

Procurement Sustainability Policy and Logistics Performance in Nigeria

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ABSTRACT

This study investigated the procurement sustainable policy 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 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). 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, sustainability policy significantly facilitates the effectiveness and efficiency of process optimization and capacity management. Hence, it was revealed that the alternate hypotheses were accepted. Based on the findings and conclusion, this study contributes to the knowledge that policy sustainability facilitates logistic performance. It could be recommended that management of logistics firms should adopt sustainability policy initiatives to enhance process optimization and capacity management. Logistics should involve the flows of products, services and information via process optimization and capacity management.

KEYWORDS: Policy Sustainability Initiatives, Process Optimization, Capacity Management

1. OVERVIEW

Today, as the role of procurement is becoming more strategic in many organizations. Purchasing internal legitimacy is tied to the proficiency of purchasing practices where effects of explorative supply knowledge provision and buying firm performances whereas exploitative knowledge

requires less internal status to attain cost reductions (Agarwal, Giraud-Carrier & Li, 2018). 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 (Bastas & Liyanage, 2018).

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.

A recent study by ABC made specific design recommendation for digitalization intervention for the purchasing function along the procurement value drivers and practices (Wang, Zhang & Zhang, 2020). Purchasing knowledge and capabilities development are widely discussed fields in the purchasing literature, mostly rooted in the knowledge based view. This perspective of an organization supports the belief that the intangible asset resource is of competitive advantage. Knowledge creates value in a unique, inimitable, and non-transferable way to ensure efficiency and effectiveness through speed and quality simultaneously in purchasing (Ovharhe, Okolo, Woko & Igbokwe, 2022).

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.

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 (Ovharhe, Ahunanya, Emenike & Otto, 2022).

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 customer'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 (Ovharhe & Igbokwe, 2021). 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 (Sajjad, Eweje & Tappin, 2020). 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, (Ovharhe, 2023).

There is a great deal of ambiguity regarding the nature, scope and role of procurement in this dynamic business environment. Prior researches on procurement have been quite fruitful in many aspects. In the inaugural issue of the Wynstra, Rooks and Snijders (2018) is in accord that the scope of procurement to include sourcing, supply management, purchasing, supplier

development, innovation and performance management. The aim of this research shall be to explore on how procurement impacts on a firm(s) performance in the logistic industry in Nigeria. Nigeria's poor infrastructure has constrained growth in the logistics industry. Time delays, bottleneck, poor logistics quality and incompetence are all risks that weigh prospects for logistics and transport industries. Adding to these are burdensome customs procedures, are major stumbling blocks in the effective functioning of the Nigeria logistics system thus increasing business costs and risks for transport and logistics service providers.

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. Hence, this study would address the procurement sustainability initiative and logistics performance in Nigeria.

-Research Questions

The following research questions are itemized below.

What is the degree of the relationship between policy sustainability initiative and process optimization of enterprise in Nigeria?

To what extent does policy sustainability initiative influences capacity management of enterprise in Nigeria?

2. LITERATURE REVIEW

2.1. Conceptual/Theoretical/ Paradigm

2.1.1. Conceptual Foundations

The end of 20th century observed unprecedented prominent changes in corporate strategy and management towards sustainable thinking. The emergence of sustainability as corporate strategy, and making sustainability an integral part of a company's business strategy in order to obtain the bottom-line benefits (Pinto, 2020). But, this requires a dramatic changes in the organizations performance against the economic, social and environmental (triple) bottom lines ((Ovharhe & Okolo, 2022), and paying more and more attention to their values and responsibility. Sustainability also necessities the transformation of mindsets and commitment of the leadership and organizational performance to include key stakeholders (Peprah, Brako & Akosah, 2018). Managing sustainability holistically is challenging and requires a sound management framework that integrates environmental and social performance with economic business performance (Chibuike, Ovharhe & Abada, 2022) raises a vital question on managing sustainability as its activities may result in establishing a parallel organization within the company dealing with non-economic issues and measuring non-economic aspects of performance. Akin, Van and Wynstra (2018) also substantiate that management is increasingly asking how companies can improve sustainability performance, and more specifically, how they can identify, manage and measure the drivers of improved sustainability, the systems and structures that can be created to improve performance measurements. Thus, sustainability performance measurement (SPM) has to include several factors based on the economic, ecological, and social issues (Bour, Asafo & Kwateng, 2019).

This research will take into account, Brandl (2017) view of a value driven company by applying Chibuike and Ovharhe (2022) approach for pillars of sustainability and survival and by integrating descriptive, instrumental and normative contributions of stakeholder view. If any, firms can response definitively to the questions, “which of your products, processes, services and facilities are really sustainable? Is it a sustainable Organization?”. Answering this question is requiring the ability to measure sustainability of economic and non-economic factors in a quantitative or at least qualitative approach. Sustainability has been defined as economic development that meet’s today’s generation needs without compromising the opportunity and ability for future generations (Hong, Liao, Zhang & Yu, 2019).

Sustainability is complex and Multi-faceted, covering a broad spectrum of topics from habitat, conservation, to energy consumption, to stakeholder satisfaction and financial results. The original or literal meaning of the term is equivalent to permanence and implies notion of durability, stability, and eternalness (Lis, Sudolska & Tomanek, 2020). The simple word sustainability however implies no presumption of economic development. For many people, sustainability translates into being “environmentally friendly”, but it is broader than that (Ovharhe & Woko, 2022). It represents much more than reducing energy and waste, protecting ecology and recycling (Cankaya & Sezen, 2019). Therefore, measuring sustainability holistically differs from measuring other dimensions of business performance in several important aspects (Huo, Fu, Zhao & Zhu, 2016). Sustainability performance can be defined as the performance of a company in all dimensions and for all drivers of corporate sustainability. It extends beyond the boundaries of a single company and typically addresses the performance of both upstream supplier and downstream customers in the value chain (Liu, Hu, Tong & Zhu, 2020).The widely applied sustainability measures only have an environmental parameter, such as quantities of substances emitted and resources used, which are not sustainability measures, because they only have a cover to one side of the equation (Gelderman, Semeijn & de Bruijn, 2015).

De Haan-Hoek, Semeijn and Caniels (2020) support Fiksel view which argues that sustainability performance measurement (SPM) must be approached as a systematic business process in order to be integrated effectively into company strategic planning and day-to-day operations. It deals with the Social, environmental and economic aspects of the companies in general, and of corporate sustainability performance in particular (Ghadimi, Ghassemi, Toosi & Heavey, 2018). Sustainability performance reflects one target end of the move of companies in the corporate responsibility continuum from corporate conformance, certifying, compliance and reporting with given standards to corporate performance in relation to stakeholder expectations.

In general, measuring logistic performance is difficult, especially when what has to be measured keeps changing (Gomes, Fernandes & Brandao, 2016).The concept of sustainability with regards to organizational change can be defined in various ways; as sustainability cannot be defined for a single organization. Chen and Kitsis (2017) consider sustainability on a continuum of work methods, goal attainment and process development. Maintaining work methods suggests a static view; as an evolving social, economic, technological and political context can render work methods and targets obsolete. A focus on ongoing development suggest a more dynamic or evolutionary perspective. They conclude that there is no “One correct” generic definition of this term, which will acquire different meanings in different organizational contexts, at different times.

This research views sustainability as a type of change involved in organizations upon top managements' decision and commitment. Leadership is one of the single most important requirements of sustainability and organizational change; as top management's commitment is a basis for change (Gomes, Fernandes & Brandao, 2016). Companies as institution are requiring a shift in mind-set and practical initiatives to integrate stakeholder management to face the prospect of an evolutionary leap to sustainable value.

Stakeholder management practices have favourably affected the long-term performance and status of companies through the implementation process, governance and its impacts (De Haan-Hoek, Semeijn & Caniels, 2020). Castillo, Mollenkopf, Bell and Bozdogan (2018) put a good example of companies that leadership commitment act as value-creators for their main stakeholders and in return to their stakeholder. Creating efficiency through its ability to integrate and adopt different systems and measurements- an approach for TRM as described by Waddock and Bodwell, (2007), is also a main departure of management towards change. TRM consist systems and procedures to ensure responsible/best business practices and management. Sustainability is transformational responsibility management considering product/service, and its image in the market space and the society at large.

Another logistics differentiation/optimization view, develops supply chain management concept within the scope of logistic service provider(s) LSP performance management practices. Forslund (2011) identifies the selection of performance variables as one of many obstacles logistics service providers face when attempting to adopt a supply chain scope. Specifically, Forslund identifies lack of understanding, failure to adopt effective performance metric definitions, and an IT solution that fails to meet performance reporting needs as obstacles experienced by the investigated LSPs report CO₂ emissions as an essential performance variable. Achievement of logistics differentiation/optimization is highlighted by Bhimani, Lopes and Acqino (2016) through the strategic profit model. The authors identify activities influence by a firm's logistics decisions that affect return on net worth. These consist of increasing sales, reducing cost of goods sold, reducing variable expenses, reducing inventories, and reducing account receivable.

Sustainability performance management perspective in line with transformational responsibility management (TRM) in logistics is dynamic. Green supply chain management: Numerous studies have viewed the concept of ecological sustainability as a framework for studying management practices in both operational and strategic contexts (Ovharhe, Woko & Ezeocha, 2021). As part of this, other studies have examined the greening of supply chains differs contexts including product design, process design, Manufacturing practices, purchasing and a broad combination of these elements (Bhatia & Gangwani, 2020).

2.1.2. Institutional Theory by Scott (1970)

Institutional theory focuses on the roles of social, political and economic systems in which companies operate and gain their legitimacy. As explained by Scott, institutions provide for the rules of the game and define the available ways to operate by discouraging, constraining or encouraging given behavioural patterns.

They have an impact on the decision making process in giving indications of what would be acceptable or not, and in determining the individual socialization of norms and behaviours in a given society. Scott describes the three (3) pillars on which societies are built: The regulative,

the normative and the cognitive. The regulative pillar is formal and legally codified, while the normative one includes non-codified attitudes present in society. When normative expectations and attitudes are largely diffused in society, they are gradually internalized by individuals and become accepted as the norms of which everybody is encouraged to conform. Institutions give stability and predictability to social behaviour pressure and expectations can be exerted by institutional constituents, such as the state, professions interest groups, public opinion and family. The underlying logic of the regulative pillar is conformity to the rules and laws, whereas that of the normative pillar relates to what is considered appropriate. But responses to institutional pressures and expectations may range from passive conformity to active resistance, depending on the nature and context of the pressure.

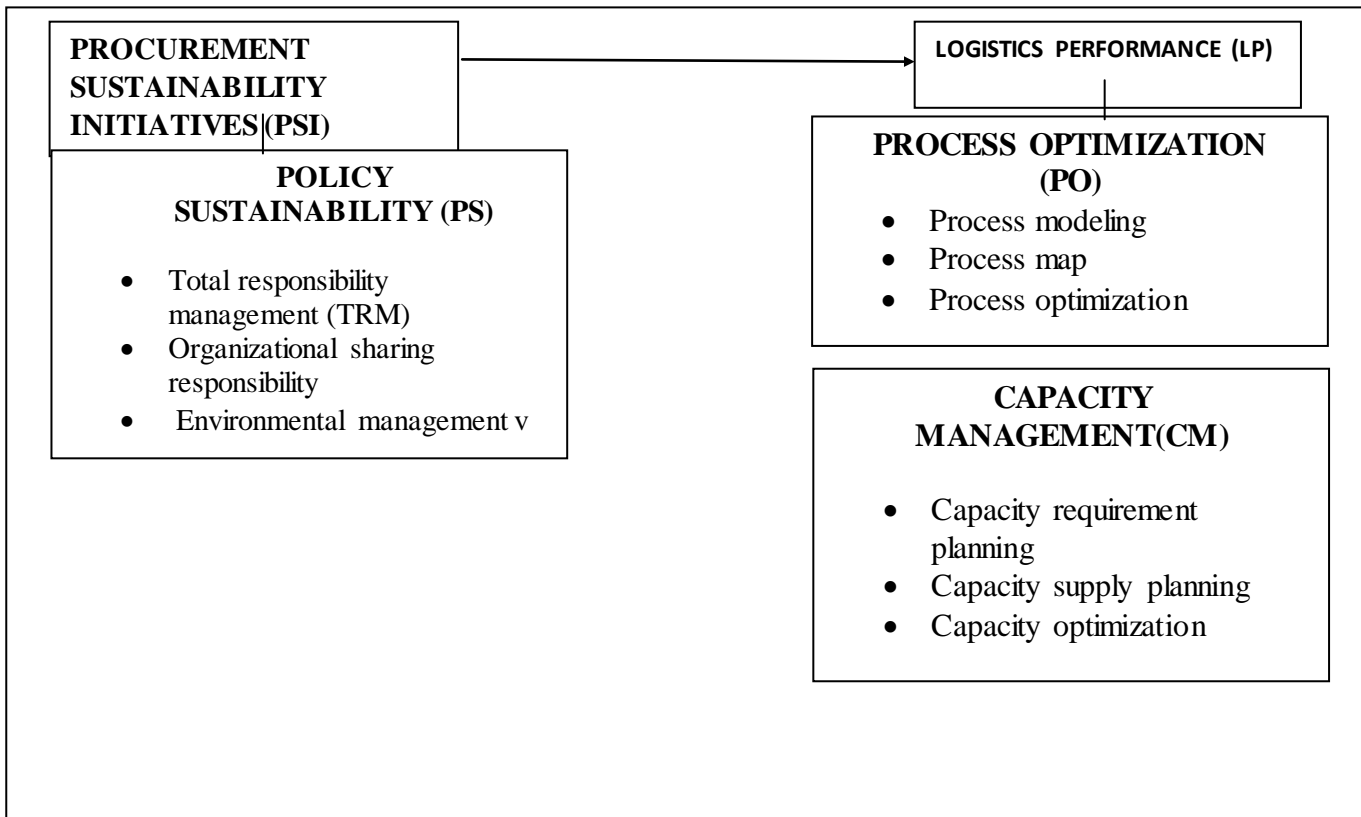
For a long time, scholars viewed markets and states as the appropriate institutional mechanisms to address externalities that results from the collective good nature of a vast class of resources. Advocates of market solution argues for privatization of collectively owned and managed resources such as fisheries and forests and argued that without privatization collective goods are likely to be over exploited (Ovharhe, Woko & Ogolo, 2021).

Voluntary exchange among private owners on the basis of pricing signals, they held, would lead to the most efficient use of resources. Advocates of state control and ownership, pointing to asymmetric allocations that often result from the operation of market mechanism, suggested that centralized control of resources was far more likely to promote conservation and sustainable use. Without centralized enforcement, according to them, attempts to manage resources use and management viewed community institution as backward inefficient and likely to promote overexploitation.

From the late 1970s, and especially since the mid-1980s, there has been a significant shift in views about the role of community as a resource management institution. This is partly because resource management strategies that rely exclusive on exchange (market) or enforcement (coercive, state-based) have obvious deficiencies. One tends to benefit a small group or a few highly asymmetric relations of domination and dependency. Both have shown a tendency to disadvantage and exclude rural residents relying on local resources, who then do not cooperate in management of these resources. Both at the level of policy initiatives, and in terms of theoretical developments, the option of collective management of resources through new types of resource institutions based in communities has found wide appeal (Bhimeni, Lopes & Aquino, 2016).

Despite heated assertion about superiority of one type of resource management institution over another, in real life most resource institutions do not easily fit the mold of market, state or community. For the operation of each of these forms of institutions, implicit or explicit understanding that shade into other form is necessary. For example, often markets and private property arrangement work better only when the force of the state is available to enforce the security of property.

Conceptual Framework



Major Logistics Firms in Nigeria

Source: Researcher Conceptualization (2023)

-Process Optimization

Conceptually, process optimization sounds easy, and companies might find it easy to implement at a surface level; however, they often fail to take process analysis far enough to achieve a level of optimization. Companies often create a process model and analyze processes from just one angle. To optimize processes within a company, they must first be modeled. Previous research cannot add further value to the modeling process or to the optimization phase if the steps are not done correctly and in the correct order (Sajjad, Eweje & Tappin; Ovharhe , 2022).

Lis, Sudolska and Tomanek (2020) agreed that business optimization is about reducing lead time and costs, improving quality and enhancing customer and employee satisfaction; in short, it contributes to maintaining or strengthening the competitive advantage of an Organization.

Majeed et al (2008) presented general business process optimisation theories, but also criticized because of a lack of existing theory in this field of business. They also noted that diagrammatic business processes cannot be optimized because optimization requires quantitative measures of process performance that cannot be evaluated or applied to diagrammatic process models (Majeed et al, 2008).

-Capacity Management

Liu *et al.*, (2020) fine-tunes logistics as the process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods including services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirement. This definition includes inbound, outbound, internal, and external movements. In view of the above definition of logistics, capacity management will be considered in this research, to give an insight into the provision of logistics facilities to address logistics uncertainty. Capacity management can be defined as “the potential of an economic or technical entity-of any type, size and structure- within a period of time.

Generally this research will consider capacity requirement planning, capacity supply in planning/scheduling and capacity adjustment in meeting clients’ requirements and addressing logistics uncertainties by the LSPs. The demand for products or services of many firms fluctuates and can be forecast only with variable accuracy. This unstable demand is accompanied by limited variables capacities and it is the challenge of capacity management to balance capacity demand and supply at the optimal level. The concept of capacity management can be transferred to outbound logistics as well, where variable demand from customers is accompanied by limited capacity of storage, information and transport. At the same time customer require high flexibility and short-lead-time, which is a huge challenge for capacity management production plant and the logistics service provider (Wang, Zhang & Zhang, 2020). At this a firm has to define an adequate strategy for capacity management and has to implement the selected strategy successfully with appropriate software solution. Capacity management in Logistics Service Providers (LSPs) is competitive and fulfill customers’ requirement in a cost efficient and flexible manner will be integrated in the context of capacity requirement planning, capacity supply planning and capacity adjustment.

3. METHODOLOGY

A cross sectional research design was 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 entrepreneurs from the 10 major logistic firms in Nigeria was purposive sampling technique. Hence the staff strength was 400 and 200 sample size was determine using Solvin appraooh. 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 and buttress with regression synopsis.

4. RESULTS AND DISCUSSIONS

From the two hundred respondent only one hundred and ninety six were chosen for data analysis.

Test of Research Hypotheses

The study proceeds to test for research hypotheses in light of the Pearson product moment and analysis with regression approach.

Research Question One

Q1. How policy sustainability does correlates process optimization in the logistics firms?

Test of Hypothesis One

Ho₁: There is no significant relationship between policy sustainability and process optimization of logistics firms in Nigeria.

Table 4.1: Pearson Test for relationship between Policy sustainability and Process Optimization

| | | Correlations | |
|---------|---------------------|--------------|---------|
| | | Policy | Process |
| Policy | Pearson Correlation | 1 | .882** |
| | Sig. (2-tailed) | | .000 |
| | N | 196 | 196 |
| Process | Pearson Correlation | .882** | 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*

In table 4.1, it can be observed that the Pearson correlation (PC) coefficient is 0.882 which shows a strong and positive orientation of the relationship between policy sustainability and process optimization. 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 shows 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 policy sustainability and process optimization of logistics firms in Nigeria.

To support the study 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. Balm also support the logistics performance with the gaining of increase among professionals and scientists.

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.

Larson (2021) investigates relationship between national logistics performance and dimensions of sustainability. A series of hypotheses are developed and tested using regression analysis of secondary data. The sources of data are the Sustainable Society Index (SSI) and the World Bank's Logistics Performance Index (LPI). Fundamental aspects of social sustainability and well-being a healthy, educated population, equality, good governance, and reasonable income distribution are related to higher levels of logistics performance. In addition, while logistics performance is a driver of economic activity and success, it is also a contributor to environmental degradation in the form of harmful emissions. If economic growth is among a nation's goals, its leaders are advised to support social well-being, along with technologies and practices for greater energy efficiency (and lower emissions) in transportation

Research Question Two

Q2. How policy sustainability initiative does correlates capacity management in the logistics firms?

Test of Hypothesis Two

H₀₂: There is no significant relationship between policy sustainability initiative correlates capacity management in the logistics firms.

Table 4.2: Pearson Test for relationship between policy sustainability and capacity management

| | | Correlations | |
|----------|---------------------|--------------|----------|
| | | Policy | Capacity |
| Policy | Pearson Correlation | 1 | .744** |
| | Sig. (2-tailed) | | .000 |
| | N | 196 | 196 |
| Capacity | Pearson Correlation | .744** | 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*

In table 4.2. it can be observed that the Pearson correlation (PC) coefficient is 0.744 which shows a strong and positive orientation of the relationship between policy sustainability initiative and capacity management. 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 0.073 which shows a t-statistics value of 2.346 (which is greater than the ± 1.96 threshold level) and a probability level of 0.020 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 policy sustainability and capacity management in Nigeria.

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. This is in accord with Shikur (2022) investigations on logistics performance in merchandizing export and imports of goods and services.

Norazah, Norbayah, Arshian and Sahar (2021) logistics played an important role in the economic excellence of any country and region. However, being a major consumer of energy it also has adverse effects. Therefore there is a need to understand the role of logistics from economic and environmental aspects. By grounding on the theoretical foundations of IPAT and STIRPAT, the

dataset of the present study is comprised of top Asian countries having 540 observations from the year 2010 to 2018 (quarterly). After applying multiple preliminary tests, including cross-section dependence, unit root tests, and cointegration, the long run and short-run relationship among the studied variables are explored by employing the Cross-sectionally augmented autoregressive distributed lags (CS-ARDL). The study confirms the significance of logistic performance index (LPI) in complementing economic growth (EG) and countering carbon emission (CE) along with the other theoretical determinants of IPAT and STIRPAT. Based on the findings, the results are discussed whereas policy implications are also proposed which states the transformation of existing logistical infrastructure towards more environment friendly operations. Lastly the limitations are discussed, on which future research directions are also recommended.

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 policy sustainability that evaluated the influence process optimization and capacity management of logistics firms in Nigeria as its general objectives.

5.2 Recommendations

Based on the findings and conclusions the following recommendations were made

- (1) Management of logistics firms should adopt sustainability policy initiatives to enhance process optimization and capacity management.
- (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 should involves the flows of products, services and information via process optimization and capacity management.

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**APPENDIX
 QUESTIONNAIRE**

PART A

1. GENDER

- Male []
 Female []

2. AGE BRACKETS

- 20- 25yrs []
 26-30yrs []
 31-35yrs []
 36-40yrs []
 41-45yrs []
 46-50yrs []
 51 and above []

3. MARITAL STATUS

- Married () Single () Widow () Divorce () Separated ()

4. EDUCATIONAL QUALIFICATION

- NCE/OND () B.Sc/HND () M.Sc/MBA () Ph.D ()

5. WORKING EXPERIENCE

- 1-4years []
 5-9years []
 10-15years []
 16-20years []
 21 and above []

6. DESIGNATION

- Transportation manager []
 Warehouse manager []
 Information technology manager []
 Procurement manager []
 Human resource manager []
 Customer service manager []

Indicate the extent to which you have agree or disagree each of these questions. Tick the appropriate column that indicate accurately the phrase your company's daily operation.

Deliberations were follows: strongly agree=1, Agree 2, Neutral =3, strongly disagree = 4, Disagree=5.

| S/N | PROCUREMENT SUSTAINABLE INITIATIVES | SA | A | N | D | SD |
|-----------------------------------|---------------------------------------------------------------------------------------|----|---|---|---|----|
| POLICY SUSTAINABILITY (PS) | | | | | | |
| | Total responsibility management is leadership commitment to creating or adding value. | | | | | |
| | Organizational sharing responsibility aims at integration of the | | | | | |

| | | | | | | |
|--|----------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| | system to be sustainable. | | | | | |
| | Environmental management seeks to address efficient utilization of resources. | | | | | |
| | PROCESS OPTIMIZATION (PO) | | | | | |
| | Process modeling gives direction to work flow and eases firm operations. | | | | | |
| | Process mapping reduces firm operational conflict and synchronizes activities or firm operations. | | | | | |
| | Process optimization is completely value driven and result oriented. | | | | | |
| | CAPACITY MANAGEMENT (CM) | | | | | |
| | Capacity requirement planning enables system synergy and synchronization for performance. | | | | | |
| | Supply planning focuses on addressing logistics complexities and variability to attain firm performance. | | | | | |
| | Capacity optimization confers value attainment on firm(s). | | | | | |