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ABSTRACT

This study explored the theoretical relationship between supply chain visibility and sales performance of oil and gas multinational firms in Rivers State. The study was conceptualized with supply chain visibility as a predictor variable to sales performance with measures such as sales volume and market share. From theoretical and empirical literature the study deduced that supply chain visibility is key and prerequisite to any supply chain effort and sales performance particularly among oil and gas multinational firms sequel to the empirical findings of other scholars in their various studies and contexts. The study concluded that supply chain visibility is a veritable driver to sales performance; key and prerequisite to any supply chain effort and sales performance particularly among oil and gas multinational firms in Rivers State. The study recommended that oil and gas multinational firms in Rivers State should prioritize supply chain visibility to improve their sales performance; oil and gas multinational firms in Rivers State should also adopt supply chain visibility to strengthen and fasten communication as this will in turn lead to better sales performance

Keywords: *Supply Chain Visibility, Sales Performance, Sales Volume, Market Share, Oil and Gas Multinational Firms.*

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INTRODUCTION

Lately, competition in almost every sector has began to shift from firm to firm to supply chain against supply chain, corporate chain stores are no exception. This shift can be attributed to a business environment that is characterized by constant change, shorter product life cycles, increasing customer requirements, product proliferation, and global sources of supply, manufacturing, and demand that has resulted in longer lead times (Zailani, Jeyaraman, Vengadasan & Premkumar, 2012). To compete in this environment, the firm and other members of the supply chain must be capable of delivering goods and services to consumers as quickly and inexpensively as possible (Kot, Onyusheva & Grondys, 2018).

In reality, there is frequently only a limited exchange of information between adjacent entities in a network. Many firms are forecast driven rather than demand driven because of lack of visibility, forcing them to make decisions in isolation of other supply chain members. The presence of functional silos also inhibits the flow of and access to data and information. Arif-Uz-Zaman and Ahsan (2014) note that the benefit of information sharing lies in the manufacturer's ability to be responsive to the retailer's needs. This can best be achieved through knowledge of the retailer's inventory levels and visibility of real demand, visibility through an assessment of the impact that this capability has on firm sales performance. Visibility is a veritable driver of sales performance yet previous research has not done well enough to examine the relationship between supply chain visibility and sales performance particularly among corporate chain stores (Chikan & Gelei, 2010). This research addresses that gap in the current knowledge base. The article is organized in four main sections beginning with theoretical perspectives of supply chain visibility and sales performance. This section is followed by the empirical postulations of various scholars that endeavour to formulate the relationship between supply chain visibility and sales performance of corporate chain stores. Research results are presented and discussed in the third section, while conclusions and future research direction are provided in the final section of the article.

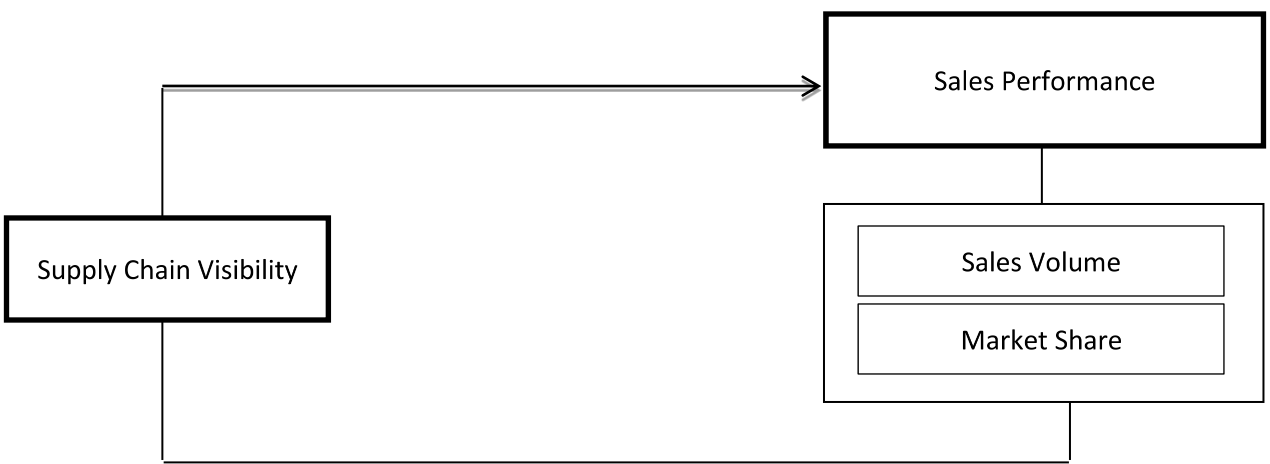

Figure 1: *Conceptual Framework of the relationship between supply chain visibility and sales performance of oil and gas companies in Rivers State*

Source: Desk Research, 2021.

Theoretical Perspectives of Supply Chain Visibility

The growing interest in supply chain management, along with the development of information and communication technologies such as electronic data interchange (EDI) and the Internet, have assisted corporate chain stores in managing complex buyer-seller relationships (Ahimbisibwe, Sebulime, Tumuhairwe & Tusiime, 2016). However, the concept of supply chain visibility has not been given the right attention among researchers and scholars in the field of supply chain management hence it remains a poorly understood concept in the literature.

Visibility has simply been described as the ability to see from one end to the other (Carvalho, Azevedo & Cruz-Machado, 2012). Holcomb, Ponomarov and Manrodt (2011) define this concept as the identity, location, and status of entities transiting the supply chain, captured in timely messages about events, along with planned and actual dates/times for these events. Holcomb, Ponomarov and Manrodt (2011) further notes that this definition along with all its detail seems to depend on an identifiable object such as a product or customer order. Barratt and Oke (2007) define supply chain visibility as the extent to which actors within a supply chain have access to or share information which they consider as key or useful to their operations and which they consider will be of mutual benefit thus, visibility has a range of levels determined by the amount of useful information that is shared across the supply chain.

Caridi, Moretto, Perego and Tumino (2014) noted that supply chain visibility on a global scope is the key to improving system performance. It is often the case that one member of a supply chain has no detailed knowledge of what goes on in other parts of the chain. Therefore, the key to improving supply chain visibility is sharing information among supply chain members ((Ahimbisibwe, Sebulime, Tumuhairwe & Tusiime, 2016). The impact that visibility has on performance is notable. Kot, Onyusheva and Grondys (2018) state that when end customer sales are taken into consideration when generating the forecast at the supplier level, even if complete visibility is not available there is a major improvement over simply relying on orders sent by the retailer. The ultimate goal for a firm as noted by Carvalho, Azevedo and Cruz-Machado (2012) is to be market driven. This involves being aware of events and trends, thereby implementing more accurate actions that will retain or attract customers, improve channel relations, or thwart competitors. Firms are able to do this because they can act on information that is timely and coherent. Visibility creates this capability.

The key to improving supply chain visibility is shared information among supply chain members (Kot, Onyusheva & Grondys, 2018). Sharing information in supply chains significantly increases its power due to the fact that information reduces uncertainty and thus reduces the amount of buffer inventory that is needed. Without visibility in the supply chain the respective members buffer inventory to hedge against uncertainties and risks. For this reason, the authors advocate that information about inventory, demand, forecasts, production, shipment plans, work in process, yields, capacities, and backlogs are accessible by key supply chain members (Zailani, Jeyaraman, Vengadasan & Premkumar, 2012). Moreover, lack of visibility often results in unnecessary costs through the use of expedited services or the wrong mode of transportation.

Concept of Sales Performance

Sales performance is the ability of a company's sales professionals to win at each stage of the customer buying process, and the speed at which each task in the sales process is performed. Carvalho, Azevedo and Cruz-Machado (2012) note that regardless of what industry, every manufacturer or supplier must improve sales performance, reduce the cost of selling, and ensure their survival. Chikan and Gelei (2010) proposed a hypothesis in which sales revenue maximizes dominance. Umair, Zhang, Han and Haq (2019) expressed that firms could seek to maximize revenue sales, market growth, market share or their employees' welfare instead of profit. Revenue maximizing strategies help sales revenue maximizing strategy enables firms to produce more output than firms adopting a profit-maximizing strategy. Umair et al (2019) concludes that as long as it possesses a secure source of capital, a revenue maximize is at a distinct advantage when competing with a profit maximizer.

Fugate, Mentzer and Stank (2010) posit that there is a need for a strategic and administrative orientation that shelters firms from storms created by environmental forces or variables and it is only when this is set in place that market and sales performance is ensured. Ahimbisibwe, Sebulime, Tumuhairwe and Tusiime (2016) suggest that a revenue-maximizing strategy places a higher value on sales while a profit maximizing strategy puts a greater emphasis on profits. According to Mohd and Yasuo (2013), sales performance is a firm's emphasis on success which comprises the marketing capability in response to the market demands and the adaptation capabilities in environmental change. In the same vein, Nwokah (2008) stressed that sales performance is the degree of the new product that meets customer expectations with regard to sales, a market share greater than its competitors, profitability, and the ability of the firm to respond to market and create customer satisfaction. Mohd and Yasuo (2013) used new product development speed, development cost efficiency, and product quality in order to reflect the marketing performance.

Lee (2000) argued that sales performance is the capability of firm to increase sales volume and firm activities which are the ultimate organizational goals in terms of financial performance. Marketing performance can be measured in terms of accounting indicators such as cash flows and profitability. Farris, Neil, Bendle, Phillip, Pfeifer and David (2010) suggested that marketing performance is measured by return on assets (ROA), and returning on investment (ROI). However, the marketing performance can be measured by "sales volume, sales growth, and market share, whereas financial performance can be measured by profitability, a percentage of sales, return on investment (ROI), profit margin, and profit growth (Nwokah, 2008). Thus, marketing performance is the perceptions regarding any outcomes that indicate firms' success including customer satisfaction, customer acceptance, sales growth, market share, and overall performance" (Ahimbisibwe, Sebulime, Tumuhairwe & Tusiime, 2016).

The term 'sales' refer to transactions between two parties where the buyer receives goods (tangible or intangible), services and/or assets in exchange for money" (Kotler & Amstrong, 2011). According to Dean (2015), no matter what industry, every manufacturer / supplier must improve sales performance, reduce the cost of selling, and ensure their survival (adopted in Kotler & Amstrong, 2011). By analyzing sales performance, managers can make changes so as to optimize sales going forward (Farris et al., 2010). According to literature, sales performance is a combination of sales effectiveness the ability of a company's sales professionals to win at each stage of the customer's buying process, and ultimately earn the business on the right terms and in the right timeframe and sales efficiency the speed at which each task in the sales process is performed (Caridi, Moretto, Perego & Tumino, 2014). According to Mohd and Yasuo (2013), sales effectiveness is not just a sales function issue; it's a company issue, as it requires deep collaboration between sales and marketing to understand what's working and not working, and continuous improvement of the knowledge, messages, skills, and strategies that sales people apply as they work sales opportunities.

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Measures of Sales Performance

The following measures of sales performance was adopted from Nwokah (2008).

Sales Volume

Sales volume represents the quantity or number of goods and services sold in the cause of operations of a company in a specified time. According to Kotler and Amstrong (2011), sales volume equals the quantity of items a business sells during a given period, such as a year or fiscal quarter. Kotler and Amstrong (2011) further asserted that it is a systematic process of identifying, measuring, classifying, recording and verifying the nature of firm's assets, liabilities and owner's equity. According to Mohd and Yasuo (2013), investors often judge the marketing prowess and managerial ability of a company's leadership through various metrics sales and sales volume being two of the most important. To ensure their approval rating does not downgrade to its lowest in the financier community, senior executives constantly delve into the company's sales data and product portfolio, heed what competitors are up to with respect to innovation, seize emerging market opportunities and attempt to expand market share.

Cavusgil (1996) in Mohd and Yasuo (2013) viewed sales volume as the quantity of total sales achieved in units or dollars. Sales volume explains important product development concepts since it provides the stakeholders with the figures on which analysis can be based to project further development, or the quantity or number of goods sold or services rendered in the normal operations of a firm in a specified manner and rendered in the normal operations of a firm during a given period. Nwokah (2008) state that the selling process is complicated by the fact that there are often many alternative ways in which each objective can be achieved (for example, an increase in revenue of 10% can be achieved by increasing prices, increasing sales volume at the company level or increasing industry sales).

Kotler and Amstrong (2011) see sales volume as a type of sales quota and states its advantages as easy to calculate and administer and simple to understand. For Nobilis (2010), sales volume is the core interest of every organization that is focused on sales and profit. When the volume goes up, everything else is manageable (margin, profit, numerical distribution) but when the volume goes down it is difficult to manage the business is ways that the company can use to influence volume increase. Kotler and Amstrong (2011) discuss of the growth stage in the product lifecycle and how sales volume increases at this stage. Umair, Zhang Han and Haq (2019) have it that providing a new product satisfies customer needs, it will be fuelled by repeat purchases and word of mouth publicity and sales will start to climb rapidly as a large number of new customers are attracted to the product for the first time.

Market Share

A company's market share is its portion of total sales in relation to the market it operates within. Market share represents the percentage of an industry or market's total sales that is earned by a particular company over a specified time period. Farris, Neil, Bendle, Phillip, Pfeifer and David (2010) argued that market share is calculated by taking the company's sales over the period and dividing it by the total sales of the industry over the same period. Market share increase can allow a company to achieve greater scale on its operations and improve profitability. Kotler (2000) saw market share as one of the crucial sales performance measures any firm can achieve.

Market share represent the percentage of sales a firm achieve within a specific period of time and in a particular market. Ltifi and Gharbi (2015) opine that market share is one of the marketing metrics that is constantly talked about in the field of marketing as a discipline as it compares the revenue of the firm with the total revenue of the market in question over a period of time. Ltifi and Gharbi further stated that the purpose behind measuring market share is to

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establish the relative position or share of the firm within the broader market place. In this study, the share of the firm in the market will be determined in relations to the extent of the promotional strategy. In effect it helps to understand the relative success of the firm in penetrating the market place, thus the relative market shares of a company attempts to compare a firm's market share with that of its nearest rivals. According to Farris, Neil, Bendle, Phillip, Pfeifer and David (2010), market share measures the preference of consumers for a firm's product offering over other similar product offerings from competitors.

Increase in market share however, requires more strategies by a firm (Ltifi & Gharbi). Adoption of low cost strategy, effective advertisement, application of differentiation strategy as well as dividing product into groups and focusing on a specific segment can have great effect of increasing the firm's market share percentage in the industry. This serves as a parameter for measuring market competitiveness as it is used to describe how efficient a firm is competing with the competitors. The market share yardstick helps managers to evaluate or examine both basic and optional demands in the market place. Fugate, Mentzer and Stank (2010) aver the market share of firm helps its managers to access both the total market growth or decline and customers' selection among competitor. By this, it can be said that losses in market share can mean serious challenge that will require strategy adjustments.

Empirical Review

Aviv (2002) studied Gaining benefits from joint supply chain forecasting on supply chain performance of manufacturing and service operations in Kenya. The study adopted the descriptive survey research design and was identified with supply chain visibility and information sharing. The questionnaire was used for data gathering. It employed regression analysis to test the extent of relationship between the variables. The study revealed that there is a statistically strong and positive relationship between supply chain visibility dimension and supply chain performance of manufacturing and service operations in Kenya thus supply chain visibility is key and prerequisite to any supply chain effort. In line with this, Barratt and Oke (2007) investigated the antecedents of supply chain visibility on operational performance in retail supply chains in Mexico. The study used the questionnaire and personal interview to generate its data. The study used person's product moment correlation to measure the level of relationship between the conjectural variables. Here, it was revealed that supply chain visibility has a very strong and positive relationship with operational performance in retail supply chains in Mexico.

Lee (2000) examined creating value through supply chain integration and visibility. The descriptive survey study used the questionnaire to generate its data. It also used person's product moment correlation to measure the level of relationship between supply chain integration and visibility and value creation. The study indicated a very strong and positive relationship between supply chain integration and visibility and value creation. More so, Holweg, Disney, Holmstrom and Smaros (2005) investigated Supply chain collaboration and competitive advantage of companies in Malaysia. The study adopted the descriptive survey design method and regression analysis. It found that there is a strong positive relationship between supply chain integration and visibility and value creation.

Discussion of Findings

From the various scholars' position, this study deduce that supply chain visibility is key and prerequisite to any supply chain effort and sales performance particularly among corporate chain stores in Rivers State. This deduction aligns with the findings of many empirical studies. For instance, Aviv (2002) studied gaining benefits from joint supply chain forecasting on supply chain performance of manufacturing and service operations in Kenya and found that there is a statistically strong and positive relationship between supply chain visibility dimension and supply chain performance of manufacturing and service operations in Kenya. Also, Barratt and Oke (2007) investigated the antecedents of supply chain visibility on operational performance in retail supply chains in Mexico and observed that supply chain visibility has a very strong and positive relationship with operational performance in retail supply chains in Mexico.

Lee (2000) examined creating value through supply chain integration and visibility and found that there is a very strong and positive relationship between supply chain integration and visibility and value creation. Holweg, Disney, Holmstrom and Smaros (2005) investigated Supply chain collaboration and competitive advantage of companies in Malaysia and found that there is a strong positive relationship between supply chain integration and visibility and value creation.

CONCLUSION AND RECOMMENDATIONS

From the theoretical and empirical literature reviewed and in line with the opinions of various scholars as highlighted in this study, we concluded that supply chain visibility is a veritable driver to sales performance; key and prerequisite to any supply chain effort and sales performance particularly among corporate chain stores in Rivers State.

Sequel to the theoretical and empirical postulations of various scholars on the subject matter of discussion we recommended the following:

- Oil and Gas Multinational firms in Rivers State should prioritize supply chain visibility to improve their sales performance
- Oil and Gas Multinational firms in Rivers State should adopt supply chain visibility to strengthen and fasten communication as this will in turn lead to better sales performance

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