International Journal of Entrepreneurship and Business Innovation
ISSN: 2689-9493
Volume 7, Issue 4, 2024 (pp. 16-31)
www.abjournals.org

PHYSICAL DISTRIBUTION PRACTICES AND MARKETING PERFORMANCE OF SELECTED FAST MOVING CONSUMER GOODS COMPANIES IN SOUTH-SOUTH REGION OF NIGERIA

Samuel G. Etuk[1], Nfawa E. Usani1[1], Idongesit J. Essien[1],

Aniekan R. Inwang[1], and Chidimma P. Onyia[1]

[1]Department of Marketing, Faculty of Management Sciences, University of Uyo, Nigeria.

Cite this article:

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. DOI: 10.52589/IJEBI-BYYBMSZW

Manuscript History

Received: 12 Aug 2024

Accepted: 9 Oct 2024

Published: 23 Oct 2024

ABSTRACT: *This study was designed to investigate the influence of physical distribution practices (transportation management, warehousing management, communication and information systems, and order processing) on the marketing performance of selected fast-moving consumer goods (FMCG) companies in the south-south region of Nigeria. The survey research design approach was adopted using a structured questionnaire to collect data from 247 selected FMCG sales representatives involved in the distribution of FMCG products in the south-south region of Nigeria. Stratified random sampling was employed. The data gathered was analysed using percentages and frequency tables. The formulated hypotheses were tested using a multiple regression approach. Findings from the study revealed a strong positive influence between the independent variables (transportation management, warehouse management, communication and information systems, and order processing management) and the dependent variable (marketing performance). The researchers suggest that FMCG companies should prioritise transportation management to facilitate better and more efficient movement of goods and people, thereby improving their marketing performance. Given the limitations of this study, the researchers presented practical implications and directions for future research.*

KEYWORDS: physical distribution, transportation management, warehousing management, communication and information systems, and order processing on marketing performance.

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

INTRODUCTION

Manufacturing firms in both developed and emerging economies strive to ensure their products meet the needs and wants of their final consumers. No matter how amazing a company's product may be, it will be a waste of time and effort if it doesn't reach customers or consumers at the right time, place, and in the best physical condition (Ebitu, 2015; Etuk *et al*., 2021). Therefore, manufacturing firms must make strategic decisions regarding the optimal methods for storing, handling, and transporting their products so that they are available to customers in the right place, at the right time, and in the right assortment, while at the same time maximising profit and maintaining marketplace position and competitive advantage (Usani and Eko, 2021). This competitive advantage can be achieved by adopting physical distribution as a marketing strategy that completes the production cycle (Ejike, 2019).

Understanding the importance of physical distribution is crucial, especially in a manufacturing setting (Ongbali *et al*., 2021 and Oladun, 2012). Physical distribution closes the gap between the producer and the consumer (Ebitu, 2003). Physical distribution encompasses a wide range of activities aimed at the efficient and effective movement of finished products from multiple sources of supply to an unlimited number of points of destination. Researchers maintain that physical distribution creates and maintains the utilities of time, form, possession, and place (Ebitu 2015). Physical distribution refers to the process of implementing, planning, controlling, and organising the physical movement of products, goods, related information, and services from point of manufacturing to point of consumption to meet customer requirements at a profit (Kotler and Armstrong, 2010). These physical distribution activities, which are closely interrelated, include, transportation, warehousing, inventory management and control, material handling, communication and information system and customer service, order processing, and packaging (Uzel, 2018).

The goal of physical distribution is to increase output levels, guarantee cost effectiveness, minimise cost, maximise customer service, and enhance customer satisfaction (Ateya et al., 2019). These objectives enhance service provision by managing materials through a demand process until the final consumer receives products. Researchers have observed that manufacturing firms are increasingly prioritising physical distribution due to several factors, including increased sales volume, return on investment, profitability, and competitive advantage (Uzel, 2018; Richard, 2018). These factors highlight the importance of achieving effective productivity through improved logistics, which can improve customer services, lower commodity costs, and enhance marketing performance.

Marketing performance is an external efficacy measure for an organisation. Usani *et al*. (2021) argued that the concept of marketing performance is multi-dimensional, with no clear definition of what the construct means in marketing literature. However, Usani and Eko (2021) perceived marketing performance as an economic measure of production efficiency in relation to customer retention, customer relationships, customer satisfaction, and the firm's increase in sales volume. Etuk *et al.* (2021) described marketing performance in four major dimensions: financial, customer, internal processes, and innovativeness.

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

The fragmentation of the physical distribution function often leads to inefficiency and inter-departmental conflicts in the performance of firms' distribution missions. Fundamentally, we should view the physical distribution function as an integrated system of activities, primarily responsible for planning and controlling the flow of raw materials and finished goods. This has necessitated a systemic approach to physical distribution. To ensure integration and prevent suboptimization of individual operating units' efforts, it is crucial to approach physical distribution in a systematic manner (Udoh and Okafor, 2010). The movement of products from the point of production to the point of use relies heavily on marketing logistics, ensuring their timely availability and safe conditions. Despite this important role, the process is not without problems, as many manufacturing firms and marketers lack skills and adequate physical distribution practices, which often times lead to damage and delay of products before they get to their points of consumption. These have negatively impacted the transfer of products to consumption points.

The precise level of research conducted on physical distribution remains uncertain. However, past research that sought to investigate the effect of physical distribution practices on marketing performance presented mixed findings. Some studies found a positive effect, while others found a negative relationship. Most of the research did not specifically target Nigeria or its manufacturing firms. The south-south region of Nigeria remains largely unexplored in many other studies related to the subject matter. As a result, it became difficult to determine to what extent physical distribution and its dimensions (transportation management, warehousing management, communication and information system, and order processing) influences the marketing performance of FMCG firms in the southern region of Nigeria. In light of the foregoing, there is a significant knowledge vacuum in the region that requires immediate academic investigation. Hence, the main objective of this study was to investigate the influence of physical distribution practices and marketing performance of selected FMCG firms in South-south region of Nigeria.

REVIEW OF RELATED LITERATURE

Concept of **Physical distribution**

Physical distribution is a concept that indicates the integration and coordination between logistics and marketing. It refers to a strategic process that ensures timely delivery of ordered products, utilising appropriate transportation methods, with an emphasis on speed and cost efficiency (Barcik and Jakubiec, 2013). According to Udoh and Okafor (2010), physical distribution encompasses a wide range of activities and tasks that a manufacturing firm undertakes to efficiently and economically transports product from the production plant to the consumption point. Also, Madina (2021) view physical distribution as the movement and supervision of products, services, and information flow from manufacturers to final consumers with the aim of meeting and satisfying consumers' needs and wants. Chala and Kumar (2021) noted that physical distribution is a service that enhances the value of products by ensuring their timely availability in the appropriate location, hence facilitating consumer interaction. Workalemahu

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

(2018) sees physical distribution is a comprehensive process that involves the flow of resources and finished products from manufacturers to intermediaries and ultimately to the end user. Here we describe physical distribution is a component of the larger process known as distribution, which encompasses not only the marketing of goods at wholesale and retail levels but also their actual transportation.

Transportation Management

To improve market expansion, organisations should promote an efficient transportation system. Transportation moves goods efficiently and economically from their production and sale locations to their consumption locations, ensuring they arrive in the required quantities and at the right times. By providing time and place utilities, the transportation system enhances the economic value of commodities (Agu *et al*., 2016). In order to accomplish these objectives, transportation infrastructure must be sufficient, consistent, reliable, and fair in terms of the costs and advantages of the facilities and services offered. According to Udoh and Okafor (2022), transportation operations take place across every step of the supply chain. The transportation process commences with the procurement of raw materials and culminates in the distribution of products to end-users, or ultimate consumers. It encompasses the processes of internal movement, movement between a company's facilities, and external movement from the company's facilities to customer destinations. The migration of individuals from one location to another is another critical factor in transportation. There are a variety of transportation options used for this purpose, which include road, water, air, rail, and pipelines, each with its own set of pros and cons (Udoh and Okafor, 2010).

Warehousing Management

Warehousing is a major component of physical distribution system. The warehouse is a large centralized store usually in a convenient location in relation to the market-area to be served. Okeudo (2013) believes that warehouse is basically design to bridge the large gap between when goods are produced and when consumers require them. This involves receiving identifying sorting and storing of materials/goods in the private and public warehouse to ensure optimal level of customer service. Jaqueta *et al.* (2020) maintain that the primary activities carried out in the warehouse include receiving, storage, order picking, accumulation, sorting and shipping. Edim and Inyang (2022) believe that warehouse efficiency boosts service standards, which in turn decreases delivery times and boosts customer satisfaction. Decisions about the number of warehouses, their capacity, location, and ownership status (leased vs. owned) must be carefully considered when implementing a warehouse strategy. A company must consider these factors, which include competing resources, when making warehouse decisions (Abdul *et al*., 2019).

Classification of warehouses based on their functions

Firms describe their warehouses in four ways. The following explanation provides insight into the functions of these classifications.

Storage or conventional warehouses: There are traditional warehouses that serve as storage facilities for stationary products. Storage warehouses offer storage amenities for both raw

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

materials intended for manufacturing consumption and finished commodities that are not required immediately.

Distribution warehouse: Distribution warehouses prioritise order processing and physical distribution over simple storage. They are also known as distribution centers. They are often located off-site from the manufacturer's facilities in various areas, allowing for efficient and quick delivery and distribution of goods to customers. They offer exceptional customer service.

Display warehouse: These are corporate offices or exhibition areas set up by business organisations and utilised by their authorised sales representatives to exhibit products to potential customers. They are also known as showrooms.

Specialty warehouse: These warehouses are necessary for storing commodities that require specific or specialised storage conditions. For instance, the storage of frozen food necessitates a refrigerated warehouse, whereas grain storage requires silos. Storing petroleum products requires underground tanks, while perishable items such as greens and fruit require specialised facilities.

Communication and Information System

The literature on physical distribution has extensively discussed the significance of communication and information systems in relation to an organisation's marketing performance. Communication in the marketing setting involves the official and unofficial (formal and informal) exchange and sharing of significant and timely information among customers and suppliers. Communication can be described as the consumer's perception of the degree to which a seller engages with its loyal customers in a friendly and tailored manner (Usani *et al*., 2021; Etuk, 2018). Communication and information systems are one major component among the various activity centres of physical distribution. They involve the processes of generating ideas, encoding and transmitting messages, receiving and decoding messages, and responding with feedback (Udoh and Okafor, 2010). Knowledge regarding the distribution system is a crucial component of the overall information system. In the absence of effective communication, the entire operational system may fail. Inadequate information about distribution might lead to the incorrect formulation of production and sales policies.

Throughout the entire distribution process, from pre-selling to selling, consumption, and post-consumption, communication is key to providing timely and trustworthy information. In the event that a delivery problem arises, it entails delivering information proactively. Effective communication is characterised by frequent, open, and honest conversations. Strong relationships are the result of two-way communication, which in turn increases satisfaction (Etuk, 2018; Etuk *et al*., 2021).

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

Order Processing Management

The physical distribution process begins with a customer's order entry. The efficiency of order processing has a direct effect on lead times (Okeudo, 2013). The objective of order processing management is to effectively accept, classify, and distribute customer orders in a manner that satisfies their requirements through systematic and strategic planning and implementation. In order to maintain a consistent and reliable process for fulfilling customer orders, it is necessary to employ systematic and skilled monitoring and tracking. The typical order-processing management operation entails collecting orders from customers, verifying them against inventory levels, selecting the required products, and ensuring their secure delivery to the client (Edim and Inyang, 2022).

Velasco (2023) defines order processing management as the systematic handling of client orders, encompassing the stages of receiving, fulfilling, and delivering them promptly. The responsibility for managing order processing begins when a customer placing an order and ends when the client receives the product or service as requested. According to Edim and Inyang (2022), order processing management is a critical part of logistics management because it helps businesses better meets their customers' demands and expectations on a continuous basis, which in turn boosts their marketing efforts.

Marketing Performance

Measuring marketing performance has recently attracted more attention from both researchers and industry professionals (Usani *et al*., 202; Sampson *et al*., 2022; and Etuk *et al*., 2022). Marketing performance allows marketers to assess the efficacy of their marketing efforts in relation to their plan's objectives. According to Etuk *et al.* (2022), marketing performance is the process of harmonising the marketing team's objectives with the tangible outcomes achieved. It is quantified by using measures such as revenues and sales volume, lead creation, customer retention, satisfaction, brand awareness, and customer engagement. Zulfikar (2018) illustrates that the evaluation of marketing performance gauges the effectiveness of value creation, achieved through the enhancement of innovation skills and a comprehensive understanding of market orientation. Various researchers have measured marketing performance using several metrics. To provide additional information, the following section will elucidate the use of marketing performance dimensions as presented by these researchers (Kosan, 2014; Mone *et al.*, 2013; Usani and Sampson, 2023; Usani and Eko, 2021; Etuk *et al*., 2024; Edim and Iyang, 2022; Usani *et al*., 2024).

Theoretical Framework

This study is based on the systems theory developed by biologist Ludwig Von Bertalanffy in the 1940-1972. Systems theory encompasses a wide range of academic disciplines that examine interdependent systems. The core idea of systems theory is that the total is greater than the sum of its components. Von Bertalanffy emphasised that actual systems are malleable, sensitive to, and responsive to their surroundings; as a result, they are capable of continuous evolution as they emerge with fundamentally new characteristics. The theory anchors on the assumption that there are general philosophies of organization, which hold for all systems. Physical distribution can be

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

seen as a network of interconnected parts that facilitate the smooth transfer of goods and services from point of supplier to point of purchase.

Ejike (2019) describes physical distribution through a system approach that encompasses various components such as transportation, warehousing, communication and information management, order processing, inventory control, packaging, and material handling. Because these parts are interdependent, selections made in one domain influence the proportional efficacy of other domains (Obiero, 2017). For example, a small business that specialises in tailor-made personal computers may choose air transport rather than truck transport to deliver their final products. This choice is motivated by the potential benefits of faster delivery times, which can lead to reduced inventory costs that outweigh the higher expenses associated with air transport (Oladun, 2012). An effective method to ensure customer service and satisfaction while minimising expenses is to adopt a systems approach when managing physical distribution (Ejike, 2019). This theory is significant to this study as it facilitates the fragmentation of the components of physical distribution, resulting in the formation of subsystems that collectively constitute physical distribution. It also explains the interdependency of the activity centres chosen as the underpinnings for this study.

Empirical Literature

There is a wealth of information about distribution strategies that offers various methods and abilities for managers. While performance is obviously crucial, we will only touch on a few aspects of it here. A solid place to begin is with the work of Uzel (2018), who studied Kapa Oil Refinery Limited's performance in relation to physical distribution practices like order processing, material management, and customer service. The results demonstrate that there is a significant influence of physical distribution practices on the business's performance. In a similar study, Edim and Inyang (2022) investigated how well SMEs in the manufacturing sector handled logistics management and the marketing performance of small and medium-sized manufacturing firms. The primary goal was to ascertain the extent to which transportation, inventory, and order processing positively or negatively impacted the marketing efforts of small and medium-sized manufacturing companies. The researchers discovered that order processing, transportation, inventory, and warehouse management significantly enhanced the marketing performance of SMEs.

Ejike (2019) carried out a study on the impact of physical distribution on the performance of cement-producing firms in Nigeria. Ejike adopted a descriptive survey design and used a questionnaire as the primary instrument for data collection. The results showed that the physical distribution of all the proxies significantly improved the performance of cement manufacturing firms in Nigeria. Abdul et al. (2019) conducted a similar study on the impact of logistics management on organizational performance. The study revealed that logistic management had a significant impact on organisational productivity.

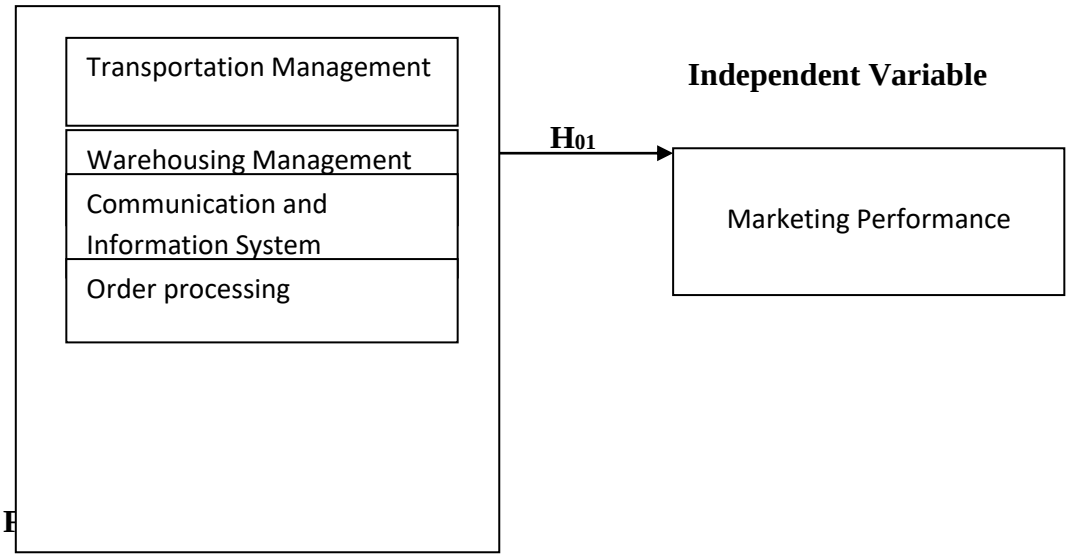
Adelwini *et al*. (2023) extended their study on how logistics management affects the efficiency of Ghana's roofing sheet production industries. The effects of transportation, warehousing, inventory, and information flow management on business efficiency were the focus of the study.

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

The results, with a 95% confidence level, indicate that inventory management, physical distribution, and warehouse management, which were selected dimensions, positively impact the organisational performance of Ghana's roofing sheet industries. Assim (2013) investigated the connection between physical distribution and marketing performance. The purpose of this study was to help bottling companies in Cairo, Egypt, improve their marketing performance by providing empirical information on the nature of the relationship between physical distribution and marketing performance. Findings show that in Cairo, Egypt's bottling business, physical distribution practices (material handling, transportation, inventory management, and warehousing) had a positive and significant association with marketing performance.

Few research have examined the relationship between physical distribution practices and marketing performance in emerging nations like Nigeria, in contrast to the vast majority of studies that have focused on industrialised nations. This furthered the interest to carry out this study on physical distribution practices and the marketing performance of selected FMCG firms in south-south states, Nigeria. In order to illustrate the proposed influence among the variables under investigation, a conceptual model was developed and depicted in Figure 2.1, specifically tailored to the context of the current investigation.

Independent Variables



Source: *Researcher's Model (2024).*

Research Hypothesis

H_{o1}: There is no significant influence between transportation management, warehousing management, communication and information systems, and order processing on marketing performance of selected FMCG firms in southern Nigeria.

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

METHODOLOGY

The methodology adopted for this study is explained under appropriate sub-headings:

Research Design: A cross-sectional survey research design was adopted in the course of this study. The choice of this design also became necessary because it is suitable for analysing a cross-section of the population at one point in time.

Study Area: This study was conducted in the south-south geopolitical zone of Nigeria. This zone consists of six states: Akwa Ibom, Cross River, Bayelsa, Edo, Delta, and Rivers State. For this study, the researcher selected Cross River and Akwa Ibom States to collect samples. The region is generally abundantly blessed with oil and other natural resources, which is a major economic driver for Nigeria. Our goal for chosing these two states was to find a way to lower the cost of research without sacrificing the reliability of our results or the quality of our data.

Population of the Study: The target population consisted of 252 staff linked with the distribution of products produced by these selected FMCG companies in the south-south region. These individuals include sales representatives (SRs), depot managers (DMs), district sales managers (DSMs), regional trade marketing managers (RTMMs), van salesmen (VSMs), regional business managers, warehouse managers, and employees. The decision to select these staff members was based on their primary role in distributing products, services, and information within the FMCG sector.

Sample Size Determination: Given the small population size for the study, there was no need to use any sampling technique. The researcher adopted a population size of 252 and used the census method of statistical enumeration to distribute copies of the questionnaire to all members of the target population of the selected FMCG companies in southern Nigeria. To divide this sample size among the selected FMCG companies in the two sample states, Bowley's (1937) proportional allocation statistic was further utilised to ensure equitable representation of the states. Bowley's (1937) formula is presented as:

$$nh = \frac{n \times Nh}{N}$$

Where: nh = number of questionnaire allocated to each of the states

n = Total sample size

Nh = Number of proposed customers to be accessed from the selected PFAs

N = Population size.

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

Table 3.1: Showing questionnaire allocation to the four FMCG Companies

Companies	Population	Sampling Calculation	Sample size
FLOUR MILLS	27	27/252x252	27
NESTLE PLC	50	50/252x252	50
NIGERIA BREWERIES	95	95/252x252	95
UNILEVER PLC	80	80/252x252	80
TOTAL	**252**		**252**

Source: *The Researcher's Computation (2024).*

Sampling Technique: In this study, the researcher used stratified random sampling to choose participants from four selected FMCG firms in the south-south region. A stratified random sampling approach allows the researcher to randomly select participants for the study.

Data Collection Method/Scaling: This research surveyed four fast-moving consumer goods companies in Cross River and Akwa Ibom States, Nigeria. The study's data came from primary sources, including a pen-on-paper questionnaire titled "Physical Distribution and Marketing Performance of Selected FMCG Companies in South-South Nigeria." The researcher measured the predictor and criterion variables on a '5' point Likert scale: strongly agreed, agreed, undecided, strongly disagreed, and disagreed, with values of 4, 3, 0, 2, and 1, respectively. The questionnaire statements were adapted from Ejike (2019) and Obiero (2017) to measure the study dimensions (transportation management, warehouse management, communication and information systems, and order processing). The questionnaire was self-administered to respondents across the four selected companies.

Reliability and Validity Test of Research Instrument: In order to establish the reliability of the questionnaire, Cronbach's alpha was used in testing the instrument. Also, efforts were made to ensure instrument validity. In this regard, the questionnaire was presented to a research lecturer in the Department of Marketing for his useful contributions to improving the quality of the instrument. Table 3.2 shows the analysis of reliability with a bench mark of 0.70.

Table 3.2: Reliability Table

Variable	**Number of Items**	**(Cronbach Alpha)**
Transportation/delivery	4	0.771
Warehouse management	4	0.735
Communication/information system	4	0.826
Order processing	4	0.709
Marketing performance	4	0.769

Source: *Researcher's Computation (2024).*

Method of Data Analysis: In this study, we analysed the personal data of the respondents using descriptive statistics. Multiple regression analyse was used to test the joint hypotheses at a threshold of 0.05.

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

Decision Rule: Reject the null hypothesis (Ho_1) if the P-value is less than 0.05 (i.e., $p < .05$); accept the null hypothesis if P-value is greater than 0.05 (i.e., $p > .05$).

DATA PRESENTATION AND DISCUSSION

Data Presentation

A total of 252 questionnaire were distributed to representatives from the chosen FMCG companies and the two states used for sampling. Of these, 247 (97.99%) were returned in usable form, making them the sample for this study. while the remaining 5 copies, representing 2.01%, were not appropriately filled and, hence, were discarded from the analysis.

Test of Hypothesis

H_{o1}: There is no collective significant influence between transportation management, warehousing management, communication and information systems, and order processing on marketing performance of selected FMCG firms in southern Nigeria.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.820[a]	.672	.668	1.12618

a. Predictors: (Constant), Transportation management, warehousing management, communication and information system and order processing

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	924.492	4	231.123	182.233	.000[b]
	Residual	451.508	356	1.268		
	Total	1376.000	360			

a. Dependent Variable: Marketing performance
b. Predictors: (Constant), Transportation management, warehousing management, communication and information system and order processing

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.078	.556		.140	.889
	Transportation management	.312	.061	.245	5.098	.000

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

	Warehouse management	.599	.061	.427	9.901	.000
	Communication and information system	-002	.096	-002	-021	.025
	Order processing	.404	.104	.335	3.895	.000

a. Dependent Variable: Marketing performance
Source: *Author's computation from SPSS version 24 (2024).*

INTERPRETATION

Tables 1–3 present the results of a multiple regression analysis examining the impact of physical distribution and marketing performance on selected FMCG companies in the southern region. In the model summary, the correlation coefficient (R = 0.820) suggests that physical distribution has a very high degree of influence, up to 82.0%, on the marketing performance of selected FMCG firms. Physical distribution predicts about 67.2% of the variation in the marketing performance of selected FMCG companies, according to the regression coefficient of determination (R2 = 0.672). In addition, the F-statistic = 182.233 and p-value < 0.005 on the ANOVA suggest that the results of the regression model could not have occurred by chance and that independent variables jointly and significantly predicted the changes in the dependent variable.

Table 2 shows that the regression model is statistically significant, which means that physical distribution has a significant influence on the marketing performance of selected FMCG companies. Also, all of the predictor variables had positive t-values and p-values that were lower than the 0.05 error margin. These variables included transportation management (p-value = 0.000; t-value = 5.098), warehouse management (p-value = 0.000; t-value = 9.901), communication and information systems (p-value = 0.25; t-value = -.021), and order processing (p-value = 0.000; t-value = 3.895). As a result, it is reasonable to conclude that these four dimensions of physical distribution have a significant influence on the marketing performance of selected FMCG companies in south-south Nigeria. Nevertheless, when looking at the standardised beta coefficients of each variable in Table 3, it becomes clear that warehouse management has the most significant influence on the marketing performance of selected FMCG firms (β = 0.427, or 42.7%). Order processing has the second highest significant influence on marketing performance (β = 0.335 or 33.5%), while transportation has the third highest significant influence on marketing performance (β = 0.245 or 24.5%). The variable communication and information system had a negative influence on marketing performance (β = -002).

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

DISCUSSION OF FINDINGS

The study findings indicate a strong positive influence between the predictor variables (transportation management, warehouse management, communication and information systems, and order processing) and the criterion variable (marketing performance). This suggests that physical distribution has a strong influence on the marketing performance of selected FMCG companies in south-south Nigeria. The results of this study are in tandem with those of Edim and Inyang (2022); Uzel (2018); Ejike (2019); Abdul *et al.* (2019); Adelwini *et al*. (2023); Jaqueta *et al*. (2020); Assim (2013); and Ateya (2019). In their studies at different times and geographical locations, they found that physical distribution and its associated underpinnings are positively and significantly related to marketing performance in both large and small enterprises. Edim and Inyang (2022) study demonstrated that companies can optimise their physical distribution process by closely monitoring the steps involved in order placement, sorting, and delivery. This way, customers can ensure prompt and satisfactory fulfilment of their orders. In addition, they thought that companies should put an emphasis on transportation management by coordinating the processes of carrier scheduling, route planning, and carrier tracking to guarantee the smooth inbound and outbound movement of goods and productive resources. Also, Ejike (2019), Jaqueta *et al*. (2020), and Assim (2013) believe that the ability to achieve organisational goals depends on how these organisations use their physical distribution resources.

CONCLUSION

The purpose of this study was to critically investigate the influence of physical distribution practices (transportation management, warehousing management, communication and information systems, and order processing) on the marketing performance of selected FMCG companies in south-south Nigeria. The empirical findings of this study conclude that physical distribution practices significantly influence marketing performance.

RECOMMENDATIONS

Based on the findings and conclusion of this study, the researcher recommended the following for optimal implication.

i. The researchers suggest that FMCG companies should prioritise transportation management to facilitate better and more efficient movement of goods and people, thereby improving their marketing performance.

ii. Fast-moving consumer goods (FMCG) companies and other manufacturing firms should always look for new ways to extend their warehouse base and build warehouses close to the target market they want to satisfy. This will help with product distribution and ultimately lead to more sales.

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

iii. FMCG companies should have a system in place for managing and exchanging communication that is both effective and efficient. To achieve customer satisfaction, patronage, and organisational growth, it is important to consistently update customers and prospective customers on what the company is up to (promotions and rebates).

iv. Order processing should be given priority in manufacturing companies and the process should be made automated to enhance a competitive advantage and retain customers for effective marketing performance.

Suggestion for further studies

This study sourced its data from selected FMCG firms in Nigeria's south-south region, which may not fully reflect the realities of firms in other regions. Therefore, researchers need to replicate this study in other regions of Nigeria to gain a comprehensive understanding of how physical distribution practices contribute to the marketing performance of firms. According to the researchers' conceptualisation, this study focused on four (4) physical distribution activities, which include transportation management, warehouse management, communication and information systems, and order processing. As a result, it cannot provide sufficient empirical evidence to explain the influence of other physical distribution practices. In order to add to existing knowledge and enhance empirical evidence, future researchers should investigate the influence of other physical distribution centres on firms' performance, such as inventory management, customer service management, packaging, insurance, and logistics automation.

REFERENCES

Abdul, F. A., Aun I. I., Oladipo, G. T. and Olota, O. O. (2019). Impact of logistics management on organizational performance (A case study of Dangote Flour Mills Plc, Nigeria). *Journal of Sustainable Development in Africa,* 21(1): 36-49.

Adewini, B. B., Toku, L. I. and Adu, O. F. (2023). Investigating the effect of logistic management on organizationtional performance: New evidence from the manufacturing industry. *Journal of Accounting, Business and Finance Research,* 16(1): 1-11.

Agu O. A., Obi-Anike, H. O. and Eke, C. N. (2016). Effect of inventory management on the organizational performance of the selected manufacturing firms. *Singaporean Journal of Business Economics, and Management Studies (SJBEMS),* 5(4): 56-69.

Assim, M. (2013). physical distribution and marketing performance in Egyptian bottling industry, Cairo. *International Journal of Service Industry Management,* 10(3):271-285.

Ateya, R. Gesimba, P. and Gichuhi, D. (2019). Examining the Influence of Physical Material Distribution on Service Delivery at the British Army Training Unit, Nanyuki, Kenya. *Saudi Journal of Humanities and Social Sciences,* 4(8): 560-566.

Chala, G. and Kumar**,** B. (2021). The effect of logistics management on organizational performance at Wonji/Shoa sugar factory. *Global Scientific Journal,* 9(5): 1962-1974.

Ebitu, E. T. (2003). *Distribution and logistics management.* Calabar: Eddynoll publishers

Ebitu, E. T. (2015). *Marketing management and strategy.* Calabar: University of Calabar printing press.

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

Edim E.J., Inyang B.I. (2022), Logistics management and marketing performance of small and medium-sized manufacturing firms. *International Journal of Entrepreneurship and Business Innovation* 5(1), 1-15. DOI: 10.52589/IJEBI-D1D3KF26

Ejike, I. K. (2019). Impact of physical distribution on market Performance of cement producing firms in Nigeria (A study of Dangote cements company Calabar). *Emerald International Journal of Scientific and Contemporary Studies,* 1(1): 1-11.

Etuk, S. G. (2018). Two-Way Communication and Customer Loyalty: A Relationship Marketing Approach. Journal of Economics and Management Sciences, 1 (3): 75-81.

Etuk, S. G. Udoh, N. A. and Usani, N. E. (2024). Entrepreneurial marketing and performance of small and medium-scale enterprises in Akwa Ibom State. *International Journal of Entrepreneurship, Business and Creative Economy,* 4 (2): 171-185. https://doi.org/10.31098/ijebce.v4i2.2137

Etuk, S. G., Udoh, N. A. and Usani, N. E. (2024). Entrepreneurial marketing and performance of small and medium-scale enterprises in Akwa Ibom State. *International Journal of Entrepreneurship, Business and Creative Economy,* 4 (2): 171-185. https://doi.org/10.31098/ijebce.v4i2.2137

Etuk, S.G. Usani, N. E. Udoh, I. S. (2022). Micromarketing and customer satisfaction of transportation networking companies in Uyo, Akwa Ibom State, *Journal of Humanities Insights*, 6 (3): 22-35. DOI: 10.22034/JHI.2022.331222.1058

Gong, Y. (2009). *Stochastic Modelling and Analysis of Warehouse Operations.* (E.R. Management, Ed.) Rotterdam, Netherland.

Jaqueta, S.D.J., Mashilo, E.N., Mocke, K. and Agigi, A.F.A., (2020). Physical distribution challenges and adaptations: A qualitative study of South Africa-based organisations operating in emerging African markets., *Journal of Transport and Supply Chain Management*, 14(0) :1-16.

Kosan L. (2014.) Accounting for Marketing: Marketing performance through financial results. *International Review of Management and Marketing*, 4 (4): 276-283.

Kotler, P., and Armstrong, G. (2010). *Principles of Marketing*. (10th Ed). Harlow, England: Pearson Publishers. 54p

Mone, S., Marius D. P., Nicoleta-Dorina Racolta- P. (2013). The "What" And "How" Of Marketing Performance Management. *Management and Marketing Challenges for the Knowledge Society*, 8(1): 129-146.

OBIERO, E. A. (2017). *Effectiveness of streamlined physical distribution to distributor small and medium-sized enterprises in Kericho County, Kenya.* (MSc Ed). Maseno University. Pp. 43.

Okeudo G. (2013). Optimization of Physical Distribution of Consumer Goods in Nigeria: A Case Study of Unilever. Nigeria Plc (South-East Region). *IOSR Journal of Business and Management (IOSR-JBM)*, 10(5): 45-53.

Oladun, M. M. (2012). *Innovative distribution strategies and performance of selected multinational corporations (mncs) and domestic manufacturing firms in Nigeria*. (Ph.D ed). Covenant University, Ota, Ogun State, Nigeria. Pp. 149.

Ongbali, S. O., Afolalu, S. A., Oyedepo, S. O., Inegbenebor, A. and Salawu, E. Y. (2021). The role of physical distribution in supply chain enterprise and the accompanying bottleneck

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW

problems: a review. *Turkish Journal of Computer and Mathematics Education* 12(13): 3312-3318.

Richard, C. (2018). Physical distribution: Key to improved volume and profits. *Journal of Marketing,* 2(1), 42-61.

Sampson, E. A., Etuk, S. and N. E. Usani (2022). Service quality and patient satisfaction in public hospitals in Akwa Ibom State, Nigeria. *Journal of Emerging Trends in Marketing and Management*, I (1):141-150.

Udoh, C. M. and Okafor, A. I. (2010). *Physical distribution and transportation management: concepts and application*. Owerri: Gabtony and Associates Nig. Ltd.

Udoh, I. S., Okwudu, A. A. and Joseph, U. E. (2022). Top management commitment and sales force performance of beverage manufacturing companies in Nigeria. *International Journal of Business and Management Review,* 10 (1): 1-12.

Usani, N. E. and Eko, H. A. (2021). Personal selling strategy and firms' productivity: A study of selected microfinance banks in Calabar, Cross River State. *International Journal of Marketing and Business Communication,* 10 (3): 30-36.

Usani, N. E. and Sampson, E. A. (2023). Internal marketing and sales force performance of beverage manufacturing firms in Nigeria. *International Journal of Management, Accounting and Economics, 10*(7): 480-494. https://doi.org/10.5281/zenodo.8268267.

Usani, N. E., and Eko, H. A. (2021). Personal Selling Strategy and Firm's Productivity: A Study of Selected Microfinance Banks in Calabar, Cross River State. *International Journal of Marketing and Business Communication,* 10 (3) 2021, 30-36.

Usani, N. E., Sampson, E. A., Essien, I. J., Christopher, U. M. and Effiong, M. I. (2024). Marketing strategies and performance of selected small and medium enterprises (SMEs) in central senatorial district of Cross River State, Nigeria. *Journal of Bio-Based Marketing, 1*, 37-45.

Usani, N.E. Etuk, S.G. Ekpenyoung, V. (2021). Integrated marketing communication and marketing performance of hotels in Calabar, Cross River State. *World Academics Journal of Management* **9**(**4**): 33-38.

Uzel, J. M. M. (2018). Effect of physical distribution practices on the performance of Kapa oil refineries limited, Mombasa, Kenya. *The Strategic Journal of Business & Change Management*, 5 (2): 2190 – 2204.

Von Bertalanffy, L. (1972). The history and status of geberal systems theory. *The Academy of Management Journal*, 15(4): 407-426.

Workalemahu, T. (2018). *Factors influencing the distribution performance (The case of muger cement factory).* (MSc ed). Pp. 60.

Zulfikar, R. (2018). Marketing performance influenced by market orientation thro-ugh value creation. *Advances in Social Science, Education and Humanities Research,* 225,: 291-297.

Article DOI: 10.52589/IJEBI-BYYBMSZW
DOI URL: https://doi.org/10.52589/IJEBI-BYYBMSZW