



## ENHANCING LOGISTICS PERFORMANCE IN NIGERIA THROUGH STRATEGIC PROCUREMENT PRACTICES

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**ABSTRACT:** This study investigated the strategic procurement initiatives and logistics performance in Nigeria. The study adopted analytical cross sectional design and correlation design. Randomized quota of business owners from ten selected logistics on basis of accidental sampling technique and quota sampling method was utilized for the study. A total population of 400 and sample size of 200 was determined using Slovin's Formula at 0.05 level of significance. The 200 copies of questionnaire were administered, only 196 was deemed fit after processing, retrieval, coding and cleansing. The Parallel reliability was used to determine the consistency of the instrument that results to 95.50 (0.955). Two research questions and two hypotheses were raised which was tested with parametric measurement using Pearson Product Moment Correlation because of its monotonic function via SPSS 25 version. From the findings, procurement sustainability initiatives concept strongly correlates with the logistic performance proxies. Hence, procurement initiatives and e-procurement significantly facilitates the effectiveness and efficiency of logistic performance. Hence, it was revealed that the alternate hypotheses were accepted. Based on the findings and conclusion, this study contributes to the knowledge that e-procurement facilitates logistics performance. It could be recommended that management of logistics firms should adopt strategic initiatives to enhance logistics performance in the area of cost savings; adopting and implementing initiatives such as outsourcing, groups purchasing organization, just-in-time and suppliers management relationship.

**Keywords:** Procurement Initiatives, Supply Chain Management, E-Procurement, Logistics Performance

### 1.1. Introduction

Procurement initiatives focus on the entire supply cycle within an organization with the aim of optimization. Primarily, procurement goals seek to; managing supplier relationship, minimizing costs and reducing risks within the cycle.

Many firms now have dedicated procurement team that works across the business ensuring that all stakeholders are involved in the past few years, the importance of procurement initiatives has been highlighted by the Covid pandemic, Brexit in the UK, the climate crisis and the disruption of Russia and Ukraine war all affecting supply

markets. Pressure on supply and demand political, and environmental factors are forcing firms to frequently review their supply chain long-term strategy, and tactical procurement during high risk periods (Agarwal, Giraud-Carrier & Li, 2018).

Procurement is increasingly involved in ensuring corporate social responsibility (CSR) objectives built into procurement policy to ensure ethically sourced materials. Supplier management, risk management, and supply chain management all come under the procurement function, so a procurement organization, will be faced with the task of managing in those areas. The procurement department holds a lot of responsibilities. Therefore, the possession of extensive procurement knowledge of the sourcing process, business purchasing history, and deep insights into how to enhance firm overall operations is highly required. Procurement skills or competences of analyzing the nuts and bolts of how a business works, provides the opportunity of knowing the status of the business and what improvement are required at ground level.

Procurement department require the buy-in from all teams across the business. This can be challenging as it requires transparency on all spending and without nurturing good relationships firm-wide, the procurement function can be seen as simply creating barriers. The role of procurement needs to be understood by all teams that they can cooperate with the initiatives.

Strategizing and steaming procurement initiatives are keys to supporting the wider business strategy; it offers the bedrock on which the firm functionality sits. It provides visibility for all stakeholders within the logistic/supplier(s) relationship and reducing risks within the cycle. While logistics performance knowledge assessment, aim to ascertain the efficiency results and reach solutions to attain the maximum performance possible within the supply chain. Logistic performance assists to identify problems or areas for improvement and act accordingly to determine the degree of competitiveness in the market to maximize costs. It is significant for firms to understand aspects to be measured that are important to firm goals or objectives. Therefore, the development of metrics should be implemented on firms goals that will determine where to strike a balance, that are and relevant to processes; related to receipts, storage, inventory; distribution, delivery, invoicing and information flows. Performance measurement indicators to implement have to be measureable and comparable to enable firm(s) take steps to improve the quality of service.

Logistics performance measurement allows firms to visualize the state of the supply chain.

Optimizing time spent diagnosing firms' health. Performance measures contribute to making the right decisions, so that improvements can be made in a shorter period of time. Performance measurement helps to enhance service which has positive impact on the relationship with clients or customers; and it allows the department involved to take necessary time to put the focus on global impact decisions and act on that bases (Akin, Van & Wynstra, 2018).

In challenging times like these of constant change and disruptions, it is significant to optimize resources and focus on what is critical to client, customer and the business firms, where the definition of indications monitoring and continuous improvement are key points to achieve.

Traditionally, the focus of procurement has been efficient purchasing activities. Firms regard low cost purchasing of quality materials or components parts or finished products as an important function of procurement.

However, today's dynamic market environment and intense competition drive many organizations to be more innovative in their operations especially in introducing new products and services to markets and require high level of flexibility in meeting changing costumer's requirements aimed at sustainable competitive. Sustainable competitive advantage does not come from one or two areas of excellence; rather, it is derived from outstanding practices in key strategic areas that are linked to the overall business processes. As market environment becomes more turbulent with rapidly changing customer requirements, the nature of goods and services is more and

products' life cycle requires a wide range of innovative component activities that make procurement more challenging and costly. Since the portion of procurement is as large as 70% or more of total cost of goods sold in some industries, management needs to take effective procurement as strategic priority. Therefore, traditional back office has been evolved to be cross functional and inter-organizational business processes. Thus, increasingly procurement has become a key strategic business process from a transactional-based practice to most business forms.

The Nigeria logistics industry, the knowledge base view is diminished and it reflects in employment, placement and assigning of responsibilities to officers. This grossly translates to poor logistics performance.

## **1.2. Statement of the Problem**

In today's highly competitive market, the demand for quality, cost minimization, risks mitigation, on-time delivery, perfect order fulfillment and short lead-time are critical factors for logistics firms to survive in the rapidly expanding and changing market place. Logistic performance in terms of effectiveness, efficiency, cost minimization, shorter lead-time, perfect order fulfillment and on-time delivery are critical in determining the economic success of logistics firm where they achieve competitive advantage and greater market share through extra ordinary performance of service levels, at competitive prices as required by clients and customers. A careful analysis of the Nigeria logistic industry reveals poor logistics performance of Nigeria major logistics firms. As a result of the following factors: Deficit Logistics infrastructure, poor connectivity, insecurity in the country; kidnapping, banditry, armed robbery on Nigeria roads and piracy on Nigeria navigable water-ways.

## **1.3. Aim and Objectives of the study**

The aim of the study is to evaluate the role of procurement initiatives and logistics performance of major logistics firms in Nigeria. While the specific objectives of the study were to:

1. Examine the relationship between strategic initiatives and logistic performance of enterprise in Nigeria.
2. Determine the relationship between E-procurement and logistic performance of enterprise in Nigeria.

## **2.1 Theoretical/Conceptual Framework**

### **2.1.1. Dynamic Capabilities Theory by Zollo & Winter (2002)**

Strategy matters most during times of change. Businesses and people find it far easier to do more of the same than to do something different. But the world does not stand still. As market becomes more globally integrated and new forms of technology and competition arise, companies cannot rest on their laurels. Firms must adapt to and exploit changes through technological, organisational or strategic innovation. Creating, adapting to, and exploiting change is inherently entrepreneurial, for big firms and small, for new and old firms. But entrepreneurial activity of this sort does not imply a lack of strategy or organisation. Indeed effective change often requires both. To survive and prosper under conditions of change, firms must develop the "dynamic capacities" to create, extend, and modify the ways in which they make their living.

A capability, whether operational and dynamic, is the ability to perform a particular task or activity. Operational capabilities enable an organization to earn a living in the present (Winter, 2003). In contrast, dynamic capabilities concern change. A dynamic capability is the capability of an organization to purposefully create, extend or modify its resource base. Dynamic capabilities come in many forms. Some dynamic capabilities enable firms to enter new businesses and extend old ones through internal growth, acquisitions and strategic alliances. Other capabilities help a firm to create new products and production process. Yet other involves the capabilities of the managers responsible for leading profitable firm change and growth. The types of dynamic capabilities extend even further, far beyond that the research work can incorporate. The concept of dynamic capabilities includes the capacity with which to identify the need or opportunity for change, formulate a response to such a need or

opportunity and implement a course of action. Not all dynamic capabilities serve all three functions. Instead, different dynamic capabilities serve different purposes.

The original definition of dynamic capabilities referred to “the firm’s ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments’ in this definition, organizational competencies denotes managerial and organizational processes or patterns of current practical and learning, through which firms specific assets are assembled in integrated clusters spanning individuals and groups. By altering the organization’s resource base, dynamic capabilities could then open new strategic alternatives or paths for the firms.

Subsequent work refined and expended the original definition of dynamic capabilities. Eisenhardt and Martin in Gelderman, Semeijn and de Bruijn (2015) asserted dynamic capabilities as the firm’s process that uses resources to match and create market change. In this conception, dynamic capabilities took the form of organizational processes.

The examples of dynamic capabilities as processes, such as product development routines, alliance and acquisition capabilities, resource allocation routines and knowledge transfer and replication routines. In addition to defining dynamic capabilities as processes, Chen and Kitsis (2017) extended the original definition of dynamic capabilities to include the creation of market change, as well as the response to exogenous change. These authors further noted that dynamic capabilities can operate in environments other than those experiencing rapid change.

Zollo and Winter in Ghadimi, Ghassemi, Toosi and Heavey (2018) supported the next focused on organizational learning as a source of dynamic capability, which they defined as a learned and stale pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit for improved effectiveness. This definition implicitly distinguishes dynamic capabilities from operational capabilities.

This definition also suggests that, like operational capabilities, dynamic capabilities consist of patterned organisational behaviour that companies can invoke on a repeated rather than idiosyncratic basis. In this definition dynamic capabilities do not necessarily improve firm performance. Although firms pursue greater effectiveness of their operating routines, they may or may not achieve it. Hence, the definition of dynamic capabilities does not suffer from any sort of tautology with regard to the superiority of performance.

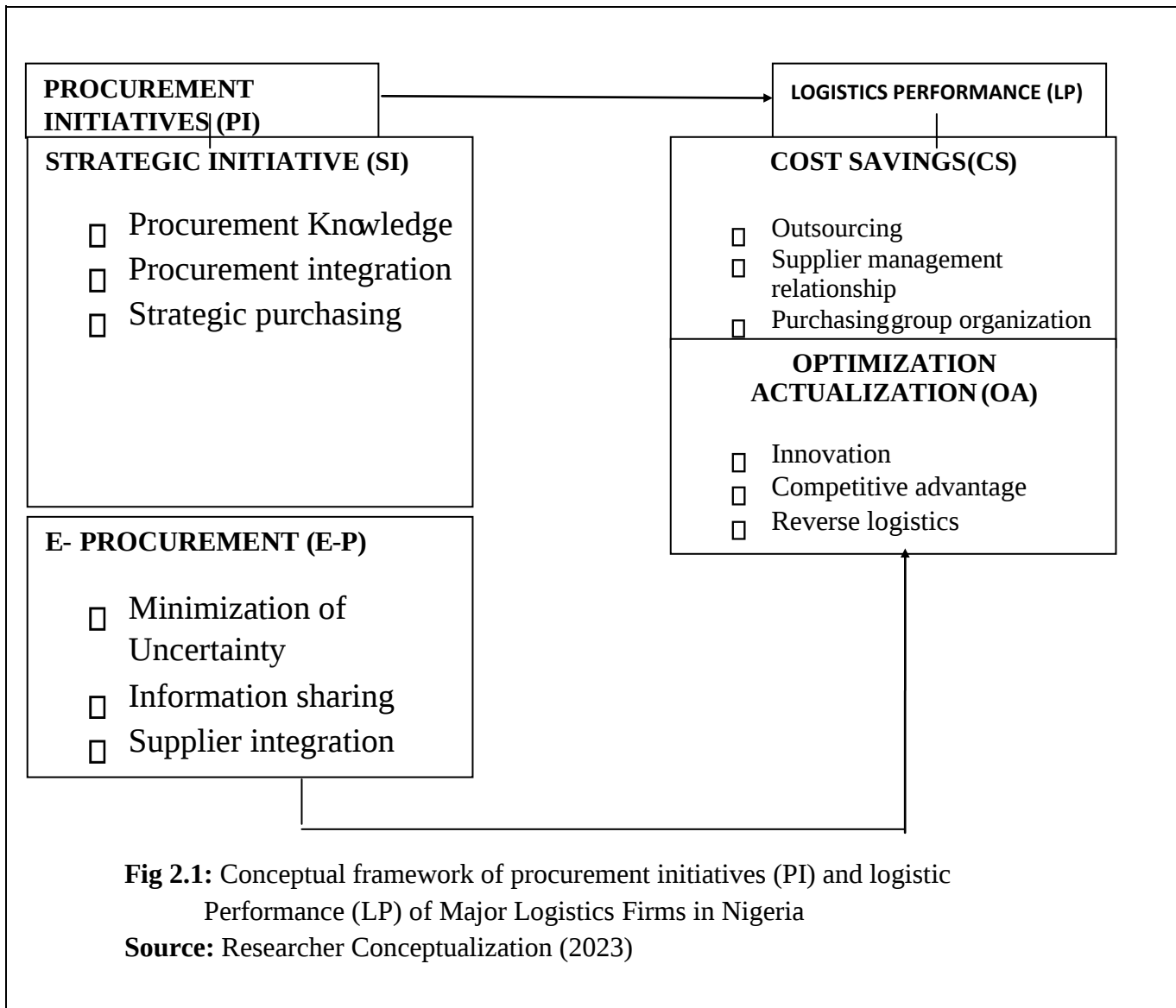
Zollo and Winter’s (2002) definition focuses on dynamic capabilities that modifies an organization’s operating routines. Not all dynamic capabilities, however, act upon operating routines. Of particular importance are information processing capabilities that may enable the firm to identify the nature of the changing market environment and sense opportunities that it holds (Teece, Pierce & Boerner, 2002). This ability to identify strategic opportunities in a changing environment provides a potential continuing source of competitive advantages (Denrell, Fang & Winter, 2003).

Basically, Bastas & Liyanage (2018) have noted the importance of managerial capabilities to sense opportunities. Taking account of the role of management more generally, Hong, Liao, Zhang and Yu (2019) used the term dynamic managerial capabilities to refer to the capacity of managers to create, extend or modify the resource base of an organization. Like dynamic organizational capabilities, dynamic managerial capabilities arise from prior learning and experience. Additionally, dynamic capabilities serves two main functions with regards to the resource base of an organization. Firstly, search and selection, including resource creation, and secondly deployments. Although the deployment or implementation, aspect of dynamic capabilities has tended to receive the most attention, search and selection are equally important.

### 2.1.2 Conceptual Framework

Mathieson et al (2011) defined conceptual framework as a virtual or written product, one that explains either graphically or in narrative form, the main things to be studied. The key factors, concepts or variables and the presume relationship among them. It also shows the relation variable that affects contended topics. In this study, the conceptual framework is based on variables that shall be critically considered from the specific objective, and will define the relationship between knowledge management, E-procurement, Strategic initiatives and policy sustainability that will evaluate the influence of procurement initiatives on logistics performance of major logistics firms in Nigeria as its general objectives. The following diagrammatic representation below, illustrate how the independent variable procurement initiatives affects the dependent variable logistics performance of major logistics firms in Nigeria. Logistics performance is a function of knowledge management, process optimization, capacity management, and cost minimization (Hong, Liao, Zhang & Yu, 2019).

#### Framework



#### 2.1.2.1 Procurement Initiatives

Traditionally, the focus of procurement has been efficient purchasing activities. Firms regard low cost purchasing of quality materials, component parts or finished product as an important function of procurement (Lis, Sudolska

& Tomanek, 2020). However, today's dynamic market environment and intense competition drive all types of organization to be more innovative in introducing new products and services fast to market and requires high level of flexibility in meeting customer requirements (Ovharhe & Igbokwe, 2021). Increasingly, the source of competitive advantage does not come from one or two areas of excellence. Rather, it is derived from outstanding practices/initiatives in key strategic areas that are connected to the overall business processes (Chibuike, Ovharhe & Abada, 2022). As market environment becomes aggressive, volatile with frequently changing customer needs, the more complex and the product life cycle is shorter (Ovharhe, 2023). Product(s) complexity and shorter product life cycle demands a wide range of innovative initiatives, component parts and services that make procurement more challenging and cost demanding. Since the portion of procurement is as large as 70% or more of total cost of goods sold in some industries, management needs to take effective procurement as strategic priority (Huo, Fu, Zhao & Zhu, 2016). Therefore, traditional back office purchasing function has evolved to be more cross functional and inter-organizational business processes. Thus, increasingly procurement becoming a key strategic business process from a transaction-based practice to the most of the business firms (Larson, 2021).

Yet, there is a great deal of ambiguity in regard to the nature, scope and role of procurement in this rapidly changing environment, prior research on procurement has been quite fruitful in many aspects. Wynstra, Rooks & Snijders (2018) broadly view the scope of procurement including sourcing, supply management, purchasing, supplier development, innovation and performance management.

Competitive advantage depends on greater value delivery: This necessitates more intensive product and process innovation. Gelderman, Semeijn and de Bruijn (2015) show that procurement is one key value chain processes which significantly impact quality and innovation regardless of a firm's strategic direction. In an empirical study of Australian firms, suppliers as key strategic partners require good understanding of their customer's business processes and needs. Creating innovation potential involves open and timely information sharing (Ovharhe, Woko & Ezeocha, 2021). This requires organisation-wide effort of sourcing and procurement planning and implementation (Ovharhe, Woko & Ogolo, 2021). Better coordination among cross-functional departments results in effective procurement, strategic procurement planning involves both senior management and functional specialists in the areas of marketing, purchasing, operations and distribution as well (Ghadimi, Ghassemi, Toosi & Heavey, 2018).

#### **A. Strategic Initiatives**

In the evolution of the purchasing function and its changing environment, the configuration of knowledge, skills, and competence of purchasing professional have always played a significant role (De Haan-Hoek, Semeijn & Caniels, 2020). Today, the role of the procurement function is becoming more strategic in many organizations, purchasing professionals job profiles have received a significant upgrade (Brandl, 2017). Purchasing internal legitimacy is tied to the proficiency of purchasing practices where effect of explorative supply knowledge provision and buying firm performance whereas exploitative knowledge requires less internal status to attain cost reductions (Gomes, Fernandes & Brandao, 2016).

This upgrade in status requires a new knowledge set, including the development of suppliers, market research, outsourcing activities, cost analysis, risk management, as well as commodity and sourcing strategies (Cankaya & Sezen, 2019). In an era of digitalization, the evolution and extension of knowledge is increased further using interactive technologies and big data analysis that increase the efficiency and effectiveness of knowledge production and sharing (Chen & Kitsis, 2017). A recent study by ABC made specific design recommendations for digitalization inventions of the purchasing function along the procurement value drivers and practices (Castillo, Mollenkopf, Bell & Bozdgan, 2018).

## B. E- Procurement

The use of Information Technology (IT) has facilitated the reduction of coordination costs, which has been extensively documented in literature (Bhimani, Lopes & Acqino, 2016). Electronic market place, facilitated through IT, reduce the cost of searching for obtaining information about product offerings and prices (Ovharhe & Okolo, 2022). Also, collaboration facilitated by information sharing can lower transaction costs (in particular coordination costs) as companies can thereby reduce supply chain uncertainty and thus the cost of contracting. If a supplier is unable to accurately predict the price of its product inputs, it will be reluctant to enter into a contract, which locks it into a fixed price for an extended period of time (Bhatia & Gangwani, 2020).

### 2.1.2.2. Procurement Practices and Firm Performance

Procurement practices refers to the strategies of procuring products and services (Bour, Asafo & Kwateng, 2019). Procurement practices can also be said to be those strategic managerial actions undertaken to enhance performance of the integrated supply chain. This research adopted strategic initiative, policy sustainability, knowledge management and E-procurement for the purpose of attaining organizational logistics performance. Bhimeni, Lopes and Aquino (2016) assert that a good organized and executed procurement can market it potential for organizational decrease of inventories, have better customer service, diminish costs in addition aid quick inventory turns. One among the biggest blessings of procurance inside the situation of short run objectives is increasing productivity and decreasing inventory and reducing lead time. On a long-run objective, this factor has important role of increasing company's market share and having outside integration of the procurance (Wang, Zhang & Zhang, 2020).

A good procurement system is significant to an effective organization's supply chain system (Ovharhe, Ahunanya, Eminike & Otto, 2022). The insignia to system performance in meeting its set goals in service sector is characterized by adequate management of the procurement function. Best procurement practices improve efficiency and effectiveness of a company that interprets to an improvement of its overall performance (Chibuike & Ovharhe, 2021). Overall procurement practices like knowledge management, E-procurement, strategic initiatives and policy sustainability make sure that organizational performance is increased by supporting procurement functions in the service firms.

### 2.1.2.2 Logistic Performance

Logistics is an important component of supply chain management (Pinto, 2020).Peprah, Brako & Akosah (2018) fine turn logistics management as "that part of supply chain management that plans, implements and control the efficient, effective forward and reverse flow and storage of goods, service and related information between the point of origin and the point of consumption in order to meet customers' requirements.Liu, Hu, Tong and Zhu (2020) describe the importance of integrating the logistics processes of all supply chain partners to better serve the needs of the ultimate customers. Sajjad, Eweje & Tappin (2020) identify logistics as one of the largest costs involved in international trade.Well-functioning logistics, both domestically and internationally, is a necessary precondition of national competitiveness (Norazah, Norbayah, Arshian & Sahar, 2021). Global product networks depend on transport operations, this dependency affects a wide array of value-added suppliers of raw materials to the end-user as well as the recycling of materials after use (Sharma, Chanda & Bhardwaj, 2017).

Performance is multi-dimensional and many diverse measures have been developed to evaluate different dimensions. Conducting research on individual measures is less meaningful than measurement dimensions since companies may have different definitions for the same measure. Therefore, this review focuses on categories of logistics performance dimensions. Griffs et. al, (2004) claimed that logistics measures have different abilities in revealing information types within an organization: responsiveness versus efficiency; strategic versus operational ; process orientation versus functional orientation; monitoring versus diagnosing. For instance, delivery lead time

reveals more information about responsiveness than efficiency. Ovharhe, Okolo, Woko and Igbokwe (2022) identified efficiency and effectiveness as two fundamental performance dimensions. Effectiveness is the extent to which the logistics business's goals are accomplished. And efficiency means how well the resources are utilized. Bobbitt (2004) argued that differentiation is another dimension to measure logistics performance except efficiency and effectiveness.

These three dimensions are used to be thought conflicting. However, Fugate et. al. (2010) proved that pursuing one of the above three does preclude pursuit of the other, but rather the performance dimensions perhaps reinforce each other through their empirical research. Financial measures dominates for a long period of time in performance measure systems since they can be conveniently designed, easily calculated and compared between companies. The need for supplementing traditional accounting measures with non-financial metrics came out in the 1980s and the early 1990s to observe the behaviour of the multiple components of a supply chain. Financial measures are used to evaluate cost and price, while non-financial measures deal with resource utilization, time, quality etc. The rising of nonfinancial measures does not mean that financial measures are no longer important, but rather non-financial measures are important in assessing companies capabilities than financial ones (Ovharhe, 2022). To establish a balanced performance measurement system, it is crucial to select both financial and non-financial measures.

Ovharhe (2023) claimed that firm's employing a combination of financial and non-financial performance measures have significantly higher levels of returns on assets and market returns. Additionally, the adoption of non-financial measures improves firm's current and future stock market performance. Another benefit of integrating financial and non-financial measures is that it allows the firm to find the best compromise between cost and quality in the supplied service, since each non-financial measures lead to a particular cost.

Bhimani et. al. (2016) categorized logistics performance measures according to decisionmaking levels. Bour *et al.*, (2019) claimed the success of strategy formulation depends on the degree of alignment of strategies at different levels. According to Bhimeni *et al.*, (2016) the strategic level measures evaluate top level management decisions (e.g competitiveness), the tactical level deals with mid-level management decisions (e.g. resource allocation) and operational level measures the low level managers activities (e.g. achieving delivery correctness). Since this categorization complies with hierarchical organization structures, performance measures at different decision levels can be assigned to managers at different decision levels. Managers are responsible for those performance measures and the responsibilities will further motivate managers to monitor, control and even improve performance measures (Akin, 2018).

### **3. METHODOLOGY**

A cross sectional research design shall be used for the study. The study area of this research covered the entire Nigeria nation. The population of this study was the ten (10) major logistic firms rated by atlanticride.com, business best logistic firms' classification. The sampling technique used in selecting in managers from the 10 major logistic firms in Nigeria was purposive sampling technique. A total population of 400 and sample size of 200 was determined using Slovin's Formula at 0.05 level of significance. The 200 copies of questionnaire were administered, only 196 was deem fit after processing, retriever, coding and cleansing. The Parallel reliability was used to determine the consistency of the instrument that results to 95.50 (0.955).

A likert scales of 5 points was used strongly agreed (SA); agreed (A); Neutral (N); disagreed (DA) and strongly disagreed (SD). The study employed Cronbach Alpha to determine the reliability of the research instrument. The reliability test attempts to associate each measuring item with every other measurement item and obtaining the average inter-correlation for all the paired association. The data collection of this study was be analyzed using descriptive statistic such as percentage, frequency distribution and tables to explain and analyze the research

statements. Each of the hypotheses was tested with various statistic packages for the social science (SPSS) analysis tools to get more and accurate result. Pearson product moment correlation (PPMC) was be used in testing data obtained from field for hypotheses.

#### 4. RESULTS AND DISCUSSIONS Test of Research Hypotheses

The study proceeds to test for research hypothesis in light of the Pearson product moment and multiple regression analysis as follows. **Research Question One**

How does strategic initiatives correlates performance in the logistics firms?

##### Test of Hypothesis One

**H<sub>01</sub>:** There is no significant relationship between strategic initiatives and performance of logistics firms in Nigeria.

**Table 4.1: Pearson Test for relationship between strategic initiatives and performance Correlations**

|                       |                     | Strategic initiatives | Logistics performance |
|-----------------------|---------------------|-----------------------|-----------------------|
| Strategic initiatives | Pearson Correlation | 1                     | .678**                |
|                       | Sig. (2-tailed)     |                       | .000                  |
|                       | N                   | 196                   | 196                   |
| Logistics performance | Pearson Correlation | .678**                | 1                     |
|                       | Sig. (2-tailed)     | .000                  |                       |
|                       | N                   | 196                   | 196                   |

\*\* . Correlation is significant at the 0.05 level (2-tailed).

**Source:** *Researcher's Field Survey (2023)- SPSS version 25 output*

Using the output in table 4.1, it can be observed that the Pearson correlation (PC) coefficient is 0.678 which shows a strong and positive orientation of the relationship between strategic initiatives and performance. The significance value of 0.000 which is less than the 5% significance level ( $p = 0.000 < 0.05$ ) leads to the rejection of the null hypothesis. The study similarly observes in the regression output, the coefficient of 0.439 which shows a t-statistics value of 10.873 (which is greater than the  $\pm 1.96$  threshold level) and a probability level of 0.000 which is less than the 0.05 significance level. This therefore reinforces the findings and on this basis, the null hypothesis is rejected while the alternate form of the hypothesis is accept therefore concluding that there is a significant relationship between strategic initiatives and performance of logistics firms in Nigeria. The following substantiate the results of Balm

(2022)

who

identified the role of large procurers (receivers) in improving city logistics is gaining increase d attention among scientists and professionals.

Nagy-Bota&Moldovan (2022) supply chain management and logistics are two concepts between which there may be differences and common aspects. The purpose of this article is to describe the two concepts as well as a comparison between the common aspects and the differences between them. The term logistics is an older term and on the other hand the term of supply chain management refers to several processes. Logistics is an activity in supply chain management. There are many differences between them, but also many common aspects but both are inseparable. Therefore, they do not contradict each other, but complement each other. Supply chain management helps logistics to stay in touch with the transport, warehousing and distribution team.

**Research Question Two**

**Q2.** How does e-procurement correlates logistics performance in the logistics firms?

**Test of Hypothesis Two**

**H0<sub>2</sub>:** There is no significant relationship between e-procurement and logistics performance of logistics firms in Nigeria.

**Table 4.2: Pearson Test for relationship between e-procurement and logistics performance Correlations**

|                       |                     | E-procurement | Logistics performance |
|-----------------------|---------------------|---------------|-----------------------|
| E-procurement         | Pearson Correlation | 1             | .859**                |
|                       | Sig. (2-tailed)     |               | .000                  |
|                       | N                   | 96            | 96                    |
| Logistics performance | Pearson Correlation | .859**        | 1                     |
|                       | Sig. (2-tailed)     |               | .000                  |
|                       | N                   | 96            | 96                    |

\*\* . Correlation is significant at the 0.05 level (2-tailed).

**Source:** *Researcher's Field Survey (2023)- SPSS version 25 output*

In table 4.2, it can be observed that the Pearson correlation (PC) coefficient is 0.859 which shows a strong and positive orientation of the relationship between e-procurement and logistics performance. The significance value of 0.000 which is less than the 5% significance level (  $p = 0.000 < 0.05$ ) leads to the rejection of the null hypothesis. The study similarly observes in the regression output, the coefficient of 0.469 which shows a t-statistics value of 13.085 (which is greater than the  $\pm 1.96$  threshold level) and a probability level of 0.000 which is less than the 0.05 significance level. This therefore reinforces the findings and on this basis, the null hypothesis is rejected while the alternate form of the hypothesis is accept therefore concluding that there is a significant relationship between e-procurement and logistics performance of logistics firms in Nigeria. This is in line with Shikur,(2022) examines the roles of each dimension of logistics performance in merchandized exports and imports of goods and services.

The study also attempts to embed the latest thinking of transaction cost economics (TCE) as a conceptual framework in the analysis of logistics performance. In that sense, the study assumes that logistics technologies provide a comparative advantage to manage the movement and storage of goods more efficiently and effectively, upgrade delivery capabilities, and improve visibility throughout the global supply chain. In this context, the study aims at bridging the existing gap in the literature that excludes transaction cost economics as a framework in logistics analysis. Data on all variables are collected from the World Bank database.

The results show that African countries have significantly lower logistics performance dimensions than other developing countries. The findings show that all the six logistics performance dimensions which include tracking and tracing, logistics quality, international shipments, customs clearance, timeliness, and infrastructure positively and significantly determine merchandized exports and imports of goods and services

In the same vein, Muhammad, Yusuf and Toba (2022) in recognition of its role in achieving sustainable growth, which is capable of reducing high unemployment, high poverty rate and poor living standard that characterized African countries, industrialization remains an integral part of development plans of Nigeria and other African countries. In spite of this however, the manufacturing sector, which is a major driver of industrialization, continues to perform abysmally in African countries including Nigeria. The Sub-Saharan Africa average share of manufacturing in GDP of 10.6 percent in 2013 was well below the world average of 16.14 percent in the same period. This situation has resulted to a continued search for policy initiatives needed to address the problem of „manufacturing deficit“ in the region. This study assesses the impact of logistics infrastructure, which has received very little attention in literature, on manufacturing sector performance in Africa. An unbalanced panel data for 35 African countries between 2007 and 2016 were analyzed using system GMM estimation technique. The result shows that logistics infrastructure has positive and significant relationship with manufacturing sector performance. An increase in logistic performance index by 1 point or 20% will result to an increase in the performance of manufacturing sector by a range of 3.61% and 7.48% depending on the component of logistic infrastructure used. Thus, logistic infrastructure improvement should constitute one of the industrialization strategies of African countries. Abdelsalam, Emadaldeen, Abebe and Umut (2022) pictured logistics performance is considered one of the most prominent topics in the logistics management area, which logistics scientists have been testing and developing different measurement and performance criteria. Therefore, drawing upon the resource-based view theory of the firm, a model is developed for investigating the relationship between transaction attributes and logistics performance. It also examined the company size as a control variable. Therefore, the survey was used for data collection from a convenience sample of (241) respondents from Sudanese manufacturing companies. Depending on the path analysis through using AMOS Structural Equation Modeling demonstrates empirical supports to the framework of this study. The results reported a positive relationship between transactions attributes (suppliers' relationship and top management beliefs) and manufacturing companies' logistics performance (cost performance). Furthermore, the findings confirmed that (suppliers' relationship and top management beliefs) and logistics Performance (delivery); also, the results predict that company size positively affects cost performance. The findings have been discussed, and the theoretical, practical implications were figured out. In addition, the limitations with future research suggestions.

## **5. CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Conclusions**

The key factors, concepts or variables predict significant and positive relationship among them. It also shows the predictor variable that influences the criterion variable. In this study, the conceptual framework is based on variables that shall be critically considered from the specific objective, and defined the relationship between knowledge management, Eprocurement, Strategic initiatives and policy sustainability that evaluated the influence of procurement initiatives on logistics performance of major logistics firms in Nigeria as its general objectives. The explanatory variables such as e-procurement and strategic initiatives has positive significant on the criterion variables (cost savings, optimization actualization, process optimization and capacity management). The study also reveals that there exists a strong correlate among explanatory variable and logistic performance.

### **5.2 Recommendations**

Based on the findings and conclusions the following recommendations were made

- (1) Management of logistics firms should adopt strategic initiatives to enhance logistics performance in the area of cost savings; adopting and implementing initiatives such as outscoring, groups purchasing organization, just-in-time and suppliers management relationship.

- (2) Logistics firms should ensure that there is effective management of policy sustainability proxies (integration (different standard), instrumental/value creation and normative value) because they are fundamental factors to the organization continued existence and prosperity, through innovation, creating quality and value.
- (3) Logistics involves the flows of products, services and information. Therefore, for the purposes of collaboration, integration, coordination and control, it is imperative that logistics firms are recommended to adopt E-procurement to facilitate of firms in Nigeria.

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