The Influence of Supply Chain Management Practises on Operational Performance of Quoted Manufacturing Firms In Nigeria: Procurement Outsourcing and Order Process Management View

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Abstract – The study explored the influence of supply chain management practices on operational performance in manufacturing firms in Nigeria. The study looks at the impact of procurement outsourcing and order process management on the operational performance of quoted manufacturing firms in Nigeria. The study adopted the cross-sectional survey research design. Data were primarily sourced through administered questionnaires. A collection of four thousand nine hundred and eighty-four (4,984) employees of all manufacturing firms listed on the Nigerian Stock Exchange (NSE) and operating in Nigeria's Edo and Delta States comprise the study's population. A sample size of 370 was computed using Yamane's formula, and the same number of questionnaires was administered, but 318 were found fit to test the formulated hypotheses. Research data were analyzed using descriptive and inferential statistical instruments. Based on the ordinary least square regression, the study revealed that procurement outsourcing (β = 0.082974, t-Statistic= 3.049313 and p<0.05) and order process management (β = 0.349839, t-Statistic= 7.972484 and p<0.05) have a positive and statistically significant relationship with the operational performance of quoted manufacturing firms in Nigeria. Based on these conclusions, the study suggested that the facility and competence of the order processing system should be regularly assessed using indicators that tracked the flexibility and reliability of order handling. Lastly, the manufacturing firms' managers should sustain an information flow management system within the performance strategies of their businesses to ensure a continuous, reliable and efficient flow of materials and client orders. Keywords: "Manufacturing firms", "Operational performance", "Ordering process management", "Procurement outsourcing", "Supply chain management".

1. Introduction

Despite their length and complexity, the supply chains of manufacturing companies must constantly develop in order for the company to survive and thrive in a cutthroat market. However, it is uncommon to achieve the requisite level of performance optimality (Sillanpaa & Kess, 2012; Puska, Kozarevic & Okicic, 2020; Skipworth, Delbufalo & Mena, 2020). This is a sign that most manufacturing enterprises must improve, especially in a developing country like Nigeria.

Organizations must fully comprehend their daily operations in order to collaborate on the supply chain, use facilities for it, and manage organizational performance (Van Thai, Rahman & Tran, 2021; Tai, Duc & Buddhakulsomsiri, 2022). This has yet to be the case in the manufacturing sector, notably in Nigeria. In modern manufacturing sectors, supply chain management is a crucial business integration technique which creates a strategic advantage for the organization (Thoo, Huam, Yusoff, Rasli & Hamid, 2011; Sayed, Hendry & Zorzini Bell, 2021). The main and most pressing issue facing numerous manufacturing companies in Nigeria includes applying ineffective supply chain management practices and procedures. This includes a lack of effective supplier relationship management, poor customer relationship management, poor information flow management, poor order process management, low levels of procurement outsourcing and regulation awareness, poor manufacturing flow management, poor implementation of health and safety measures, use of poor material disposal procedures, ineffective communication system, application of inferior goods and storage/handling procedures, and more. However, if manufacturing firms needed to become efficient and flexible in their manufacturing methods, they needed to be acquainted with the best supply chain management strategies to manage the flow of goods from the point of production to the end user (Awino, 2011; Skipworth et al., 2020; Sayed et al., 2021; Van Thai et al., 2021).

Moreover, most previous studies had tended to focus more on the developed world (Ketchen & Hult, 2007a&b; McKinnon, Edwards, Piecyk & Palmer, 2009; Sanchez-Rodrigues, Cowburn, Potter, Naim & Whiteing, 2009; Davis-Sramek, Germain & Stank, 2010; Fugate, Mentzer & Stank, 2010; Green, Zelbst, Meacham & Bhadauria, 2012). Evidence showed that each country's cultural, social, economic and environmental aspects did influence the link between supply chain management and performance (Kaufmann & Carter, 2006; Miguel & Brito, 2011). Keebler and Plank (2009) agreed that the findings of US firms could not represent the universe of companies, nor could findings be generalized to other countries. In addition, industrialized nations like those in Europe, America, and a portion of Asia had more advanced business structures and infrastructure than developing nations had, making it simpler for them to implement supply chain management practices. It was necessary to do empirical research in various settings, especially in emerging economies like Nigeria, to generalize the causal relationship between supply chain management and the success of manufacturing enterprises.

Although related research has been done in this area of study in Africa and other developing countries, their findings could be more consistent and consistent. For example, the empirical finding of Mutimos (2014) regarding reuse products' effect on performance is inconsistent with the result of Kabergey and Richu (2015). So also, the empirical finding of Smith and Chang (2010) in respect to customer relationship management impact on performance contradicts the outcomes of Thoo *et al.* (2011), Iriqat and Abu Daqar (2017), and

Prabusankar (2017) respectively. In light of this, the study evaluates the correlation between the supply chain management variables (procurement outsourcing and order process management) and the operational performance of listed manufacturing firms in Nigeria to validate the existing findings and close the gap between supply chain management practices and operational performance. Having reviewed the different constructs used by the authors, the absence of a comprehensive framework encompassing all supply chain management activities on both the upstream and downstream sides necessitated the use of the constructs. Therefore, the study seeks to:

- i. Examine the relationship between procurement outsourcing and operational performance in manufacturing firms in Nigeria.
- ii. Evaluate the relationship between order process management and operational performance in manufacturing firms in Nigeria.

2. Literature Review

2.1 Concept of Operational Performance

Operational performance was described by Voss, Ahlstrom, and Blackmon (1997) as the quantifiable results of a firm's operations like productivity, reliability, and production cycle turn that influence key business performance indicators like market share and customer satisfaction. The performance indicators of manufacturing firms include reliability, responsiveness, agility, cost and asset management (Sillanpaa & Kess, 2012). However, the most common performance indicators applicable to manufacturing and service firms cost, quality, speed, flexibility and dependability (Slack, Chambers & Johnston, 2004), and improved customer satisfaction (Zhang, Vonderembse & Lim, 2005). Cost is about doing things economically to improve efficiency and productivity (Batista, 2009). Dependability involves being reliable by doing things as promised and on time (Batista, 2009). While Customers satisfaction has to do with developing logistics flexibility which enabled quick replenishment of incoming materials, supply of quality components, rapid delivery of finished products and reliable services to customers (Zhang et al., 2005) plus reduced customer complaints, increased customer compliment to the firm and growth in value-added productivity (Tracey & Tan, 2001). Improved operational performance in firm results in various benefits. Among them include better customer service and customer retention, lower prices, better capacity utilization, efficient risk management, quick service and delivery of goods, increased visibility of relevant performance, higher productivity, and improved competitive position in the market. Some other benefits include customer compliments to the firm, reduced scrap, reduced inventory levels, reduced customer complaints and improved quality (Ninlawan, Seksan, Tossapol & Pilada, 2010). However, this study measures the operational performance of the quoted manufacturing firms in Nigeria in terms of cost, quality, speed, flexibility, dependability, and customer satisfaction.

2.2 Supply Chain Management

Even if initially described as a chain, the supply chain can currently be defined as the network of companies that are involved through upstream and downstream linkages in the different processes and activities that create value in the form of products and services in the hands of the ultimate customer (Christopher, 1998; Puska et al., 2020). Mentzer, DeWitt, Keebler, Min, Nix, Smith and Zacharia (2001) define SCM as encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities, including coordination and collaboration with suppliers, intermediaries, third-party service providers, and customers. SCM is the management and integration of the complete business processes that produce goods, services, and information that create customer value (Cooper, Lambert & Pagh, 1997). Authors such as New and Payne (1995), Christopher (1998), and Simchi-Levi, Kaminsky and Simchi-Levi (2000) define supply chain management as the integration of key business processes among a network of interdependent suppliers, manufacturers, distribution centres, and retailers in order to improve the flow of goods, services, and information from original suppliers to final customers, with the objectives of reducing system-wide costs while maintaining required service levels. Supply chain management deals with the incorporation of critical corporate practises from the end user through the original suppliers to deliver goods, services, and information that add value for clients and other stakeholders, according to the Global Supply Chain Forum (GSCF) (as cited in Lambert, Cooper & Pagh, 1998).

Conversely, a supply chain is a network of organizations performing various processes and activities to produce value in products and services for the end customer (Christopher, 1992). SCM concerns the integrated and process-oriented approach to the supply chain's design, management and control, aiming to produce value for the end customer by lowering cost and improving customer service (Bowersox & Closs, 1996; Giannocearo & Pontrandolfo, 2002). Scott and Westbrook (1991) portray SCM as the chain linking each element of the manufacturing and supply process from raw materials to the end-user or customer, encompassing some organizational boundaries and treating all organizations within the value chain as an integrated virtual business entity. Supply chain goals are to achieve low operating costs, minimize the assets in the chain and provide service to customers (Omigie, 2018; Schary & Skjoett-Larsen, 2001; Huo, Haq & Gu, 2021).

2.3 Procurement Outsourcing

According to Mojsilovic, Ray, Lawrence and Takriti (2007), procurement outsourcing is handing off specific essential procurement tasks to a third party, such as supplier management and sourcing, to cut costs generally or narrow the company's emphasis to its core strengths. Procurement service providers do deliver advanced expertise, which improves the capability of the organization since it can use the expertise and outsourced management experience to run its activities (Bailey, Masson & Raeside, 2002; Skipworth *et al.*, 2020; Sayed, Hendry & Zorzini Bell, 2021; Van Thai *et al.*, 2021). However, according to Joel and Linda (2008), it is paramount that firms develop strong relationships and partnerships with suppliers, inclusive of third-party service providers based on a strategic perspective, and then manage the relationships to create full value for all participants in the supply chain. According to Randall (1993), organizations undergo rapid changes due to

changing internal and external environments. They will likely benefit by embracing procurement outsourcing as an operational strategy to reduce operational costs. In procurement outsourcing, several practices are observed between the manufacturing firms and third-party service providers, including consultancy services, distribution and logistics services, warehousing services, information systems management, purchasing functions, supplier management and inventory management (Leenders, Fearon, Flynn & Johnson, 2002). Bailey et al. (2002) studied outsourcing in Edinburgh and Lothians. They suggested that improving the quality of service, reducing operation costs, focusing on the core business functions, and accessing advanced technology and management experience were some of the major motivations for outsourcing. According to Belcourt (2006), the rationale for outsourcing some functions or processes includes substantial financial economies, increased ability to focus on strategic issues, access to technology and specialized expertise, and an ability to demand measurable and improved service levels. According to Minahan (1995), Procurement officers can outsource consultancy services to optimize productivity, reduce operational costs, increase supply chain visibility, increase the quality of goods and services, and improve customer care. However, the research's first hypothesis states that:

H01: Procurement outsourcing does not significantly impact the operational performance of quoted manufacturing firms in Nigeria.

2.4 Order Process Management

According to Stevenson and Spring (2009), Order process management involves identifying the collective tasks associated with fulfilling an order for goods or services placed by a customer, including all activities necessary to define customer requirements, design a network, and enable the firm to meet customer requests while minimizing the total delivered cost. Christopher (2005) defined *Order processing management* as the term used to identify the collective tasks associated with fulfilling an order for goods or services a customer places. It formed the basis for the information flow in a supply chain system. Whereas many aspects of information were critical to supply chain management operations, the processing of orders is of principal significance (Bowersox, Closs & Cooper, 2010). Lin and Shaw (1998) introduced the core objective of order process management characterized by two dimensions: the first is characterized by delivering qualified products to fulfil customer orders at the right time and right place, and the second is concerned with achieving agility to handle uncertainties from internal or external environments.

In contrast, Forslund's (2007) study concentrated on the impact and significance of the worth of information amid the client and organization within the order fulfilment process and how this can influence the supply chain. The order processing system is the communications network which provides information required for managing the interfaces between the supply chain and the other functional areas of the organization within the supply chain (Ninlawan *et al.*, 2010). Order process management spans the boundaries among internal functions, suppliers, and customers, creating value by leveraging various partners' operational and informational resources in a supply chain network to ultimately meet end-customer requirements cost-effectively (Davis-Sramek, Germain & Stank, 2010). Once a customer makes an order, the supplier of the organization concerned must deliver the product

and service as promised to and expected by the customer or risk forfeiting future business to that customer (Davis-Sramek *et al.*, 2010). Hence, the second Hypothesis:

H02: Order process management does not significantly impact the operational performance of quoted manufacturing firms in Nigeria.

2.5 Theoretical Underpinning

This study is based on the Agile Supply Chain Theory. Iaccoca Institute of Lehigh University put forward the agile manufacturing concept in 1991 (Barasa, Simiyu & Iravo, 2015). The capability to adapt to changing market demand regarding volume and diversity is a key component of agile production. Agile manufacturing is based on lead time reduction and has shown to be effective whenever product life cycles are short, and market demand is unpredictable (Towill & McCullen, 1999). Lumsden (1998) argues that an agile supply chain can flexibly adapt to the fast-changing environment and thus quickly gain customer satisfaction. Yusuf, Sarhadi and Gunasekaran (1999) terms agility as the successful exploration of competitive bases of innovation proactivity, speed, flexibility, product/service quality, and profitability through the integration of reconfigurable resources and best practices in a knowledge-rich environment to provide customer-driven products and services in a fast-changing market environment. Agile firms or companies perform all physical activities rapidly and accurately because of faster material, information and decision flow through the entire supply chain network, enabling a shorter response to the market needs (Naylor, Naim & Berry, 1999). The more quickly a supply chain can transfer goods, information, and decisions through it, the faster it can satisfy client demands. Agile manufacturing uses market knowledge and a virtual corporation to exploit profitable opportunities in a volatile marketplace (Naylor et al., 1999).

3. Methodology of Study

The research design for this study was a cross-sectional survey. In learning more about the operational effectiveness of manufacturing companies in Nigeria and supply chain management characteristics, data were systematically gathered from the sampled respondents using questionnaires. Four thousand, nine hundred and eighty-four (4,984) employees from the production unit/department, procurement unit/department, warehouse unit/department, logistics unit/department, and marketing unit/department of all manufacturing firms quoted on the Nigerian Stock Exchange (NSE) and operating in Nigeria's Edo and Delta States make up the study's population. Using the Yamane (1964) formula, a sample size of 370 was calculated because the population is known and the same number of questionnaires was distributed; however, only 318 were deemed to be useful. Descriptive and inferential statistics were used to analyze the research data. The descriptive measures used were frequency tables, percentage analysis, and means. The applied ordinary least square (OLS) regression and Pearson correlation techniques are the inferential statistics measurements. Statistical Package for Social Sciences was used to analyze the data (SPSS version 21.0). The following describes the regression model used in this study: $OP = \alpha + \beta 1 POS + \beta 2 OPM + \varepsilon$

Where OP = Operational Performance; POS = Procurement Outsourcing; OPM = Order Process Management; α is constant, $\beta 1 \& \beta 2$ are coefficients to estimate, and ε is the error term.

4. Data Analysis and Presentation

This segment presents the analysis of the data collected from questionnaire administration. The presentation and analysis of the data in this section align with the study's aim. Out of 370 copies of the questionnaire administered, 318 were found usable. Out of the total of 318, 10 (3.1%) were obtained from respondents from Seven-Up Bottling Company; 180 (56.6%) were obtained from Presco Plc, 15 (4.7%) were obtained from Guinness Nigeria Plc, 1 (0.3%) were obtained from Austin Laz and Company Plc, 12 (3.8%) were obtained from Beta Glass Plc, while 100 (31.4%) were obtained from respondents from Company Plc. Firstly, the demographic features of the respondents which include marital status, gender, age, educational qualification and department/unit were presented and discussed. The relationships between operational performance (the dependent variable) and procurement outsourcing and order process management (the independent variables) were established using Pearson correlation and the ordinary least square (OLS) regression tool for analysis. Finally, the tested research hypotheses and results from the data analysis were discussed.

4.1 Description of Respondents' background information

The respondents' various background details, including gender, marital status, age, level of education, and department, are included in this section. The results are in Table 1 below:

| Variable | Category | Frequency | Percent | Cumulative Percent |
|------------------------------|------------------|-----------|---------|---------------------------|
| | Male | 221 | 69.5 | 69.5 |
| Gender | Female | 97 | 30.5 | 100 |
| | Total | 318 | 100.0 | |
| | Single | 125 | 39.3 | 39.3 |
| Marital Status | Married | 192 | 60.4 | 99.7 |
| Marital Status | Divorced | 1 | 0.3 | 100 |
| | Total | 318 | 100.0 | |
| | 1-20years | 21 | 6.6 | 6.6 |
| | 21-40years | 142 | 44.7 | 51.3 |
| Age of Respondents | 41-60years | 145 | 45.6 | 96.9 |
| | Above 60years | 10 | 3.1 | 100 |
| | Total | 318 | 100.0 | |
| | SSCE/GCE | 50 | 15.7 | 15.7 |
| Educational Qualification | ND/NCE | 97 | 30.5 | 46.2 |
| Quanneation | HND/First Degree | 152 | 47.8 | 94.0 |

Table 1: Demographic Information of Respondents

| Variable | Category | Frequency | Percent | Cumulative Percent |
|-----------------|-------------|-----------|---------|---------------------------|
| | Masters | 19 | 6.0 | 100 |
| | Total | 318 | 100.0 | |
| | Production | 164 | 51.6 | 51.6 |
| | Procurement | 45 | 14.2 | 65.7 |
| | Warehouse | 42 | 13.2 | 78.9 |
| Department/Unit | Logistics | 38 | 11.9 | 90.9 |
| | Marketing | 29 | 9.1 | 100 |
| | Total | 318 | 100.0 | |

Source: Field Survey

Gender: Table 1 shows that the majority of the respondents are male, which is 221, accounting for 69.5% of the respondents. The female respondents consist of 97, which accounts for 30.5% of the total respondents.

Marital Status: The marital status shows that 125 (39.5%) respondents were single, while 192 (60.4%) were married. Only one respondent representing 0.3%, divorced.

Age of Respondents: The age distribution shows that the majority of the respondents (145, 45.6%) were between 41 and to 60 years old. This is followed by 21-40 years old (142, 44.7%) and 1-20 years (21, 6.6%). Finally, the age group above 60 years accounts for 3.1% of the total respondents.

Educational Qualification: Only 50 employees have SSCE/GCE. This category accounts for 15.7%. 97 (30.5%) of the respondents have ND/NCE, while 152 (47.8%) of the respondents have a first degree (HND/B.Sc Degree).

Respondents with postgraduate qualifications (Master's) account for 6%. It can be inferred that many respondents are educated enough to respond appropriately to the items in the questionnaire.

Department: Five departments were used to classify the responses. A large majority of the respondents work in the production department. 51.6% of the total respondents are in this group. 14.2% of responses are from the procurement department, and 10.1% are from the warehouse department. 11.9% and 9.1%, respectively, of respondents come from the departments of logistics and marketing.

4.2 Correlation Analysis

Pearson Correlation was conducted to establish the possible association between the variables of interest, as shown in Table 2 below;

| Tuble 2. Fearson Correlation Coefficients Among Research variables | | | | | |
|--|------------------------------|----|-----|-----|--|
| | Variables | ОР | POS | OPM | |
| | Operational Performance (OP) | 1 | | | |

 Table 2: Pearson Correlation Coefficients Among Research Variables

| Procurement Outsourcing (POS) | 0.145^{**} | 1 | | |
|--|---------------|--------------|---|--|
| Order Process Management (OPM) | 0.483^{**} | 0.150^{**} | 1 | |
| **. Correlation is significant at the 0. | 01 level (2-t | tailed). | | |
| Source: Researcher's computation | | | | |
| | | | | |

Table 2 shows that operational performance is positively and significantly related to procurement outsourcing (r=0.145, p < 0.05) and order process management (r=0.483, p < 0.05). According to Hair Jr., Black, Babin and Anderson (2014), multicollinearity between exogenous latent constructs is present statistically when the correlation coefficient is 0.90 and above. Hence, multicollinearity is absent since the correlation coefficient between the dependent variable (operational performance) and the independent variables (procurement outsourcing and order process management) are below the benchmark of 0.90.

4.3 Regression Analysis Results

Regression analysis was performed to establish the relationship between supply chain management practice variables and operational performance in understudied manufacturing firms. The result is shown in Table 3 below:

| Operational Terjormance | | | | | |
|---|-------------|--------------------|-------------|----------|--|
| Dependent Variable: Operational Performance | | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. | |
| С | 1.093063 | 0.250909 | 4.356420 | 0.0000 | |
| Procurement Outsourcing (PO) | 0.082974 | 0.027211 | 3.049313 | 0.0025 | |
| Order Process Management (OPM) | 0.349839 | 0.043881 | 7.972484 | 0.0000 | |
| R-squared | 0.423579 | | F-statistic | | |
| Adjusted R-squared | 0.414342 | Prob(F-statistic) | | 0.000000 | |
| Observations | 318 | Durbin-Watson stat | | 1.819695 | |

Table 3: Relationship Between Supply Chain Management Practise Variables and Operational Performance

Source: Researcher's computation

Operational Performance: Results in Table 3 reveal that operational performance is positively and significantly related to procurement outsourcing and order process management at a 5% significance level. The coefficient of determination (R2) value of 0.4236 was obtained. The Adjusted R2 of 0.4143 shows that the independent variables jointly explained 41.43% of the variation in the dependent variable. The Durbin-Watson statistic of 1.8197 reveals the absence of autocorrelation because the Durbin-Watson statistic is approximately 2.00 (Studenmund, 2000). The F-statistic of 45.8542 is significant at p<0.05 (p=0.000). This indicates that the dependent and independent variables have a statistically significant connection.

Hypotheses Testing

The results in Table 3 were used to test the hypotheses stated for this study:

H01: Procurement outsourcing does not significantly impact the operational performance of quoted manufacturing firms in Nigeria.

Table 3 shows a positive and statistically significant relationship between procurement outsourcing (β = 0.0829; p<0.05) and operational performance. The t-statistic of 3.0493 and p-value of less than 5% confirmed the result. Based on the result, we reject the null hypothesis. We, therefore, conclude that procurement outsourcing significantly impacts the operational performance of quoted manufacturing firms in Nigeria.

H02: Order process management does not significantly impact the operational performance of quoted manufacturing firms in Nigeria.

Table 3 shows that there is a positive and statistically significant relationship between order process management (β = 0.3498; p<0.05) and operational performance. The t-statistic of 7.9725 and p-value of less than 5% confirmed the result. Based on the outcome, we reject the null hypothesis. Thus, we conclude that order process management considerably impacts the operational performance of quoted manufacturing firms in Nigeria.

5. Discussion of Findings

First, for procurement outsourcing, $\beta = 0.082974$, t-Statistic= 3.049313, and p<0.05 shows that there is a positive and statistically significant relationship between procurement outsourcing and operational performance. Therefore, we conclude that procurement outsourcing significantly impacts the operational performance of quoted manufacturing firms in Nigeria. This finding supports the outcome of Kinyanjui (2014), that investigated the connection between manufacturing companies' supply chains' performance and procurement outsourcing in Nairobi. According to the study, supply chain performance and procurement outsourcing are positively correlated. It also corresponds to the findings of Kogoh (2015), which investigated the effect of outsourcing on the performance of the logistics industry in Kenya. It was revealed that outsourcing order processing, transport logistics and warehousing on the functioning of the logistics sector in Kenya was discovered to have a statistically significant positive impact. However, the finding of this study is inconsistent with Kogoh's (2015) investigation in the area where Packaging logistics outsourcing does not significantly impact the performance of the logistics industry in Kenya. In addition, our result also conforms to the findings of Khalili and Adhami (2014), Nyangau, Mburu and Ogolla (2014), Adu-Gyamfi (2015), Mwichigi and Waiganjo (2015), and Muthoni (2016) accordingly. Mwichigi and Waiganjo (2015) revealed that outsourcing services at Kenya Power had reduced operational costs and resulted in operational efficiency. The study's findings indicate a positive correlation between an administrative, financial, human resource, and technical outsourcing services and operational performance. Muthoni (2016) concludes that if an organization is enthusiastic about improving its supply

chain performance, it should outsource all functions of the various supply chain processes whose outsourcing leads to significant improvement of its performance. In comparison, it is preferable to carry out internally those supply chain processes activities whose outsourcing does not significantly enhance the company's performance.

However, for order process management, β = 0.349839, t-Statistic= 7.972484, and p<0.05 shows that there is a positive and statistically significant relationship between order process management and operational performance. We, therefore, conclude that order process management does significantly impact the operational performance of quoted manufacturing firms in Nigeria. This finding validates the study of Perry (2012), Kogoh (2015), and Mwangangi (2016), respectively. According to Perry's (2012) investigation, order fulfilment positively correlated to organizational performance and competitive advantage. The study of Mwangangi (2016) established that order process management positively and significantly influences the performance of firms. However, Kogoh (2015) revealed that order processing outsourcing has a statistically positive effect on the performance of the logistics industry in Kenya. This research outcome is also supported by Wardaya *et al.* (2013) standpoint that transmission of customers' orders triggers the supply chain management processes within the firm, and through order processing, handling and monitoring of orders could be addressed from the time the customer placed it to the delivery of the shipment documents and invoice to the customer.

6. Conclusion and Recommendations

This study examined the impact of supply chain management practices on the operational performance of quoted manufacturing firms in Nigeria. The study examined the impact of procurement outsourcing and order process management on the operational performance of quoted manufacturing firms in Nigeria. In this study, the independent variables are procurement outsourcing and order process management, while the dependent variable is operational performance. The Pearson correlation coefficients show that operational performance is positively and significantly related to supply chain management practice variables, i.e. procurement outsourcing and order process management, at a 5% significance level. Also, based on the ordinary least squares regression, the study revealed that procurement outsourcing (β = 0.082974, t-Statistic= 3.049313 and p<0.05) and order process management (β = 0.349839, t-Statistic= 7.972484 and p<0.05) have a positive and statistically significant relationship with the operational performance of quoted manufacturing firms understudied. Therefore, we conclude that procurement outsourcing and order process management significantly impact the operational performance of quoted manufacturing firms in Nigeria.

Based on the aforementioned findings, the study recommends that the management of the manufacturing firms should take legal actions against third parties offering the services or products being outsourced to prevent information leaks or an infringement of company privacy. The management of understudied manufacturing firms should conduct a benchmarking exercise for the best players in the industry as a way to improve their

procurement outsourcing practices. This would allow them to attain and maintain an unmatched supply chain performance. Moreover, the manufacturing firms should concentrate on the production and services they have expertise in and outsource those functions to other firms or individuals who can do better for them. The facility and competence of the order processing system should be regularly assessed using indicators that track the flexibility and reliability of order handling. Lastly, the manufacturing firms' managers should sustain an information flow management system within the performance strategies of their businesses to ensure a continuous, reliable and efficient flow of materials and client orders.

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