Original Research

EFFECT OF LOGISTICS MANAGEMENT PRACTICES ON MARKETING PERFORMANCE OF SMALL AND MEDIUM SCALE ENETRPRISES IN CALABAR, CROSS RIVER

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ABSTRACT

The study examined the effect of logistics management practices in Calabar. The specific objectives were to investigate the effect of warehouse management, inventory, transportation and order processing on marketing performance of SMSEs in Calabar, Cross River State. The research design used for this study is the survey method. Primary data were collected from small and medium scale enterprises (SMSEs) in Calabar using questionnaire. The data were analysed using inferential and descriptive statistical tools. Based on the results, it was revealed that warehouse management, inventory management, transportation management and order processing have a significant effect on marketing performance of SMSEs in Calabar. On the basis of the findings, it was concluded that logistics and supply chain managers should encourage effective and efficient logistics management practices in their organizations to enhance their marketing performance.

Keywords: Logistics management, supply chain management, warehouse, Inventory, transportation and order processing management, marketing performance.

1.0   INTRODUCTION

Small and medium scale enterprises have continued to exhibit an imperative role in the growth and development of business in Cross River State (Adelwini, Toku & Adu, 2023). With the help of logistics management SMSEs scale enterprises has historically provided the government with employment possibilities, creative thinking and financial resources through gross domestic product and taxes (Mpuon et al., 2021; Pakurar et al., 2020). Council of logistics management (1991) and Mpuon et al. (2023) defined logistics as part of the supply chain process that plans, implements and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements. Mukolwe & Wanyoike (2015) and Ajoke et al. (2019) argued that one important management practice that can be applied in organizations today is logistics management.

According to Kalkan (2018) and Mpuon et al. (2022) logistics management provides organizations with the total operations costs and increases the efficiency of the company's business activities. Nthiwa and Wanjiru (2018) asserted that collaboration among all the supply chain players coupled with a responsive approach can enhance organizational competitiveness of small and medium scale enterprises through reduced lead-time facilitated by smooth flow of material from upstream toward the downstream end of supply chain. Chow et al. (1994) and Omoush (2022) maintained that logistics management practices by small and medium scale enterprises ensure that end customers get value for their money and also reducing the level of uncertainty in the industry.

In the assertion of Wasike et al. (2020) and Ajoke et al. (2019), a logistics system is made up of a large number of stakeholders which include the suppliers, manufacturers, wholesalers or distributors and retailers who have to be managed strategically in order to deliver final products n the right quantities at the desired time and quality at the right place and at a reasonable cost to the final consumers. Mwangangi (2016), Mukolwe & Wanyoike (2015) and Mpuon (2018a, 2018b) argued that logistics strategy has three main objectives, cost reduction, capital reduction and service improvement. Similarly, Mogaka & Arani (2020), Mpuon & Oyong (2019) and Mpuon (2019) noted that the goal of logistics management was the geographical arrangement of plants and warehouse facilities, select transportation methods, and control distribution costs.

Consequently, Petelina (2016) and Mpuon et al. (2020) declared that logistics promote efficient and efficient flow of raw materials, funds, information, goods services from producers to final consumers. While Edo (2021) and Mpuon et al. (2023a, 2023b) affirmed that logistics managers are responsible for designing and implementing plans that can include physical things such as food material, animals, equipment and liquids and abstract objectives such as time and knowledge. Moreover, Wasike et al. (2020) and Mpuon et al. (2020) sated that logistics management practices include needs assessment practices, material and service ordering practices, optimal donations management practices, best warehousing practices, documentation, cataloging, consolidation, inventory management and organizational productivity and impact of information, flow management on employees' efficiency. Logistics management practices according to Gudeta (2021) involves transportation, customer's service, warehousing and storage, plant and warehouse site selection, inventory management, order processing, logistics communications, procurement, material handling, packaging, demand forecasting and reverse logistics.

Logistics management practices play a pivotal role in supporting organization as the strive for more efficient management system in business practices. In effective logistics management system together with the inefficient internal management control would hinder the organization ability to react out to the demand of customers with the lowest price including the quality level which will not meet the customer expectation and that would bring the organization to the competitive disadvantage situation against their rivals. Despite the increase in logistics management research and the development of SMSEs in Nigeria there seem to be no empirical research on logistics management practices with respect to SMSEs in Cross River Sate. The lack of literature by scholars with respect to logistics management practices, could be the root cause of poor logistics performance in SMSEs in Cross River State.

2.0   LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1   The concept of logistics management practices

The economic growth of the national and global operations increases the need for logistics services, primarily transport services, which are more and more critical to business and operational performance (Omoush, 2022). Hence, globalization has a profound and powerful impact on all countries which has changed the way business operates and they are expanding the transport and logistics market (Adelwini et al., 2023). Logistics management practices are described as a group of activities carried out by the company to facilitate auspicious logistics management (Omoush, 2022). In today's competitive environment, logistics management practices encourage effective and timely responses to ever-changing customer taste and preference which have become essential component for successful marketing performance Nthiwa and Wanjiru (2018).

According to Pakurar et al. (2020), logistics management components are important firm design and strategy use in enhancing business and marketing performance. Hoang and Son (2019) argued that logistics is the movement of resources to fulfil the requirement of consumers or businesses between the place of origin and the destination of consumption. Bihter and Ali (2015) show that logistics expects the right product to be delivered in the best possible quality and right quantity at the right location and time, for the right customer, an at the right price. Ali et al. (2016) maintained that managing activities in logistics involved fundamental practices and support practices. Customer service, inventory management, and transportation an information flow are fundamental practices whereas the complementary practices supporting the core practices encompass warehousing, packaging and order and information processing. Some of these variables are use   as dimensions of logistics management practices which are discussed below.

Warehouse Management

A warehouse can be considered as a spinal cord of small and medium enterprises including manufacturing organizations that carries out various logistics activities. An ideal manufacturing organization can be measured by its efficacy in warehousing decisions (Gueta, 2021). A warehouse should be located near a point of consumption and should be able to store sufficient products in case of unforeseen demand of product (Zunaira et al., 2021). According to Omoush (2022) warehousing comprises the planning of space arrangement of stocks, setting, and positioning of stocks. Furthermore, Mukolwe and Wanyoike (2015) argued that factors such as warehouse location, size, layout and design play a crucial role in logistics activities of small and medium scale enterprises in Calabar – Nigeria.

Muslimini et al. (2015) argued that warehousing activities include large scale storing of products in a structured and organized fashion and allowing them conveniently accessible where appropriate. Logistics enhance small and medium scale enterprises by supporting the right product at the right volume based on the correct selection and dispatch of the warehousing. The warehouses serve as an entry and storage place for raw materials and component items while assisting in manufacturing operations (Edo, 2021). Warehouse management is influential in determining logistics performance because the operation of those two components is interrelated, and proper

warehouse management will improve the flow of materials, provide a strong backbone for increased inventory, and indirectly lower shipping costs (Petelina, 2016). Based on the above discussion, the following hypothesis is put forward for testing:

H_{o1}. Warehouse management has no significant effect on marketing performance of SMSEs in Calabar.

Inventory management

Proper inventory management ensures seamless supply of products but also cuts down on storage costs (Petelina, 2016). Logistics ensure that there is neither excess of products in inventory nor deficit (Mogaka and Arani, 2020). Haphazardly managed inventory will lower the profits of manufacturing firms and may even lead to pilferage in the stocks (Mwangangi, 2016). According to Omoush (2022) inventory is the storage of any material or item used by a company. The system of inventory management refers to a collection of policies and procedures, which regulate stock levels and decide how stocks must be retained and the size of the order to replenish the shortage (Wasike & Juma, 2020). In the assertion of Mpuon et al (022) and Omoush (2022), inventory management or inventory planning and control pertain to the continuous provision of standard items with independent demand, where there should always be specific speculative quantities. Ajoke et al. (2019) argued that companies keep such inventories for different purposes, which include safety from general deficiencies or possible supplier issues, or because fluctuations in unit prices are likely inevitable. Mpuon (2018a, 2018b) and Edo (2021) maintained that inventories allow businesses to deliver provisions without costly delays for the recipients.

Omoush (2022) maintained that there are two inventory management methods. The first is the just-in-time approach where companies prepare to obtain goods as required, instead of retaining high levels of inventory. The second is the preparation of materials needs, which involves arranging the delivery of materials based on demand productions. Efficient inventory management necessitate a company's ability to pursue stocking and used optimized inventory valuation methods to avert under or overstating profits (Nthiwa & Wanjiru, 2018). Chow et al. (1994) found that the use of different approach to inventory management will assist companies in enhancing their performance. In the light of the above argument, we hypothesize as follows:

H_{o2}: Inventory management has no significant effect on marketing performance of SMSEs in Calabar.

Transportation

Transportation is the single most important aspect of logistics activities in manufacturing organizations (Balou, 1997). The physical movement of finished products is pivotal as unless products do not reach the target customers, the demand or customer satisfaction cannot be fulfilled (Kalkan, 2018). According to Adelwini et al. (2023) transportation ensures delivery of products from the point of origin to the point of consumption. Pakurar et al. (2020) declared that timely availability of products is of prime importance as only then can the reason for manufacturing a

product be attained. Honay and Son (2019) and Omoush (2022) maintained that a transport and logistics system is formed by the processes of managing transportation services. Bihter and Ali (2015) noted that the forecasting and planning of Cargo flows, as well as the distribution of resources have a significant impact on the efficiency of these processes management (Ali et al., 2016).

According to Gudeta (2021) transportation can be described as the practice of transporting materials or persons from location to a designated place. Transport performs a significant part in the success, as the entire system will not be capable of functioning to its full capacity without the effective transportation of final goods and raw materials (Zunaira et al., 2021). According to Mukolwe and Wanyoike (2015) transportation can be described as the practice of transporting materials or persons from a location to a designated place. Muslimin et al (2015) asserted that transportation management involves activities that if dealt with correctly are considered to be the most successful and realistic in helping organizations attain their transportation objectives, particularly concerning cost savings, timelines, transport-associated optimization, and resource maximization.

In the assertion of Mogaka and Arani (2020) a transportation and logistics system is formed by the processes of managing transportation services. Mwangangi (2016) noted that forecasting and planning of cargo flows, as well as the distribution of resources, have a significant impact on the efficiency of these processes management. Similarly, for Wiasike and Juma (2020) transportation is one of the six key logistics activities that drive total logistics costs along with customer service (including parts, service support and returns goods handling), inventory management (including packaging and reverse logistics), warehousing and storage, materials handling and procurement and order processing (including information management and demand forecasting). On the basis of the foregoing deliberation, the following hypothesis is put forward for testing:

Ho_3: transportation management has no significant impact on marketing performance

Order processing

Order processing refers to handling voluminous products to make them reach the desired destination (Mpuon et al., 2021). Order processing operations or facilities are generally known as distribution centres (Mpuon et al., 2022). According to Omoush (2022) order processing comprises verifying the order received and checking whether the facility has the required amount of goods. At the individual level, order processing includes crating, filling, distributing, and fulfilling the requests and orders of the customers (Nthiwa & Wanjiru, 2018; Chow et al., 1994).

Omoush (2022) argued that in logistics, the purpose of order processing management is to make sure that every machine and workspace receives the right product at the right time in a suitable quantity and quality. Customer response and capital efficiency can only be accomplished by order processing logistics (Kalkan, 2018). According to Mukolwe and Wanyoike (2015) and Muslimin et al. (2015) the more responsive the supply chain and logistics management, the more reliable and up-to-date information about consumer purchasing behavior is relevant. Customer

preference are conveyed as instructions in most supply chains. Nevertheless, such orders cover anything from the original issuance, shipping, invoicing, or the selection of the order to handling the customer's needs (Mogaka & Arani, 2020' Wasike & Juma, 2020 and Omoush, 2 022). Based on the discussion above, we hypothesize as follows:

Ho4: Order processing has no effect on marketing performance.

2.2   Theoretical Specification of Model

Theoretical specification of model covers the definitions and theoretical foundations governing each of the dependent and independent variables. The need for theoretical model begins when a researcher wants to theoretically link the independent and dependent variables.

' **Figure 3.1:**   Showing the study's conceptual framework that establishes the inter-relationship between these two groups of variables.
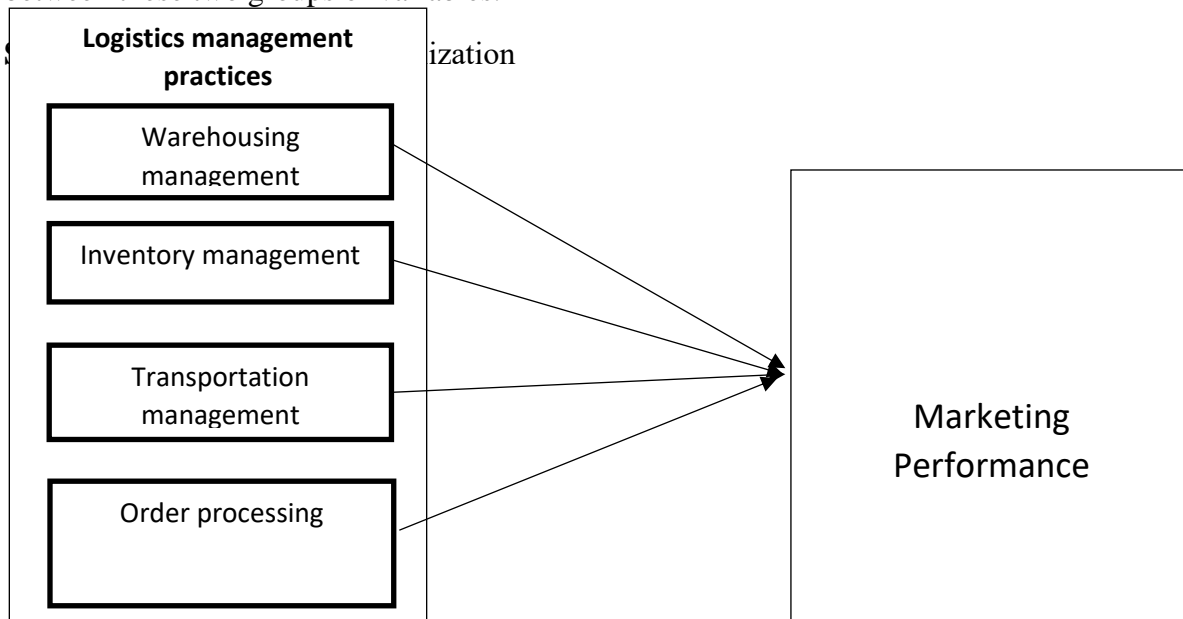
2.3   Theoretical framework

The study hinged on resource-based view theory and commitment-trust theory. The theories and their relevance to the study are discussed in this section. Although two theories are examined in this section, the anchor theory of this work is the resource-based view theory.

Resource-Based view theory (Barney, 1991)

Resource based view theory considers the firm as a bundle of resources. These resources and how there are integrated, distinguished organizations, allowing them to achieve a competitive advantage. The main idea is that having valuable, unique, inimitable, and non – substitutable resource allows organizations to design value – enhancing strategies that are difficult to copy by

competitors. Firm resources are important if they enable businesses to design and implement plans that reduce net costs and enhance net revenues beyond what would have been the case (Barney, 1991). The resource-based view is an interdisciplinary approach which makes a significant shift in thinking (Irian *et al*., 2013). The theory is interdisciplinary in that it has been built within the disciplines of economics, ethics, law, marketing strategy, supply chain management and general business (Barney, 1991). Scholars assert that resource-based view theory represent a new paradigm, although it has origins in Recardian and Penrosian economic theories that firms can gain sustainable exceptional returns if they have superior resources and are shielded by some of the isolating mechanism that prevent them from spreading across the industry (Barney, 1991). According to Lan (2001) while its exact impact is debated, two strategic scholars hold Edith Penrose's 1959 book "The Theory of the Company's Growth" to state several principles which would later influence the company's modern resource-based theory.

The resource-based view principles described the strategic resources that an organization can exploit to achieve sustainable competitive advantage (Prahalad and Hamel, 1990). Although the literature includes several different ideas about the definition of the resource advantage view point, the common team is the financial, legal, human, operational, intellectual and rational use of the resources of an organization (Wade and Halland, 2004). These resources are heterogeneous and imperfectly mobile, and the key management tasks are the awareness and arrangement of resources for sustainable competitive advancement (Williamson, 1999).

A key insight from the resource-based point of view is that not all resources are equally important and do not present the potential for sustainable competitive advantage (Wernerfelt, 1989). The longevity of any competitive advantage depends on how far resources cannot be imitated or substituted. Scholars pointed out that in practice, it can be very difficult to understand the casual relationship between the sources of profit and effective strategies. Hence, it requires a great deal of managerial effort to develop, cultivate and retain key resources, invest in organizational learning to build on resources and skills, create specific core competencies to allow them to outperform competitors by doing things differently (Rugman and Verbeke, 2002).

The theory of resource-based view argued that sustainable competitive advantage stems from drivers of superior skills and resources with major emphasis on the internal organizational resources as a way of planning process and achieving competitive advantage (Prahalad and Hamel, 1990). The principles of resource-based view further acknowledge that the dominant paradigm in the strategic planning school is a prescriptive approach that focuses management attention on external concern, notable structure of the industry (Barney, 1991). During the 1980s the so-called positioning school dominated the discipline. The theory will help agricultural products' producers' companies in Nigerian to develop and manage their tangible and intangible resources and capabilities. Firm's tangible resources to be developed and managed are as follows; Physical assets, such as financial resources and human resources, including real estate, raw materials, machinery, plant, cash, inventory, trademarks, brands and patents (Irian et al, 2013). While valuable intangible resources that will help to position the agricultural products' producer's companies in South-South of Nigeria include, knowledge or know-how, relationship with

customers, organizations reputation, accumulated experience, relationship with intermediaries, stakeholders, and culture (Lev, 2001).

The resource-based view theory will give opportunity to sales managers, logistics managers, marketing managers, procurement managers and other functional managers in SMSEs to employ heterogeneous resources different from other industries skills, capabilities, structure and firms design strategies that enhances competitive advantage in the market there by helping companies in the chain to forecast customers demand accurately, achieving sales growth and gaining market share. SMSEs in Calabar   will maintain competitive advantage by implementing a value creating strategy not simultaneously implemented by any current or potential competitors (Wade and Halland, 2004).

Commitment-trust theory (Morgan and Hunt, 1994).
Commitment is defined as an exchange partner believing that an ongoing relationship with another is so important that it warrants putting forth maximum effort to maintain it. In other words, the committed partner believes the relationship is worth working on in order to ensure that it lasts indefinitely. A lasting desire to sustain a valued relationship is defined as commitment. The strong notion that relationship commitment arises only when the relationship is regarded vital must align with the valued relationship. Similarly, their unwavering desire to keep a relationship going aligns to the idea that a devoted partner wants the relationship to last forever and is willing to put in the effort to keep it going.

 When one side has faith in the skill and integrity of an exchange partner, it is called trust. The readiness to rely on an exchange partner in whom one has faith is known as trust. It is an individual's generalized expectation that the word of another can be trusted. The trusting party's confidence is based on the solid opinion that the trust worthy party is reliable and has high integrity, which are attributes such as consistency, competence, honesty, fairness, responsibility, helpfulness and benevolence. The confidence that another corporation will take activities that will result in great outcome for the company as well as not take unanticipated acts that would result in negative outcomes is referred to as trust. This theory states that the two important indicators of exchange performance are commitment to and trust in an exchange partner (Morgan and Hunt, 1994). The theory upholds that successful channel partners cooperate and leverage their commitment and trust to enhance their marketing performance. Commitment refers to the desire of a channel actor to proceed with a valued relationship (Watson *et al*., 2015) while trust refers to the confidence that a channel partner has in the other partner integrity and reliability (Watson *et al*., 2015).

This theory will help SMSEs and its intermediaries to resolve functional conflict. They will always be disagreement or conflict in relational exchange, the hostility and bitterness resulting from disagreement not being resolved amicably can lead to such pathological consequences as relationship dissolution. However, when disputes are resolved amicably, such disagreements can be referred to as functional conflict because the prevent stagnation, stimulate interest and curiosity, prevent or provide a medium through which problems can be aired and solutions arrived. It is trust that leads a partner to perceive the future conflictual episodes will be functional. The theory also

helps in acquiesce which is the degree to which a partner accepts or adheres to another's specific request or politics. Besides, it will help channel actors in the sharing of formal and informal meaningful and timely information between firms communication network. Timely communication fosters trust by assisting in resolving dispute and aligning perceptions and expectations. Commitment – trust theory will help exchange partners to enhance their share value. When exchange partners share values, they indeed will be more committed to their relationships. Shared value is the extent to which partners have beliefs in common about what behaviour, goals and policies are important or unimportant, appropriate or inappropriate, right or wrong.

Marketing performance

Marketing performance is the alignment between the marketing team's stated goals and objects versus actual results (Mpuon, 2018a). It is measured using selected metrics and key performance indicators (KPIs), including return on investment, cost per sale, cost per lead, conversion rate, and customer lifetime value (Mpuon, 2023). Also, marketing performance is the metrics outcomes that marketing departments look at to determine how well their marketing activities are doing at achieving the goals in their marketing plans (Mpuon, 2019).

2.4   Empirical review

Ajoke et al. (2019) investigate the impact of logistics management on organizational performance to analyze the influence of transportation, inventory, and management and information flow on organizational productivity. Findings of the study shows that transportation management affects organizational effectiveness, there is strong relationship between information flow management and employees' efficiency, and there is equally strong relationship between inventory management and organizational productivity using Pearson correlation coefficient moment to test the hypothesis. The study concludes that factors associated with logistics management needs to be considered by the organization in their strategic plans as it will contribute significantly to a sustainable development to of the Nigeria economy. Wasike and Juma (2020) examined influence of logistics management practices on the logistics performance of humanitarian organizations using both descriptive and explanatory research design. The study found that humanitarian organizations engaged transportation management practices that allow for timely deliveries of goods and services to consumers, employ logistics management practices, which help the organization to avoid inventory disruption in the production cycle. The research also found that warehouse management methods promote the delivery of goods to the customers in the appropriate quantity. Based on the regression analysis the study established positive beta coefficients with all dimensions, inventory management practices, transportation practices, information flow practices and warehousing practices. The study concluded that any change made is expected to positively impact logistical effectiveness and efficiencies.

Omoush (2023) explored the impact of the practices of logistics management on operational performance using descriptive analytical approach to collect data from road transport companies in Jordan. According to the findings of the research, logistics management practices have a considerable positive impact on its dimension, (inventory management, warehousing, order

process management, transportation and packaging) on the operational performance of road transport companies in Jordan. As a result of the findings, it is suggested that industrial companies concentrate on all aspects of logistics operations such as purchasing, storage, transportation, distribution, handling, packaging, customer service and scheduling in the industrial sector.

Adelwini et al. (2023) investigated the effects of logistics management on organizational performance employing multiple linear regression. The findings showed that the aspects of logistics management that have a beneficial impact on organizational performance include inventory management, physical distribution and warehouse management. The study concluded that logistics plays an important role in supporting organizations as theory strive for more efficient management systems.

Based on the empirical investigation above, it is clearly seen that the studies focus on organizational performance not marketing performance. The lack of literature by scholars relating logistics management practices to marketing performance, could be the root cause of poor logistics efficiency and effectiveness in terms of marketing performance. Following the foregoing limitation, this study sought to investigate the limitation thereby bridging a gap in knowledge.

3.0   RESEARCH METHODOLOGY

The study adopted cross – sectional field survey of the quasi-experimental research design as a useful aid in examining the extent to which logistics management practices explain or predict the variables in marketing performance. The survey relies on a sample of elements from the population of interest which are measured at a single point in time. It is also a small sample approach that is particularly useful when examining the interrelationships among a number of variables. The research setting is a natural setting and the researcher cannot manipulate the research elements. The population of the study comprised of one thousand four hundred and seventy (1470) management staff of registered small and medium scale enterprises in Calabar, Cross River State of Nigeria. Due to envisaged difficulty in conducting a successful study on the entire population, the researcher decided to limit the number to a manageable size using Taro Yamen's formula as shown below:

n $= \frac{N}{1+N(e)2}$

Where

n = sample size

e = level of significant

N = population size

Applying the above formula
1470 ÷ 1+1470(05)2
n = 1470 ÷ 4.675o

n = 314,

Which was modified to three hundred and six (306) out of the three hundred and fourteen (314) copies of questionnaire given to the management staff of the companies' survey, three hundred and eight (308) were retrieved, two of the questionnaire were not suitable for inclusion in the final analysis resulting to a modified sample size of three hundred and six (306). The researcher adopted judgment sampling techniques which was based on the researcher's experience and knowledge about the sample units on the notion that selecting them was instrumental to the generation of relevant data for the research. Basically, the questionnaire as source of data collection was employed in the study. The five (5) point Like Scale of Agree = 1, Strongly Agree = 2, Neutral = 3, Disagree = 4 and strongly disagree = 5 was used to generate data. The study examined the effect of logistics management practices on marketing performance of small and medium scale enterprises. The independent variable is logistics management practices while the dependent variable is marketing performance. Primary data were collected using structured questionnaire title logistics management questionnaire (LMQ) adapted from Mpuon et al. (2023a) which was modified for the purpose of this research. Each questionnaire contains forty-one (41) questions, shared in two parts. The first part consists of six questions in the demographic characteristics while the second part consist of thirty-five (35) questions in the independent and dependent variables.

The instrument was validated by two experts in marketing and one expert in text and measurements all from the University of Calabar. To determine the reliability of the instruments, 30 copies of the instruments were tested on thirty (25) management staff of small and medium scale enterprises in Calabar who will not take part in the main study but were part of the population. The data obtained were subjected to Cronbach Alpha statistical tool. Results yielded reliability coefficients of 0.77, 0.79, 0.92, 0.83 and 0.92 for warehouse management, inventory management, transportation, order processing and marketing performance respectively. These reliability coefficients are all greater than 0.70 which implies that the instrument is reliable. Summary result of reliability analysis is presented in Table 3.1.

Table 3.1:   Cronbach Alpha Reliability Result Summary for the Instrument

Research Variables	N	K	Mean	Reliability coefficient
Independent variables				
Warehouse management	25	5	10.06	0.77
Inventory management	25	5	9.07	0.79
Transportation	25	5	7.03	0.92
Order processing	25	5	7.73	0.83
Dependent variable				
Marketing performance	30	5	14.43	0.92

Source: Researcher's Computation (2023)

4.0 RESULTS

4.1: Demographics of the respondents

Demographics variables	No. of Respondents	Percentage (%)
Gender	180	58.8
Male	126	41.2
Female	306	100.0
Total		
Marital status		
Married	143	46.7
Single	92	30.1
Widow	32	10.5
Divorce	22	7.2
Separated	17	5.6
Total	306	100.0
Educational Qualification		
NCE/OND	48	15.7
B.Sc/HND	164	53.6
M.Sc/MBA	46	15.0
PhD	48	15.7
Total	306	100.0
Working experience		
1- 4 years	87	28.4
5-9 years	90	29.4
10-15 years	32	10.5
16-20 years	52	17.0
21 and above years	45	14.7
Total	306	100.0
Designation		
Sales manager	169	55.2
Marketing manager	37	12.1
Supply chain manager	38	12.4
General manager	33	10.8
Procurement manager	29	9.5
Total	306	100.0

Source: Field survey (2023)

Table 4.1. Result reveals that 58.8% of the respondents were male and 41.2% of the respondents were female meaning that there are more male respondents than female respondents. The distribution of the marital status of the respondents indicates that 46.7% of the respondents were married, 30.1% were single, 10.5% were widowed, 7.2% were divorced and 5.6% of the respondents were separated which implies that the majority of the respondents were married.

Result also indicates that 15.7% of the respondents were NCE/OND holders, 53.6% were B.Sc/HND holders, 15.0% were M.Sc/MBA holders while the remaining 15.7% of the respondents were holders of PhD. Result of the educational qualification of the respondent shows that more than half of the respondents are B.Sc/HND holders. In terms of work experience, 28.4% of the respondents had 1-4 years of working experience while 29.4%, 10.5%, 17.0% and 14.7% of the respondents had 5-9 years, 10-15 years, 16-20 years and 21 and above years of working experience. The majority of the respondents had 5-9 years of working experience which is high enough for them to provide reliable responses on logistics management practices and marketing performance of small and medium scale enterprises in Calabar. Result indicates that 55.2% of the respondents were sales managers, 12.1% were marketing managers, 12.4% were supply chain managers, 10.8% were general managers and 9.5% of the respondents were procurement managers. More than half of the respondents were sales managers (55.2%).

The general implications of this result to the study is that, it provide data regarding the research participants and it is necessary for determining whether the individuals in this study are representative of the target sample of the population for the purpose of generalization. Summary of the demographics of the respondents is presented in Table

4.2   Statistical Analysis of Data
The data used in data analysis are presented in Appendix. The data were not included in the work due to the size of the data. Data were obtained on both the demographics of the respondents and on the research variables. Data obtained on the gender, marital status, educational qualification, working experience and designation of the respondents were analyzed and the result is presented in Table 4.1.

4.3   Presentation and Analysis of Empirical Results
Result in Table 4.2 shows the descriptive statistics for the research variables. Result shows mean scores of 23.19, 23.17, 6.81, 23.21 and 45. 18 for warehouse management, inventory management, order processing, transportation and marketing performance respectively with standard deviation of 1.94, 2.00, 1.90, 2.07 and 1.88 respectively. Based on the mean scores, order processing l was more rated than other logistics management practices variables. Result indicates that scores obtained transportation reported negative skewness which implies that the scores decreased more than it decreased.

The weighted mean scores obtained on these independent variables were all above the expected mean score of 3.00 meaning that the respondents agreed that these variables are very important in logistics management practices. For the dependent variables, weighted means was used instead of the mean scores and this is due to the differences in the number of items on each of the marketing performance variable. Result shows weighted mean scores of 48. 18. The normality of the data obtained was tested using Shapiro-Wilk test and the result obtained is presented in Table.

Table 4.2:   Descriptive statistics for the research variables

Research Variables	n	K	Mean	Weighted mean	SD	Skewness	Kurtosis
Independent variables							
Warehouse management	306	5	23.19	4.64	1.94	-0.61	-1.00
Inventory management	306	5	23.17	4.63	2.00	-0.55	-1.29
Transportation	306	5	6.81	1.36	1.90	0.73	-0.60
Order processing	306	5	23.21	4.64	2.07	-1.69	3.89
Dependent variable							
Marketing performance	306	10	45.18	4.52	4.01	-0.33	-1.03

Source: Researcher's Computation field survey Data, (2023)

Table 4.3: Summary of normality test using Shapiro-Wilk test for theresearch variables

	Shapiro-Wilk		
	Statistic	df	P-value
Warehouse management	0.820	306	0.000
Inventory management	0.681	306	0.000
Transportation	0.846	306	0.000
Order processing	0.295	306	0.000
Marketing performance	0.810	306	0.000

Source: Researchers computation (2023)

Result in Table 4.3 reveals that warehouse management (P-value = 0.000), inventory management (P-value = 0.000), transportation (P-value = 0.000), order processing (P-value= 0.0000)) and marketing performance (P-value = 0.000) have their P-values less than 0.05($P<0.05$). This indicates that all the research variables were not normally distributed. Therefore, to determine the univariate relationship between variables, the non- parametric correlation was used (Spearman Rank Correlation).

Table 4.4: Relationship between the research variables

Variables	1	2	3	4	5	6
1. Warehouse management	1					
2. Inventory management	0.346*	1				
3. Transportation	-0.259**	-0.501**	1			
4. Order processing	0.436**	0.166**	-0.154**	1		
6. Marketing performance	0.359**	0.236**	-0.070	0.108	0.295*	1

Source: Author's computation (2023) **correlation is significant at 1% (p<0.01).

Result in Table 4.4 indicates that transportation (r-value = 0.259, P<0.01), inventory management (r-value = 0.346, P<0.05) and order processing (r-value = 0.436, P<0.01) have significant positive relationship with marketing performance. Also, among the independent variables based on the univariate correlation analysis as presented in Table 4.4, warehouse management was found to have the most significant positive relationship with marketing performance of small and medium scale enterprises in Calabar. This result is only based on univariate analysis which may not give us true pictures of the relationship between the variables as each of the variables is treated individually. It is important to examine the combined effect of the variable and hence further analysis was carried out using multiple linear regression with marketing performance as the dependent variable and four logistics management practices variables as the independent variables (warehouse management, inventory management, transportation and order processing). Result of multicollinearity is presented in Table 4.5.

Test for Multicollinearity

Table 4.5: Multicollinearity test for collinearity among the variables

Independent Variables	Tolerance	VIF
Warehouse management	0.748	1.358
Inventory management	0.658	1.472
Transportation	0.776	1.253
Order processing	0.749	1.255

Source: Author's computation (2023) VIF- Variance Inflation Factor

The result presented in Table 4.5 shows tolerances of 0.748, 0.658, 0.776 and 0.749 for warehouse management, inventory management, transportation and order processing. The tolerances were all greater than 0.10 which implies that there is no evidence of multicollinearity. The Variance Inflation Factor (VIF) of 1.358, 1.472, 1.253, 1.255 and 1.308 were obtained for warehouse management, inventory management, transportation and order processing respectively. . The VIFs were less than 10.00 indicating that there is no evidence of collinearity among the independent variables. Hence, the independent variables are not collinear.

Test for Autocorrelation

Table 4.6: Test for autocorrelation using Durbin Watson test

Test statistics	Test value	Remark
Durbin Watson	2.592	No evidence of autocorrelation

Source: Author's computation (2023)

To check for autocorrelation which is one of the assumptions of a regression model, Durbin Watson test was used. Result as presented in Table 4.6 reveals Durbin Watson value of 2.592. The Durbin Watson value of 2.592 is greater than 1 but less than 3.00 which indicate that the error terms are not correlated as suggested by Field (Field, 2009).

Estimation of the Empirical Model (Multiple regressions)

The empirical model used in testing the hypotheses were estimated using Ordinary Least Square (OLS) method of estimation and the results obtained are presented in this section.

Table 4.7:   **Multiple regression summary showing the effect of logistics management practices variables on marketing performance of SMSEs**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	0.524	0.327	0.242	3.56424

Source: Author's computation, (2021)

Table 4.7 presents summary result of the effect of logistics management variables (warehousing management, inventory management, transportation, order processing) and marketing performance of SMSEs. Result shows coefficient of determination of 0.265 which indicates that logistics management variables accounting for 32.7% of the variation in marketing performance of SMSEs in Calabar.   Result of Analysis of Variance (ANOVA) showing whether there is a regression relationship between the dependent variable (marketing performance) and the independent variables (warehouse management, Inventory management, transportation and order processing) is presented in Table 4.8.

Table 4.8:   **ANOVA result summary showing the relationship between warehouse management, inventory management, transportation, order processing and marketing performance**

Model	Sum of Squares	Df	Mean Square	F-calc.	F-crit.	P-value
Regression	1265.454	5	299.091	31.6894	2.24	0.0000
Residual	3700.297	320	13.001			
Total	3795.752	306				

Source: Author's computation (2021) using SPSS version 20.0

From Table 4.8, the F-calculated of 31.6894 was obtained with P-value of 0.000 as against the F-critical of 2.24 at 0.05 level of significance. Result shows that the F-calculated (31.6894) is greater than F- critical (2.24) which means that there is a significant regression relationship between marketing performance and the channel logistics management variables (warehouse management, inventory management, transportation and order processing). This result implies that warehouse management, inventory management, transportation and order processing jointly predict marketing performance of SMSEs in. Result obtained from the ANOVA shows that the three independent variables (warehouse management, Inventory management, transportation and

order processing have a significant positive effect on marketing performance based on the parameter estimates of the multiple regression model is as presented in Table 4.9.

Table 4.9:   Parameters estimates of the regression result showing the relationship between, warehouse, management, Inventory management, transportation, order processing and marketing performance of SMSEs

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	P-value
	B	Std. Error	Beta		
(Constant)	14.104	3.958		3.564	0 0.000
Warehouse management	0.414	0.118	0.349	3.316	0.000**
Inventory management	0.463	0.130	0.191	4.013	0.003**
Transportation	0.220	0.138	0.057	5.454	0.384
Order processing	0.320	0.128	0.124	3.050	0.051*

*Significant at 5% (P<0.05), **Significant at 1% (P<0.01), t-critical = 1.97,

Source: Author's computation, (2021)

From Table 4.9, unstandardized coefficients of 0.414, 0463, 0.200, and 0.320 for warehouse management, inventory management, transportation, and order processing respectively. The result reveals that all the logistics management variables reported positive unstandardized beta coefficient which implies that these variables have positive contribution to marketing performance of SMSEs in the study area. Result also indicates that among the logistics management practices variables, transportation reported the highest value of both unstandardized and standardized beta coefficients meaning that it contributes more to marketing performance than other logistics management practices variables considered.

4.4   Test of Hypotheses

Hypothesis 1

Ho₁: warehouse management has no significant effect on marketing performance of SMSEs in Calabar, Cross River State.

Result in Table 4.9 shows that Warehouse management (β = 0.239, S E = 0.118, t-calc. = 3.316, P-value = 0.000, P-value<0.05) has positive effect on SMSEs. The standardized beta of 0.239 was obtained which means that if other variables are held constant, for every 1 unit improvement in the management of warehouse activities, marketing performance will increase by 0.239. Result also reveals t-calculated of 3.316 and t-critical of 1.97 at the 0.05 level of

significance. The t-calculated (3.316) is greater than the t-critical (1.97) at 0.05 level of significance. The null hypothesis is rejected. There is a significant effect of Warehouse management on marketing performance of SMSEs. This result indicates that when there is a significant improvement in the management of warehousing, there will be a significant improvement in the marketing performance SMSEs in the study area. This result also implies that warehouse management has a significant positive effect on marketing performance SMESs in Calabar, Cross River State

Hypothesis 2

Ho2:   Inventory management has no significant effect on marketing performance of SMSEs in Cross River State

Result in Table 4.9 reveals that inventory management (β = 0.191, S E = 0.130, t-calc. = 4.013, P-value = 0.003, P-value<0.05) has positive effect on marketing performance of SMSEs. The standardized beta of 0.191 was obtained which means that if other variables are held constant, for every 1 unit improvement Inventory management, marketing performance will increase by 0.191. Result shows t-calculated of 4.013 and t-critical of 1.97 at the 0.05 level of significance. The t-calculated (4.013) is greater than the t-critical (1.97) at 0.05 level of significance. The null hypothesis is rejected. Inventory management has a significant effect on marketing performance of SMSEs in Cross River State. This result implies that when there is a significant improvement in inventory management, there will be a significant improvement in marketing performance of SMSEs in Cross River State. This result also implies prosper inventory management enhanced marketing performance of small and medium scale enterprises.

Hypothesis 3

Ho3: transportation has no significant effect on marketing performance of SMSEs in Calabar, Cross River State

Result in Table 4.9 shows that transportation management (β = 0.220, S E = 0.138, t-calc. = 5.384, P-value = 0.384, P-value>0.05) has positive effect on marketing performance of SMSEs. The standardized beta of 0.220 was obtained which means that if other variables are held constant, for every 1 unit transportation management, marketing performance will increase by 0.220, Result also reveals t-calculated of 5.454 and t-critical of 1.97 at the 0.05 level of significance. The t-calculated (5.454) is greater than the t-critical (1.97) at 0.05 level of significance. The null hypothesis is rejected. Therefore, there is a significant relationship between transportation management and marketing of SMSEs in Cross River State.

Hypothesis 4

Ho4:   order processing has no significant effect on marketing performance of SMSEs in Cross River State of Nigeria.

Result in Table 4.9 shows that order processing (β = 0.124, S E = 0.128, t-calc. = 3.050, P-value = 0.051, P-value<0.05) has a positive effect on marketing performance of SMSEs in Cross

River State of Nigeria. The standardized beta of 0.124 was obtained which means that if other variables are held constant, for every 1 unit improvement in order processing management, marketing performance will increase by 0.124. Result also reveals t-calculated of 3.050 and t-critical of 1.97 at the 0.05 level of significance. The t-calculated (3.050) is greater than the t-critical (1.97) at 0.05 level of significance. The null hypothesis is rejected. There is a significant effect between order processing and marketing performance of SMSEs in Cross River State. This result indicates that order processing significantly affects marketing performance of SMSEs in Cross River State. This result also implies that when there is a significant improvement in the way order processing is managed, there will be a corresponding increase in the marketing performance of SMSEs in Cross River State.

4.5   Discussion of the Findings

The study showed a significant and positive effect of the four dimensions of logistics management practices (warehouse management, inventory management, transportation and order processing) on marketing performance. The result of hypothesis one revealed that t – calculated (3. 316) is greater than the t – critical (1.97) at 0.05 level of significant which implies that there is a significant and positive effect of warehouse management on marketing performance of SMSEs in Calabar. The test result of hypothesis 2 showed that the t – calculated of (4.013) is greater than the t – critical of (1. 97) demonstrating that inventory management has a significant and positive effect on marketing performance of SMSEs in Calabar. The result of the third hypothesis revealed that the t – calculated of (5. 384) is greater than the t – critical of (1. 97) at 0 05 level of significant meaning that there is significant and positive effect of transportation on marketing performance. Hypothesis four test results shows that the t – calculated value of (3. 0 50) is greater than the t – critical of (1. 97) at 0.05 level of significance which implies that order processing has a significant and positive effect on marketing performance of SMSEs in Calabar.

     Based on the above findings from the study, we discuss that logistics management practices is a strategic and competitive method spanning multiple contributing factors for company to respond logistically to external pressures as argued by Mogaka and Arani (2020). It was discovered that effective logistics management practices have become highly critical to sustaining a competitive advantage and entering new markets with developments which are emerging rising global trade, growing consumer demand for fast tailored response and removing trade barriers. The findings further demonstrated that logistics management practices help SMSEs to fulfil the requirements of customers and also stipulate series of decisions on the key logistics domains of operation of the company.

5.0   CONCLUSION AND RECOMMENDATIONS
5.1   Conclusion

     The point of departure for this survey concerns was perhaps the attempt to answer four research questions and four hypotheses on how logistics management practices can improve on their marketing performance using logistics management dimensions (warehouse, inventory management, transportation and order processing) to maintain a sustainable competitive advantage

in line with the proposed theories used in the study. These issues are relevant as many decisions makers in business practices as well as in academia discuss them more frequently than thinking about new possible interpretation of the phenomenon of inter- organization management of the transit flows between products and consumption. The empirical results of the study clearly underscore the following:

i.   Warehouse management, Inventory management, transportation management and order processing positively and significantly affect marketing performance of SMSEs in Calabar, Cross River State.

ii.   All the null hypotheses formulated were rejected.
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5.2 Recommendations

On the basis of the findings, the following recommendations are made:

i.   Firms should put in place effective and efficient warehouse management practices that will create an enabling environment for the actualization of the firm's overall marketing strategies

ii.   The firm's sales managers should focus on maintaining a balance inventory system to improve on their marketing performance.

iii. The best mode of transportation system should be chosen for effective marketing performance

iv.   For effective marketing performance, SMSEs in Calabar should adopt a good order processing system.

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