyalty significantly predicts market performance (H4). This is consistent with Olayinka, Arinze, and Ezeude (2024), who found that emotional and service quality loyalty were positively associated with sales performance at Dangote Sugar Refinery. Similarly, Osarenmwinda and Ekanem (2024) showed that loyalty programs significantly increased repeat purchase behavior among FMCG consumers. The present study reinforces these findings, demonstrating that loyalty is a key mechanism through which distribution strategies translate into sustained performance. This is consistent with the Loyalty-Profitability Link (Reichheld & Sasser, 1990), which argues that loyal customers reduce acquisition costs, increase lifetime value, and stabilize revenue streams.

Conclusion

The study concludes that distribution channels are not merely logistical pathways but strategic levers that shape both customer loyalty and market performance. Wholesale and retail distribution remain vital for ensuring physical accessibility and product availability, while online sales channels are increasingly critical for digital engagement, convenience, and market expansion. Customer loyalty emerges as the linchpin that mediates these relationships, transforming distribution efficiency into sustained performance outcomes. Theoretically, the findings are consistent with Porter's Value Chain Theory, Service-Dominant Logic and the Resource Based View. Thus, the study contributes to both theory and practice by demonstrating how distribution strategies and loyalty interact to drive performance in a highly competitive FMCG market.

5.3 Recommendation

Based on the findings, several recommendations are proposed:

1. Strengthen Online Sales Channels: The study revealed that online sales channels play the most influential role in shaping both customer loyalty and market performance. This can be achieved by investing in e-commerce partnerships, mobile applications, and social media shops. In addition, firms should integrate features such as personalized promotions, seamless payment systems, and efficient delivery services to enhance customer convenience and engagement.

2.Enhance Retail Distribution Execution: Retail outlets remain a critical access point for consumers, making retail distribution a vital driver of performance. To maximize this channel, firms should strengthen their relationships with retailers through merchandising support, attractive incentives .Retail visibility can also be improved through branding at points of sale and micro-distribution strategies that extend product reach into underserved rural and semi-urban areas.

3.Optimize Wholesale Networks: Wholesalers continue to play a central role in ensuring product flow and availability across markets. To optimize this channel, firms should focus on structured territory planning, efficient inventory management, and fair pricing policies. Training and engagement programs for wholesalers can also help align them with brand objectives, ensuring consistency in product distribution and market coverage.

4.Build Customer Loyalty as a Strategic Resource: Customer loyalty emerged as a key factor that not only drives performance directly but also mediates the effect of distribution strategies. Firms should therefore design loyalty-building initiatives such as reward schemes, referral bonuses, and consistent after-sales support. Beyond transactional loyalty, emotional loyalty should be cultivated through brand storytelling, community engagement, and corporate social responsibility initiatives that resonate with consumers.

Limitations and Future Research Directions

The study was limited to Adamawa State, which may restrict the generalizability of the findings to other regions of Nigeria or beyond. The study also relied on self-reported survey data, which may be subject to response bias.

Future research could address the Comparative studies across multiple states or regions in Nigeria could also provide broader generalizability. Finally, researchers could explore other mediating or moderating variables, such as brand equity, customer satisfaction, or digital literacy, that may further explain the relationship between distribution channels and market performance.

References

- Abinav, S. (2023). Impact of marketing strategies on business sales and financial performance. *InternationalJournalofCreativeResearchThought*,11(4),552-556.
<https://ijcrt.org/papers/IJCRT2304831.pdf>
- Adams, N. G. (2020). *The impact of distribution on consumer loyalty in the Nigerian household goods sector* (Master's thesis, National College of Ireland). National College of Ireland Institutional Repository. <https://norma.ncirl.ie/4713/1/nasimotgbemisolaadams.pdf>
- Adekola (2021) Effect of marketing strategy on performance of manufacturing firms in north Central, Nigeria. *International Journal of Management and Social Sciences*, (IJOMASS), 2(2), 38-64
<https://doi.org/10.51739/122113816.v2i2.181918829>
- Afriyie, S., Du, J., & Ibn Musah, A. A. (2019). Innovation and marketing performance of SME in an emerging economy: the moderating effect of transformational leadership. *Journal of Global Entrepreneurship Research*, 9(1), 1-25.
- Afolayan, T., & Ogunnaike, O. (2021). *Distribution channel strategies and market penetration among FMCG firms in Nigeria*. *Journal of Business and Retail Management Research*, 15(3), 47–58.
<https://doi.org/10.24052/JBRMR.V15IS03.04>
- Akpabio, E. (2008). Management of “killer” Indomie scare and impact on consumer confidence: A casestudy.*InternationalJournalofStrategicCommunication*,
<https://doi.org/10.1080/15531180802446431>
- Al Karim, R., Alam, M. M. D., & Al Balushi, M. K. (2023). The nexus between CRM and competitive advantage: The mediating role of customer loyalty. *Nankai Business Review International*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/NBRI-04-2022-0040>
- Aliata, V. L., Odonodo, A. J., Aila, F. O., Ojera, P. B., Abongo, B. E., & Odera, O. (2012). Influence of promotional strategies on banks' performance. *International Journal of Business, Humanities and Technology*, 2(5), 169 - 178.
- Aliu, A. A., & Agbetokun, O. F. (2020). Internet marketing practices and customer loyalty: Empirical evidence from Ogun State, Nigeria. *Journal of Marketing and Consumer Research*, 72(1), 15–25.
<https://eprints.federalpolyilaro.edu.ng/1142/1/ALIUA.A5.pdf>

- Anderson, E., & Coughlan, A. T. (2021). *Channel management and marketing performance: A strategic perspective*. Journal of Marketing Channels, 28(2), 91–108. <https://doi.org/10.1080/1046669X.2021.1884932>
- Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3(2), 107-120.
- Anderson, J., & White, P. (2019). The Impact of Place Strategy on Marketing Performance in the Australian Retail Sector. *Journal of Retailing Research*, 25(2), 123-145.
- Anas, Y. A. & Batool, A. Q. (2016). The effect of marketing strategy on maximizing the performance of an organization: sustainable competitive advantage as a mediate variable: Empirical Study on Small and Medium Companies in Jordan. *International Journal of Academic Research in Business and Social Sciences*, 6(4), 318-24.
- Armstrong S. & Kesten C. G. (2007). Competitor-oriented objectives: The myth of market share. *International Journal of Business*, 12(1) 116–134.
- Astuti, R. D., Afiff, A. Z., & Balqiah, E. T. (2018). Entrepreneurial marketing and marketing strategies of SMEs on marketing performance: an empirical analysis of fit. *Pertanika Journal. Social. Science. & Humanities*, 26, 39-54.
- Babakus, E., & Mangold, G. (1992). Adapting the servqual Scale to Hospital Services: An Empirical Investigation. *Health Service Research*, 26, 767-780.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Bello, et al. (2018) Distributional strategies and performance of manufacturing firms in ikeja *Lapai international journal of management and social sciences*, Volume 10, Number 1&2
- Bhandari, P. (2021, March 1). Mediator vs. moderator variables: Differences & examples. Scribbr. <https://www.scribbr.com/methodology/mediator-vs-moderator/>
- Berry, L. L., & Parasuraman, A. (1991). *Marketing services: Competing through quality*. Free Press.
- Bingqun, C., Kejia, Y. & Tingjui, C. (2016). Analyzing the impact of price promotion strategies on manufacturer sales performance. *Journal of Service Science and Management*, 9, 182-187.
- Bintu, M. (2017). Effects of marketing mix strategy on performance of small-scale businesses in Maiduguri Metropolitan, Borno State Nigeria. *Journal of Marketing and Consumer Research*.31.
- Brassington, F. & Pettitt, S. (2010). *Principles of marketing* (2nd ed.). Harlow Pearson Education Limited.
- Brifo, K. (2022, December 7). How noodles dominated Nigeria's staple market. *Vanguard*, Retrieved from <https://www.vanguardngr.com/2022/12/how-noodles-dominated-nigerias-staplemarket-kojo-brifo/>
- Brown, L., et al. (2019). Assessing Customer Loyalty in the Retail Industry: A Study of Supermarkets in Australia. *Journal of Retail Management*, 12(4), 112-125
- Budi, R. K. & Aditya, W. (2013). Marketing strategies and their impact on marketing performance of Indonesian ship classification society. *International Journal of Science and Research*, 4(2), 69-74.
- Burnett, J. (2008). *Core concepts of marketing*. Zurich: Jacobs Foundation.
- Carluccio, J., Eizenman, O., & Rothschild, P. (2021). Next in loyalty: Eight levers to turn customers into fans. <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/next-in-loyalty-eight-levers-to-turn-customers-into-fans>
- Chahal, H., & Sharma, R. D. (2006). Implications of corporate social responsibility on marketing performance: A conceptual framework. *Journal of Services Research*, 6(1), 205.
- Chen, L., et al. (2017). Product Strategy and Marketing Performance in the Chinese Technology Industry. *International Journal of Business Research*, 17(3), 45-68.
- Check, J., & Schutt, R. K. (2012). Survey research. In J. Check & R. K. Schutt (Eds.). *Research methods in education*. (pp. 159–185). Thousand Oaks, CA: Sage Publications
- Chigbata, M. O., Chukwunonso, N. J., & Ifeanyi. O. D. (2020). Marketing Strategy and Performance of Small and Medium Enterprises (SMEs) in Anambra State. *Sumerianz Journal of Business Management and Marketing*, 3(12), 212-218. <https://doi.org/10.47752/sjbmm.312.212.218>

- Chinomona, R., & Sandada, M. (2018). *Customer loyalty and market performance in the FMCG sector: The mediating role of trust*. Journal of Relationship Marketing, 17(4), 259–278. <https://doi.org/10.1080/15332667.2018.1456879>
- Chumpitaz, R., & Paparoidamis, N. G. (2004). Service quality and marketing performance in business-to-business markets: Exploring the mediating role of client satisfaction. *Managing Service Quality*, 14(2/3), 235-248. <https://doi.org/10.1108/09604520410528653>
- Cochran, W. G. (1963). *Sampling techniques* (2nd ed.). New York, John Wiley and Son Inc.
- Cooper, D. R. & Schindler, P. S. (2003) *Business research methods* (8th ed.). McGraw-Hill Irwin, Boston.
- Creswell, J. W. (2012). *Research design: Qualitative, quantitative, and mixed methods approaches*. California: Sage Publications Inc.
- Cross, O. D. (2018). Effects of marketing strategies on organizational performance. *International Journal of Business Marketing and Management*, 3(9), 01-09. <http://www.ijbmm.com>
- Czinkota, M. R., Ronkainen, I. A., & Moffett, M. H. (2019). *International business*. John Wiley & Sons.
- Day, G. S. (2011). Closing the marketing capabilities gap. *Journal of Marketing*, 75(4), 183-195.
- Dick, A. S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*, 22(2), 99-113.
- Didia, et al. (2023). Pricing Strategies and Sales Force Performance of Food and Beverages Firms in Port Harcourt. *International Journal of Business & Law Research* 11(3):12-30,
- DeTonia, et al. (2016). Marketing Pricing strategies and levels and their impact on corporate profitability. Departamento de Administração, Faculdade de Economia, Administração e Contabilidade da Universidade de São Paulo
- Deb, T., & Giokos, E. (2019). How Indomie instant noodles became a Nigerian staple. *CNN*, <https://edition.cnn.com/2019/01/25/africa/indomie-giant-in-nigeria-intl/index.html>
- Desta & Amantie (2023) The Role of Marketing Strategy on Market Performance: A Study on Small and Medium Enterprises in Ethiopia, Jimma Town. *International Journal of Business and Economics Research* 2023; 12(3): 99-107. <http://www.sciencepublishinggroup.com/j/ijber> doi: <https://doi.org/10.11648/j.ijber.20231203.13> ISSN:
- Eniola, A. A. & Olorunleke, G. K. (2020). Marketing strategies impact on organizational Performance. *International Journal of Scientific and Technology Research*, 9(01), <http://www.ijstr.org>
- Etuk, S. G., Usani, N. E., Essien, I. J., Inwang, A. R., & Onyia, C. P. (2024). Physical distribution practices and marketing performance of selected fast-moving consumer goods companies in South-South region of Nigeria. *International Journal of Entrepreneurship and Business Innovation*, 7(4), 16–31. https://abjournals.org/ijebi/wpcontent/uploads/sites/5/journal/published_paper/volume-7/issue-4/IJEBI_BYBYBMSZW.pdf
- Famini, G. (2020, August 10). Noodle makers scramble for market share as demography offers opportunity. *Business Day*, <https://businessday.ng/real-sector/article/noodle-makers-scramble-for-market-share-as-demography-offers-opportunity/>
- Farris, P. W., Neil T. Bendle, P. E. Pfeifer, D. J., & Reibstein (2010). *Marketing metrics: The definitive guide to measuring marketing performance*. Upper Saddle River, New Jersey: Pearson Education, Inc.
- Fernando, J. (2023, March 17). What is a distribution channel in business and how does it work? *Investopedia*. <https://www.investopedia.com/terms/d/distribution-channel.asp>
- Ferrell, O. C., & Hartline, M. (2019). *Marketing strategy*. Cengage Learning.
- Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *Journal of Marketing*, 63(2), 70-87.
- Garuba, D.S. (2006). Survival at the margins: Economic crisis and coping mechanisms in rural Nigeria, *Local Environment*, 11(1), 17-36.
- Gebremicael, & Murthy (2023). Effect of Place / Distribution Strategy on Organization performance: Evidence from Ethiopia's Brewery Industry. *Seybold Report Journal* 18(04), 131-146. <http://seyboldreport.com>

- Gbolagade, A., A., A. M. & Oyewale, I. O. (2013). Impact of marketing strategy on business performance a study of selected small and medium enterprises (SME) In Oluyole Local Government, Ibadan, Nigeria. *IOSR Journal of Business and Management (IOSR-JBM)*, 11(4), 59-66. <http://www.iosrjournals.org>
- Gituma, N. (2017). The effects of marketing mix on sales performance using Unga feeds Ltd, Nairobi. *International Journal of Marketing*, 2(1),
- Goi, C. L. (2005). Marketing mix: A review of 'P'. *Journal of Internet Banking and Commerce*, 10(2), https://www.researchgate.net/publication/26433927_Marketing_Mix_A_Review_of_'P
- Goodie-Okio J. A. (2022) Pricing Strategies and Marketing Performance of Telecommunication Firms in Port Harcourt. *Double Blind Peer Reviewed International Research Journal* Volume 9, Issue 1, PP 01-16, ISSN: 2382-7446,.
- Goudarzi, M., Mossallami Aghili, S., & Mokhtary Tajeek, Z. (2019). Effect of customer relationship management (CRM) on marketing performance: A case study in Mellat Bank of Bank of Khorram-abad County. *International Journal of Advanced Studies in Humanities and Social Science*, 8(3), 301-309
- Gupta, R. (2020). Price strategy and marketing performance: A cross-industry analysis. *Journal of Marketing Analytics*, 8(1), 56-78.
- Gummesson, E. (1994). Making relationship marketing operational. *International Journal of Service Industry Management*, 5(5), 5-20.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modelling* (3rd ed.). Sage Publications
- Hair, J. F., Sarstedt, M., Ringle, C., & Gudergan, S. P. (2018). *Advanced issues in partial least squares structural equation modeling*. Sage Publications.
- Harahap, E. F. (2018). Pengaruh Strategi Pemasaran terhadap Keputusan Pembelian Asuransi Kendaraan Bermotor pada PT Asuransi Sinarmas Cabang Garut. *Journal of Knowledge Management*.
- Haruna, S., Aliyu, M. S., Suleiman, A., Shaibu, H., & Muazu, M. H. (2024). Marketing strategies and marketing performance of actors on the distribution channel of Indomie Instant Noodles in Adamawa State, Nigeria. *International Journal of Management Science and Business Analysis Research*, 4(7), 81–94. <https://cambridgeresearchpub.com/ijmsbar/article/download/289/298/558>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405-431.
- Hyginus et al (2019) Pricing Strategy as a factor for sales performance of consumable goods Evidence from consumable goods dealers in Wukari Local government area of Taraba State, Nigeria. *Noble International Journal of Business and Management Research* ISSN(e): 25204521 ISSN(p): 2522-6606 Vol. 03, No. 03, pp: 48-61
- Ibojo, B. O. & Amos, O. (2011). Effect of sales promotion on product as a tool on organization performance (A case study of Sunshine plastic company). *Journal of Emerging Trends in economics and Management*, 2(1), 9-13 .
- Ibojo, B. O. & Akinruwa, T. E. (2014). Effect of promotion on product awareness (a case study of a reputable organization in the brewery sub-sector of the manufacturing industry. *International Journal of Education and Research*, 2(9), <http://www.ijern.com>
- Itopa, et al (2019) Distribution Strategy as Competitive Advantage In Nigerian Bottling Company Ltd *American International Journal of Business Management (AIJBM)* ISSN- 2379- 106X, www.aijbm.com Volume 2, Issue 7 (July- 2019), PP 61-67
- Iwarue, J. O., & Asanga, U. J. (2025). Online sales channels and its impact on business performance. *British Journal of Management and Marketing Studies*, 8(1), 1–19. https://abjournals.org/bjmms/wp-content/uploads/sites/3/journal/published_paper/volume8/issue-1/BJMMS_54MZPG8X.pdf
- Iyadi, R. C., Ofili, P. N., Edeme, C. N., & Eboh, M. E. (2024). Omni-channel retail strategies and customer loyalty: A focus on e-commerce stores in Nigeria. *Edelweiss Applied Science and Technology*, 8(6), 6236–6250. <https://ideas.repec.org/a/ajp/edwast/v8y2024i6p62366250id3365.html>

- Jacoby, J., & Chestnut, R. W. (1978). Brand loyalty: Measurement and management. John Wiley & Sons.
- Jahlid, H., & Ibrahim, Y. (2013). Marketing strategy and corporate performance exploring relationships . *International Journal of Service Industry Management*, 10(3), 271-281.
- Jain, K. (2004). SME definition and statistical issues. *Journal of Enterprising Culture*, 11(3), 173337.
- Johnson, M., & Lee, S. (2018). An empirical analysis of price strategy and marketing performance in the UK Hospitality Sector. *International Journal of Hospitality Management*, 72, 120-130.
- Jones, S., et al. (2021). Assessing the Effectiveness of Place Strategy in the Hospitality Industry: A Study of Hotel Chains in the United States. *Journal of Hospitality Management*, 18(3), 45-58.
- Kartawinata, B. R., & Wardhana, A. (2013). Marketing strategies and their impact on marketing performance of Indonesian ship classification society. *International Journal of Science and Research*, 4(2), 69-74.
- Kawira, K. D. (2021). The Effect of Pricing Strategy on the Performance of Micro, Small and Medium Enterprises (MSMEs) in Kenya. *Journal of Entrepreneurship & Project Management*, Vol 5(1) pp. 29-44.
- Keeling, K. A. (2022). A review of perspectives on customer loyalty. In D. Keeling, K. de Ruyter, & D. Cox (Eds.), *Handbook of Research on Customer Loyalty*, (pp. 5-22). <https://doi.org/10.4337/9781800371637.00007>
- Kim, W. C. & Mauborgne, R. (2005). *Blue Ocean Strategy. How to create uncontested market space and make competition irrelevant*, Harvard Business School Publishing ,60 Harvard way, Boston, Massachusetts 02163
- Kitaiange & Beatrice (2020) investigated distribution channel structure influence on the performance of cement manufacturing firms in Kenya, *European journal of management and marketing studies* ,ISSN:2501-9988
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54(2), 1-18.
- Kothari, C. R. (2004), *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers
- Kotler, P., & Keller, K. L. (2015). *Marketing management* (15th ed.). New Jersey: Pearson Prentice Hall.
- Kotler, P., & Armstrong, G. (2018). *Principles of marketing*. Pearson.
- Kuswanto, et al (2012) Impact of Distribution Channel Innovation on the Performance of Small and Medium Enterprises, *International Business and Management* Vol. 5, No. 1, 2012, pp. 50-60 <https://doi.org/10.3968/j.ibm.1923842820120501.1025>
- Kumar, V., & Kapoor, S. (2021). *Challenges in wholesale distribution and their impact on supply chain performance in developing markets*. *International Journal of Logistics Research and Applications*, 24(7), 663–679. <https://doi.org/10.1080/13675567.2020.1771238>
- Lars, B. (2008). *Personal selling and relationships-a review and explorative essay*. Doctoral Thesis.
- Lee, H. F., & Jiang, M. (2021). A Hybrid Machine Learning Approach for Customer Loyalty Prediction. In: Zhang, H., Yang, Z., Zhang, Z., Wu, Z., Hao, T. (eds) *Neural Computing for Advanced Applications*. NCAA 2021. Communications in Computer and Information Science, vol 1449. Springer, Singapore. https://doi.org/10.1007/978-981-16-5188-5_16
- Li, Q., & Zhang, H. (2018). Place strategy and marketing performance in the Chinese manufacturing sector. *Asia Pacific Journal of Marketing and Logistics*, 30(1), 67-87.
- Li, S., Kinman, R., Duan, Y., & Edwards, J.S. (2000). Computer-based support for marketing strategy development, *European Journal of Marketing*, 34(5/6).
- Li, T. & Calantone, R. J. (2000). The impact of market knowledge competence on new product advantage: Conceptualization and empirical examination. *Journal of Marketing*, 62(4), 1329.
- Little, R. J. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, 83(404), 1198-1202.

- Luo, J., Wang, X., & Li, Y. (2023). *Synergistic effects of multi-channel distribution on firm performance: Evidence from emerging markets*. *Industrial Marketing Management*, 109, 120–132. <https://doi.org/10.1016/j.indmarman.2023.01.006>
- Marketing Edge. (2023). *Battle of noodles brands over market share*. <https://marketingedge.com.ng/battle-of-noodle-brands-over-market-share/>
- Martinez, A., et al. (2019). Promotion strategy and marketing performance in the Latin American FMCG Sector. *Journal of Business and Retail Management Research*, 13(4), 125-140.
- Munir, A., Kadir, N., & Umar, F. (2023). The impact of digital marketing and brand articulating capability for enhancing marketing capability. *International Journal of Data and Network Science*, 7(1), 65-72.
- Mavondo, F.T. (2000). Marketing as a form of adaptation: Empirical evidence from a developing economy, *Marketing Intelligence and Planning*, 18(5), 256-272.
- Mbithi, B., Muturi, M. & Rambo, C. (2015). Effect of product development strategy on performance in Sugar industry in Kenya. *International Journal of Academic Research in Business and Social Sciences*, 5(12), <https://doi.org/10.6007/IJARBS/v5-i12/1960>
- Mohammad, A. H., Wang, A. & Sunayya, B. (2012). Investigating tourist's satisfaction: an empirical study on East Lake. *European Journal of Business and Management*, 4(7), 273-82.
- Mohammed, I. E. (2010). The impact of advertising attitudes on the intensity of TV ads avoiding behavior. *International Journal of Business and Social Science*, 1(1), 1-14.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20-38.
- Mulyaning, M. S. D. (2016, December 16). Instant noodle boom in Indonesia: A commodity chain analysis study. *Agrarian, Food and Environmental Studies (AFES)*. <http://hdl.handle.net/2105/37266>
- Murshid, M. A., Mohaidin, Z., Yen Nee, G., & Fernando, Y. (2016). Physician perceived value as a mediating variable between marketing mix strategy and physician satisfaction. *Asian Journal of Marketing and Logistics*, 28(5), 780-806. <https://doi.org/10.1108/apjml-09-2015-0142>
- Naningsih, N., & Hardiyono, H. (2019). Pengaruh Strategi Pemasaran Terhadap Kepuasan Dan Keputusan Pembelian Produk Usaha Kecil Menengah (Ukm) 310 Di Makassar. *Journal Aplikasi Manajemen & Kewirausahaan MASSARO*. <https://doi.org/10.37476/massaro.v1i1.644>
- National Bureau of statistics, (2023). CPI and Inflation Report October <https://nigerianstat.gov.ng/elibrary/read/1241407>
- Nashwan, M.A.S (2015). How does Marketing Strategy Influence Firm Performance? Implementation of Marketing Strategy for Firm Success. *International Journal of Innovation and Economic Development*, 1(3), 7-15.
- Nasution, D. A. D., Barus, M. D. B., & Tasril, V. (2020). Pen-ingkatan Daya Saing Bumdes untuk Pengembangan Ekonomi Desa Pematang Serai di Kecamatan Tanjung Pura Kabupaten Langkat. *JMM (Jurnal Masyarakat Mandiri)*, 4(3), 319-329.
- Ngechu, M. (2004). *Understanding the research process and method. An introduction to research methods*. Act Press, Nairobi
- Ngugi, I., & Ogutu, M. (2020). *Distribution channel structure and market performance of FMCG firms in Kenya*. *International Journal of Marketing Studies*, 12(2), 87–102. <https://doi.org/10.5539/ijms.v12n2p87>
- Nitzl, C., Roldan, J. L., & Cepeda, G. (2016). Mediation analysis in partial least squares path modeling: Helping researchers discuss more sophisticated models. *Industrial Management & Data Systems*, 116(9), 1-28. <http://doi.org/10.1108/IMDS-07-2015-0302>
- Nnawuihe, D., & Ogbu, S. U. (2019). Role of Indomie's "like no other" campaign in cultivating pester power in the children of Eleko Community, Lagos. *Journal of Mass Communication Journalism*, 9(2), 410.
- Nuryakin, & Ardyana, E. (2018). SMEs' marketing performance: The mediating role of market entry capability. *Journal of Research in Marketing and Entrepreneurship*, <https://doi.org/10.1108/JRME-03-2016-0005>
- Obaji, R. N. (2011). The Effects of Channels of Distribution on Nigerian Product Sales. *International Business & Economics Research Journal*, 10 (2), 85-92.

- Obananya, C. G. (2020). Service quality and customers' loyalty in Nigerian commercial banking industry. *International Journal of Innovative Finance and Economics Research*, 8(4), 1–12. <https://www.seahipublications.org/wp-content/uploads/2024/10/IJIFER-D-1-2020.pdf>
- Obasan, et. al. (2015). Marketing strategy and product performance: A study of selected firms in Nigeria. *Ethiopian Journal of Environmental Studies & Management* 8(6): 669 – 674, 2015. ISSN:1998-0507
- Ochuko, A. M., & Falilat, O. B. (2023). Digital marketing and customer loyalty: A study of Jumia Nigeria Ltd. *International Journal of Women in Technical Education and Employment*, 4(1), 171–176. <https://www.ajol.info/index.php/ijowited/article/download/252951/239000>
- Ohai, & Iyadi (2023) Distribution strategy and marketing performance: A focus on breweries in Nigeria. *Nigerian Journal Of Management Sciences* Vol. 24, Issue 1a Pg. 75
- Oke, et al. (2016) The relevance of pricing strategies on corporate performance in Nigeria. *International journal of economics, commerce and management* United Kingdom, Vol. IV, Issue 1, Page 475 <http://ijecm.co.uk/> ISSN 2348 0386
- Olayinka, H. O., Arinze, V. C., & Ezeude, N. W. (2024). Customers' loyalty and sales performance in Nigeria. *American Research Journal of Contemporary Issues*, 2(1), 179–189. https://www.researchgate.net/profile/Hammed-Olayinka-2/publication/379652864_CUSTOMERS_LOYALTY_AND_SALES_PERFORMANCE_IN_NIGERIA/links/66181aef66ba7e2359bedb36/CUSTOMERS-LOYALTY-AND-SALESPERFORMANCE-IN-NIGERIA.pdf
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4), 33-44.
- Oliver, R. L. (2014). *Satisfaction: A behavioral perspective on the consumer*. Routledge.
- Omodafe, U. P., & Akparobi, J. N. (2013). Effect of the impact of customer loyalty on marketing performance of business organization. *European Journal of Business and Management*, 5, 150-152.
- Orunko, O. (2023, November 13). Product assessment on Indomie Noodles [Linkedin]. <https://www.linkedin.com/pulse/product-assessment-indomie-noodles-olufemi-orunko-fnetf>
- Osarenmwinda, S., & Ekanem, D. (2024). Customer loyalty programs and repeat purchase behavior of FMCG in Nigeria. *Nigerian Journal of Marketing Studies*. <https://njms.unilag.edu.ng/article/download/2572/2078/>
- Osuagwu, L. (2006). Market orientations in Nigerian companies. *Intelligence and Planning*, 24(6), 67-73.
- Osuagwu, L., (2004). Relationship marketing strategies in Nigerian companies, *The Marketing Management Journal*, 14(2) 114-128.
- Osuagwu, L. (1999). *Marketing: Principles and management*, Lagos: Grey Resources Limited.
- Owomoyela, S. K., Oyeniyi, K. O. & Ola, O. S. (2013). Investigating the impact of marketing mix elements on consumer loyalty: An empirical study on Nigerian Breweries Plc. *Interdisciplinary Journal of Contemporary Research in Business*, 4(11), 485-96.
- Pemb, et al (2017) Impact of sales promotional strategy on organizational performance in Nigeria. *European Journal of Research and Reflection in Management Sciences* Vol. 5 No. 4, 2017 ISSN 2056-5992 Progressive Academic Publishing, UK Page 31 www.idpublications.org
- Prajogo, D., & Olhager, J. (2019). *Supply chain integration and performance: The moderating role of distribution management*. *International Journal of Operations & Production Management*, 39(2), 329–348. <https://doi.org/10.1108/IJOPM-10-2017-0635>
- Propheto, A., Kartini, D., Sucherly, S., & Oesman, Y. (2020). Marketing performance as implication of brand image mediated by trust. *Management Science Letters*, 10(4), 741-746.
- Pujari, D. (2006). Eco-innovation and new product development: understanding the influences on market performance. *Technovation*, 26(1), 76-85.
- Reichheld, F. F., & Sasser, W. E. Jr. (1990). Zero defections: Quality comes to services. *Harvard Business Review*, 68(5), 105-111.
- Reinartz, W. J. (2006). Understanding customer loyalty program. In M. Krafft & M. K. Mantrala (Eds). *Retailing in the 21st century* (pp. 361-). https://doi.org/10.1007/3-540-28433-8_23

- Reuben, A. A., Omula, E., & Harold, G. O. (2024). Online marketing and advertising in Nigeria: Prospects and challenges. *Pan-Atlantic University Press Journal*, 1(1), 1–20.
https://paupress.pau.edu.ng/wp-content/uploads/journal/published_paper/volume-1/issue1/U85MBJPw.pdf
- Ringle, C. M., Wende, S., & Becker, J. M. (2015). *SmartPLS 3. Boenningstedt: SmartPLS.3.8*
- Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Return on marketing: Using customer equity to focus marketing strategy. *Journal of Marketing*, 68(1), 109-127.
- Sanusi, M. O. (2023). Distribution channels and sales performance in Nigeria: A case study of some selected fast moving consumer goods (FMCGs) in Ibadan. *World Academic Journal of Management*, 11(1), 13–21. https://www.isroset.org/pub_paper/WAJM/3-ISROSET-WAJM08055.pdf
- Saiesha (2021, August 25). How Indomie Noodles transformed Nigeria's economy. *Borgen Magazine*, Retrieved from <https://www.borgenmagazine.com/indomie-noodles/>
- Santos, M. J., Perin, M. G., Simões, C., & Sampaio, C. H. (2020). Customer orientation and financial performance relationship: The mediating role of innovative capability. *Gestão & Produção*, 27(4), 1-20. <https://doi.org/10.1590/0104-530X4706-20>
- Soliman, H. S. (2011). Customer relationship management and its relationship to the marketing performance. *International Journal of Business and Social Science*, 2(10).
- Solimun, S., & Fernandes, A.A.R. (2018). The mediation effect of customer satisfaction in the relationship between service quality, service orientation, and marketing mix strategy to customer loyalty. *Journal of Management Development*, 37(1), 76-87.
<https://doi.org/10.1108/JMD-12-2016-0315>
- Simons, R., (1999). Levers of control, how managers use innovative control systems to drive strategic renewal. Harvard Business School Press, Boston, MA
- Somuyiwa, A. O., Ayodele, O. O., & Oluwasanmi, A. (2021). Examination of the distribution channel of Indomie Instant Noodles in Oyo State. *Journal of Advances in Civil Engineering and Management*, 4(3), 40-46. <http://hbrppublication.com/OJS/index.php/JACEM/article/view/2189>
- Sije & Oloko (2013) Penetration pricing strategy and performance of small and medium enterprises in Kenya. *European Journal of Business and Social Sciences*, Vol. 2, No.9 , pp 114-123, December 2013. P.P. 114 - 12 <http://www.ejbss.com/recent.aspx> ISSN: 2235 -767X
- Singh, M. (2012). Marketing mix of 4p's for competitive advantage. *IOSR Journal of Business and Management*, 3(6), 40-45. <https://doi.org/10.9790/487X-0364045>
- Singleton, R. A., & Straits, B. C. (2009). *Approaches to social research* (5th ed.). New York: Oxford University Press
- Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research*, 3(7), 749-752.
- Shukla, Satishprakash, (2020) *Research methodology and statistics*. Ahmedabad: Rishit Publications.
- Smith, J. (2019). The Role of Product Strategy in Marketing Performance: Insights from the US Retail Sector. *Journal of Retailing*,
- Smith, J., et al. (2020). Evaluating the Impact of Promotion Strategy on Consumer Behavior: A Study of Fast-Moving Consumer Goods in the United Kingdom. *Journal of Marketing Research*, 15(2), 78-91
- Somuyiwa, A. O., Ayodele, O. O., & Oluwasanmi, A. (2022). Examination of the distribution channel of Indomie Instant Noodles in Oyo State. *Journal of Advances in Civil Engineering and Management*, 4(3), 1–7. <https://doi.org/10.5281/zenodo.5837039>
- Srinivasan, S., Anderson, R., & Ponnayolu, K. (2002). Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing*, 78(1), 41-50.
- Suhandi, S. (2020). The Effect of Marketing Strategy and Promotion Activities on Marketing Performance of Retail Business. *Almana: Jurnal Manajemen dan Bisnis*, 4(2), 205-213.
- Sukardi, M., ZA, S. Z., & Hudayah, S. (2021). The Effect of Marketing Agility to Marketing Performance through Innovation Capability of Retail Company of Spare Parts for Heavy Equipment Coal Mining in East Kalimantan. *Budapest International Research and Critics Institute: Humanities and Social Sciences*, 4(4), 13247-13254.

- Tambe, N. A. (2023 April 30). Nigeria investigates as Malaysia, Taiwan recall Indomie noodles over cancer-causing substance. *Premium Times*, <https://www.premiumtimesng.com/health/healthnews/595912-nigeria-investigates-as-malaysia-taiwan-recall-indomie-noodles-over-cancercausing-substance.html>
- Tamara, S. (2014). The impacts of perceived advertising spending and price promotions on brand equity: A case of an Indonesian instant noodle brand. 2(2):183007-. Devina, A., & Rahayu, W. A. (2022). Consumers behavior evaluation and segmentation of millennial and generation Z in Indonesia Instant Noodle Market. *International Journal of Current Science Research and Review*, 5(4), 1155-1171. <http://doi.org/10.47191/ijcsrr/v5-i4-38>
- Vera, F., & Khalid, A. (2012). Analysis of the relationship between digital marketing Customer loyalty in Iran. *Journal of the Academy of Dynamic Consumer Studies*, 16(9), 12-24.
- Wambua & Mwanzia (2020) Influence of Distribution on Sales Performance of Vehicle Entertainment Distributors in Nairobi- *European Journal of Business and Management*,12(26).
- Wang, T., Yang, L., & Zhao, F. (2022). *Optimizing wholesale logistics for competitive advantage and market growth*. *Journal of Business Logistics*, 43(4), 312–327. <https://doi.org/10.1002/jbl.3021>
- Wassouf, W. N., Alkhatib, R., Salloum, K. & Balloul, S. (2020). Predictive analytics using big data for increased customer loyalty: Syriatel Telecom Company case study. *J Big Data* 7, 29. <https://doi.org/10.1186/s40537-020-00290-0>
- Yi, Y., & Jeon, H. (2003). Effects of loyalty programs on value perception, program loyalty, and brand loyalty. *Journal of the Academy of Marketing Science*, 31(3), 229-240.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46.
- Zhang, Y., Li, Q., & Hu, J. (2023). *Customer loyalty as a mediator between distribution efficiency and firm performance*. *Journal of Retailing and Consumer Services*, 70, 103151. <https://doi.org/10.1016/j.jretconser.2023.103151>