

The Impact of Logistics Out-Sourcing Activities on the Organisational Performance of Nigeria's Manufacturing Industry

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ABSTRACT

In the manufacturing industry, logistics outsourcing has become a strategy adopted by industry managers to ensure the effective, successful, and timely execution of customer needs. The discovery of logistics outsourcing as a strategy makes many manufacturing industries move some of their non-core activities to third-party logistics providers. However, the question is, what is the impact of this strategy on the performance of the manufacturing industry? Therefore, at this point, the study aims to examine the impact of Logistics out-sourcing activities on the Organizational performance of Nigeria's Manufacturing Industry. A case study of Friesland Campina WAMCO Nigeria plc. The study objectives are to examine the impact of transport and distribution logistics outsourcing activities on the organisational performance of the industry. The data for the study were obtained from 98 employees, including managers and directors, who work at Friesland Campina WAMCO Nigeria plc. Descriptive survey research was conducted using a structured questionnaire and interview and administered via e-mail and by sending questionnaire links to a WhatsApp platform group of the respondents. The data was analysed using correlation analysis to reveal the relationship between the selected variables. The study established a positive relationship between transport and distribution outsourcing and the performance of the Nigerian manufacturing industry. The recommendation is that when adopting the strategic decision to outsource some non-core activities to 3PL, there is a need to consider whether the operational costs of outsourcing are excessively high.

Keywords: Logistics, Outsourcing, performance, manufacturing industry, Transport, Distribution.

1. Introduction

Logistics, which involves the flow of goods and services from the point of origin to the point of consumption, is part of supply chain management, whose core objective is to plan and execute supply chain activities to meet customer needs. Most organisations across the world, due to the rapidly changing environment, have observed that logistics services play an essential function in the operational efficiency of an organisation. The emergence of globalisation and competitive pressure in the world has forced many managers to adopt various strategies, such as outsourcing organisational logistic activities to third-party logistics

providers (whom they believe to be the best in those activities) to achieve great results. According to Jean (2019), the term "outsourcing is defined as the management strategy adopted by a company to assign some non-core company activities to more specialised service providers so that the company can focus attention and concentrate on the core business or primary activities. Irina et al. (2012) state several reasons firms adopt this business strategy (outsourcing). According to him, he established that cost reduction and the achievement of best practices are the main motives behind the adoption of this strategy. Nowadays, logistics outsourcing is one of the most widely adopted business strategies for achieving outstanding services to consumers in all sectors of the economy, both private and public. Globalisation has led numerous firms, like the manufacturing and construction sectors, to mention a few, to outsource some of their non-core activities or services, such as transportation, distribution, warehousing, and inventory activities, to specialised 3PLs to place more emphasis on their competitive advantage. Muiruri and Iravo (2015) noted that logistic service in the manufacturing sector is not as good as required since logistics service is not a core activity of the manufacturing industry. Therefore, the manufacturing industry needs enormous logistical mechanisms and careful management for effective organisational performance. The core business of the manufacturing industry is to turn raw materials into finished goods. However, they must still procure raw materials, manage inventory, and transport them to distribution centres. All these other activities are non-core and can be outsourced so that the manufacturing industry can focus on its core function, production. Based on that, logistic outsourcing methods were introduced in the manufacturing industry in the early nineties due to the existing position impact it created in the construction industry. According to Waters and Rinsler (2014), the total number of firms in the manufacturing industry adopting outsourced operations is increasing yearly due to benefits such as cost reduction, competitive benefit, experience gained, risk reduction, and quality provided. Other benefits include launching new possibilities, experiences, contracts, and sophisticated thinking methods (Waters & Rinsler, 2014).

However, since the introduction of logistics outsourcing into the manufacturing industry due to numerous advantages, the impact on the performance of the Nigerian manufacturing industry has not been established. Before the adoption of outsourcing strategies in the sector in 2012 by most of the manufacturing industry in Nigeria (NBS, 2013), it was revealed that the gross domestic product (GDP) contribution of the sector in Nigeria was 12.3% in 2006 from 2009 to 2012, the contribution increased by 14.3%, 15.1%, 15.2%, and 17.2%, respectively. This contribution was made before outsourcing activities were introduced in the Nigerian manufacturing industry. This contribution has not changed since the introduction of these activities. For instance, according to the data released by the Nigeria Bureau of Statistics (Nigeria Bureau of Statistics, 2013), the contribution of the manufacturing and construction industries to GDP was as low as 11.5% in 2013. However, in 2014 and 2015, it rose to 16.2% and 16.9%, respectively. Although the sudden decrease in 2013 was attributed to the adverse effects of the crunch experienced during the period (NBS 2013), In a recent report by Damilola (2023), it was shown that infrastructural activities in the manufacturing sector in Nigeria were reduced to 7.5 per cent of their contribution to the Nigerian GDP in the first quarter of 2023.

Another report by Yinka (2023) established that the Nigerian manufacturing sector, during the past five years spanning from 2018 to 2022, recorded an aggregate contribution of 32.346 trillion to the Nigerian economy, representing 9 per cent. The sudden drop from 14.3% in 2012 to 7.5% in 2023 during and after the implementation of this strategy is the reason behind the study.

Jean (2019) revealed that the outsourcing concept in Nigeria, especially in the manufacturing industry, has not received much attention and support, which can be said to be favourable and can enhance organisational growth and performance in Nigeria. The manufacturing sector, therefore, needs enormous logistical approaches, which require good management supervision for effective organisational performance. Although several studies, like Bhattacharya et al. (2013), Kroes and Ghosh (2010), and Mulama (2014), show that logistics outsourcing has a positive impact on organisational performance,

Secondly, research on the impact of logistic outsourcing activities on the Nigerian manufacturing industry is scarce. Some of the completed studies done in respect of this strategy fail to look at the influence of transport, distribution, warehouse, and inventory outsourcing activities on the performance of the manufacturing industry in Nigeria. Hence, there is a need for further studies to mitigate this literature gap. Therefore, the study aims to examine the impact of transport and distribution logistics outsourcing activities on the organisational performance of the Friesland and Campina WAMCO Nigeria plc.

2. Literature Review

2.1 Logistics outsourcing and organisational performance

Jenatabadi (2018) defines organisational performance as a collection of financial and non-financial indicators that provide insight into the extent to which set goals and outcomes have been achieved. Cocoa & Alberti (2010) affirmed that organisational performance can be measured using the following parameters: efficiency, effectiveness, quality, quality of life, productivity, profitability, innovation, and learning. According to Cocoa & Alberti (2010), organisational effectiveness refers to an organisation's capacity to carry out its objectives correctly and at the correct cost. Also, efficiency refers to properly using resources to achieve predetermined goals. The ability to successfully meet or surpass customer expectations is called quality. Productivity is the ratio of output to input; quality of work life is the affective response of employees towards their work and organisation (Pavlov & Bournce, 2011). According to Pavlov and Bournce (2011), profitability is the excess of revenues generated over the costs of the product; innovation is the development of a new idea or improvement of a product for better service (Rhee *et al.*, 2010); and learning is defined as the ability of an organisation to acquire more knowledge to improve or expand the use of the product (Liao & Wu, 2010); looking at the manufacturing industry, organisational performance refers to the efficacy and efficiency of the firms to 'established and meet standards, specifications, objectives, and goals; secondly, guaranteeing the satisfaction of all pertinent stakeholders, and upholding relevant laws and regulations.

2.2 Logistic Outsourcing Activities in Manufacturing Industry

Logistics performance involves the practical trade-off relationship between quality and cost. This assumption is equal to and parallel to the service quality, which must be highly utilised at the lowest logistics costs. As things stand, many companies' transportation costs are currently the highest logistical cost. The cost of transport is usually seen as freight charges. Transportation refers to the movement of raw materials or finished goods from one source to the point of need (Chopra & Meindl, 2007). Knowing when the material will be delivered is essential during the production of any product in the manufacturing industry. Regarding customer satisfaction, short transit times and on-time delivery give transport costs a new dimension. In the manufacturing industry, transportation contributes to and plays a significant role in manufacturing activity and its supply chain (Ballou, 2007). Transportation of commodities in the manufacturing industry is a multi-disciplinary process whereby materials, equipment, and other items are loaded and unloaded, transported, packed, and allocated from place to place (Mariuz Szuster, 2010). Before manufacturing any product occurs, organisations seek and determine the appropriate mode, scheduling time, inexpensive cost, and high-quality guaranteed delivery of material supply. They perform these activities by the third party directly involved in them by providing those services. In most manufacturing industries, especially in Nigeria, delivering raw materials and shipping finished goods or products is not essential to the core competencies (Sherifat *et al.*, 2022). Therefore, it is an activity to outsource. An example of a transport outsourcing provider is a freight forwarder. Freight forwarders are like international agents who facilitate logistics services from the point of sale or purchase to the destination. Sometimes, he covered the following activities: transportation, insurance, and clearance of goods from the port.

2.3 The Impact of Logistics Outsourcing on Organizational Performance

However, several researchers have examined the concept of logistics outsourcing, its benefits, and its impact on organisational performance in various sectors of the economy in developed countries. For example, in the recent study by Akindele (2023), who examined the effect of outsourcing logistic activities of three indigenous shipping industries in Nigeria, observed that logistic outsourcing in the shipping industry has a significant impact, especially on inventory control and the purchase of shipping fuel.

In Nigeria, studies like Akindele (2018) study the impact of logistics outsourcing activities on the performance of the Nigerian shipping industry. The study focuses on crewing outsourcing, bunker supply outsourcing, and warehousing outsourcing in the shipping industry. It was established in the study that cost reduction, lack of technology, lack of personnel, lessening operational risk, and improving productivity and efficiency are contributing factors influencing outsourcing activities in the Nigerian shipping industry. Finally, the study also established a positive relationship between crewing outsourcing, bunker outsourcing, and warehousing outsourcing and the performance of the Nigerian shipping industry. Sherifat *et al.* (2022) examined the effect of logistics outsourcing on the operational performance of the selected manufacturing companies in southwestern Nigeria. The study was done using a descriptive survey design. The study revealed that logistics outsourcing activities significantly

affected the operational performance of the manufacturing companies selected in southwestern Nigeria. The study establishes that logistics outsourcing significantly enhances the operational performance of manufacturing companies. Jenabata & Huang (2017) study the impact of logistic outsourcing on a firm's performance using 51 publicly traded firms as a case study. Unlike most previous studies on outsourcing activities, the study used annual report data to measure the firm's performance. The analysis shows some evidence that outsourcing positively impacts the performance of the traded firms. Siquiet (2015) examined the relationship between distribution outsourcing logistics and the organisational performance of 34 hotels in Sweden. The study shows a positive relationship between organisational effectiveness, productivity, profitability, quality, continuous improvement, quality of work life, and social responsibility levels. Bustinza et al. (2010) examined outsourcing, its competitive capabilities, and the performance of service firms in Spain. The study concluded that there is a positive relationship between outsourcing decisions and company performance resulting from the impact of outsourcing decisions. The recent study by Bhattacharya et al. (2013), titled "Outsourcing as a Key Debate for Organisational Performance," looks at five organisations in Australia as a case study. The key focus of the debate is how the parties (the receiver and the provider) involved in outsourcing services perceive outsourcing from different perspectives, for example, areas of convergence and divergence. The study revealed that several parties often split opinions regarding conflict among the parties, environmental unpredictability, information imbalance, and contract duration. In contrast, different opinions were based on the degree of the guideline, ingrate behaviour, mutual obligation of the parties, goal compatibility, and costs. Petter & Mats (2023), in their study on organising construction logistics outsourcing: a logistics strategy perspective, show that logistics capabilities at the strategic and tactical levels are the key to procuring construction logistics services successfully. Muiruri et al. (2015) determine the effects of outsourcing logistics services on operational efficiency in a DMKL Thika Branch case study. The study adopts a quantitative survey method with a sample of 45 employees. The study revealed that freight logistics, road transportation distribution, customs brokerage, packaging and removals, and warehousing are the logistic outsourcing activities adopted by the firms. Further findings show that logistic outsourcing positively impacts the firm's operational efficiency. Javed, Rafique, and Muhammad (2020) analyse the impact of outsourcing services in the Karachi construction industry. The study used qualitative and quantitative research methods to obtain data from 150 respondents. The results revealed a significant relationship between dependent and independent variables. Further analysis shows that heating, ventilating, or air-conditioning logistic services do not significantly impact organisational performance. In contrast, electrical, civil works, and transportation positively impact organisational performance. Otieno & Jackson (2020), in their study on the influence of outsourcing practices on the performance of construction projects in four public-level hospitals in Nakuru County, Kenya, the study adopted a descriptive survey design method as an appropriate method to achieve the stated objective. The study established a strong relationship between dependent and independent variables (outsourcing activities and performance). Diyuoh and Mensah (2014) conducted a study to determine the influence of supply chain management on the performance of Kasapreko Company Limited, using a sample of 200. The study findings revealed that the

company utilised supply chain practices for six years, from 2004 to 2010. Also, the study ascertained that supply chain practices, as shown in the sales trend, strongly and significantly affect the company's performance. The study listed inventory management, outsourcing, information sharing, and green supply chain practices as among the significant supply chain management practices. Mahulo (2015) conducted a study on supply chain management practices and performance, focusing attention on the cement manufacturing companies in Kenya. The study used the principal components analysis to determine the major supply chain practices adopted in the cement manufacturing industry in Kenya. The result established that all seven components measured in the study explain 84.55% of the performance of cement companies in Kenya. Furthermore, Tinney (2012) examines the relationship between supply chain attributes such as orientation, management, and collaboration and the effects of those concepts on organisational performance. The study employed only primary data collected using a questionnaire and interviews as the means of data collection. Out of the three attributes of the supply chain measured, orientation and collaboration were linked to organisational performance. In the study, Kaluki (2015) analysed supply chain management practices and service delivery using some selected humanitarian organisations in Kenya. The regression analysis results show a positive relationship between supply chain management and service delivery. The study also found that the employment of SCM in humanitarian organisations in Kenya has helped to save lives, enhance stability to respond to different magnitudes of disasters, improve resource utilisation, and reduce time spent responding to disasters. Clement and Daniel (2019) evaluated the impact of outsourcing transport logistics on organisational performance. Six alcoholic beverage-producing companies in Ghana were adopted using a mixed-research approach to address the study's objectives. The study results show that firm improvement, competition, global recognition, risk minimisation, and cost control or reduction are the reasons for outsourcing fast-moving consumer goods in Ghana. The study revealed that outsourcing activities, which help greatly reduce transport costs, lead to increased profitability for selected alcoholic beverage-producing companies in Ghana.

In conclusion of the review, the research mentioned above should have examined the influence of transport outsourcing, distribution outsourcing, or warehousing outsourcing services on the business performance of manufacturing industries in Nigeria.

3. Methodology

For this study, a quantitative research approach was used because the study seeks to test a set of hypotheses, and the literature reviewed ascertains that the approach is an appropriate method for a study designed to analyse the theory through narrow hypotheses proposition and data-gathering to agree or disagree these hypotheses. The questionnaire used for the study was constructed using the feedback method. This means that the information used to formulate the questionnaire was obtained and developed based on the information from the target population. This method helps to ensure that respondents used in the study have enough information or expertise to answer the questions truthfully. The study population comprised logistics department employees of the Friesland Campina WAMCO Nigeria Plc.

3.1 Overview and Belief History of Friesland Campina WAMCO Nigeria (FCWN) Plc

Friesland Campina WAMCO Nigeria Plc is a multinational manufacturing company and one of Nigeria's fastest-moving consumer goods industries, located at Plot 7B, Acme Road, Ikeja Industrial Estate, Ogba, Ikeja, Lagos, southwest Nigeria. The company is an affiliate of Royal Friesland Campina in the Netherlands, the world's largest dairy cooperative. Since the company's establishment, it has been managed by three levels: top management, middle management, and low management. FCWN has been leading similar industries in providing high-quality dairy products through its powdered and evaporated milk brands, such as Peak Milk, Three Crowns, Coast, NUNU, and Olympic. Over the years, FCWN Plc has been involved in Nigeria by addressing three significant national challenges, such as nutrition security, sustainability, and good living for all Nigerians, and contributing to the nation's gross domestic product. The company operates an extensive distribution network across Nigeria's 36 states and the Federal Capital Territory, with about 3,000 permanent staff deployed in various locations nationwide. At the same time, the main branch has one hundred thirty (130) permanent staff as of the fourth quarter of 2023, as shown in Table 1 below.

Table 1: Number of staff at the Head Office

Staff categories	First quarter 2022	Second quarter 2022	Third quarter 2022	First quarter 2023	Second quarter 2023	Third quarter 2023	Fourth quarter 2023
Senior manager	11	11	10	11	11	11	11
Middle-level manager	15	15	13	15	14	15	15
Superior	40	40	40	39	39	37	37
Junior Staff	61	61	61	61	61	67	67
Total	127	127	124	126	125	130	130

Source: Friesland Campina WAMCO Plc staff strength report (2022- 2023)

The company operates under the following departments: maintenance and engineering department, finance department, marketing department, sales department, operations department, inventory management department, and transport department. The first logistics outsourcing activity for the company was in 2014, when the company outsourced some of the non-core activities, such as transport and distribution activities. FCWN Plc was selected as one of the first five leading fastest-moving consumer goods industries in Nigeria that are into transport and distribution outsourcing activities to an external third-party logistics provider. This study's population is all FCWN Plc staff working at their head office. The reason for choosing the head office is because they know what is happening in terms of outsourcing arrangements and their impact on the organisational performance of the industry. Therefore, a total of one hundred thirty (130) permanent staff as of the fourth quarter of 2023, as shown in Table 3.1, serves as the population of the study. In all, the study's sample size was determined using the Yamane (1967) technique. Descriptive and correlational analysis were employed in the data analysis process using SPSS version 25.0.

4. Discussion of Result

4.1 Social-economic Characteristics of the Respondents

The socioeconomic characteristics of the respondents were considered necessary in this study because the reliability of any study partly depends on the source of information or data and

the methodology adopted. Therefore, Figure 1 shows the gender of the study's seventy (70) respondents. The result indicates that 71% of the respondents are male, while the remaining 29% are female. The significance of this is that gender parity was achieved during the study; therefore, the responses obtained were from male and female respondents. This implies that both genders are well represented in the survey. Secondly, the result implied that women are on the rise and competing with men in Nigeria's manufacturing industry. This result contradicts the study of Obinna (2018), who recorded as few as 14% of female participants in the Nigerian manufacturing industry.

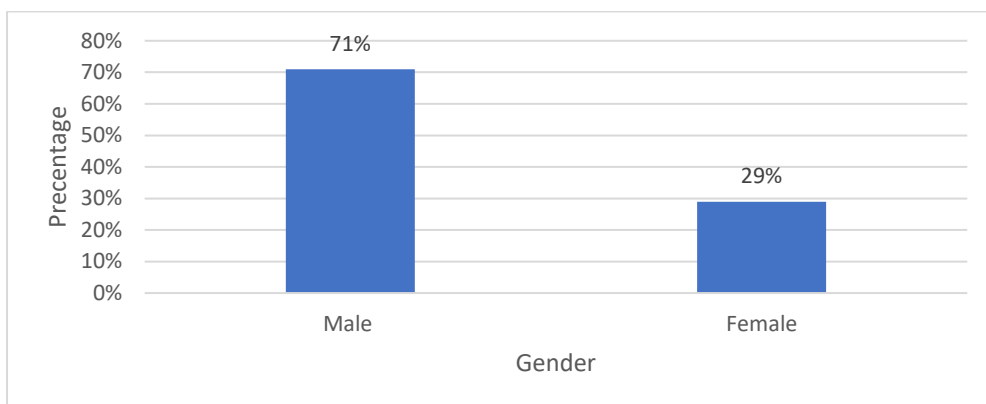


Figure 1 The gender of the respondents

Source: Author's finding (2024)

The respondents' education level was considered necessary because it ensured that respondents understood the questions on the theme of the study and, hence, gave reliability and confidence in the data provided. The analysis in Figure 2 shows that 36% of the respondents have a bachelor's degree certificate, 51% have a master's degree, 5% have a doctorate degree certificate, and 8% belong to others. In addition to their degree level, most possess professional certifications in various fields, making them qualified and worthy of their position in the organisation. The results show that most of the respondents acquired a master's degree certificate, and the least number of respondents had a doctorate. This implies that the information from the respondents was reliable and can provide an accurate picture of outsourcing activities in the company.

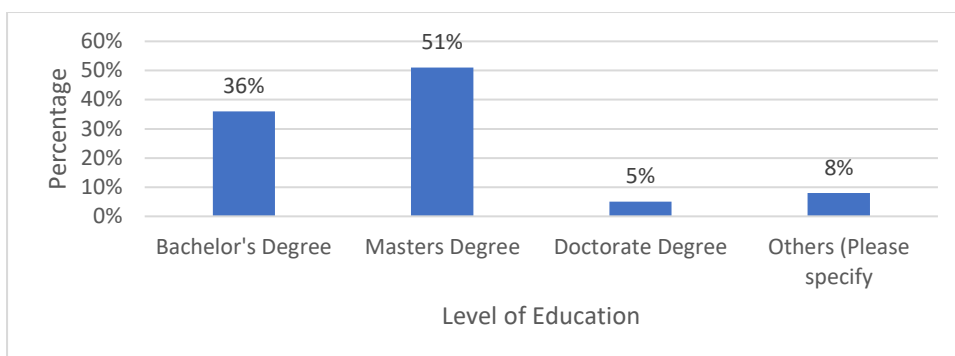


Figure 2 Level of Education
Source: Author's finding (2024)

Figure 3 shows the result of the respondent's position in the company. From the result, 20% of the respondents are in the managerial category, 25% are supervisors, 38% are middle-level officers, and 17% belong to other categories of staff. The above result implies that most respondents are middle-level officers of the company, such as assistant managers, supervisors, and engineers. This was followed by the supervisor and managers of the company.

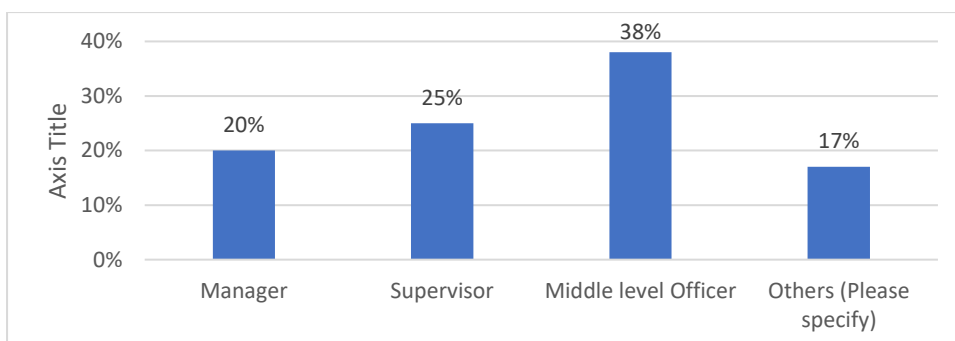


Figure 3: Respondent's position in the company
Source: Author's finding (2024)

Furthermore, the study sought to know the respondents' years of experience. According to Figure 4, The study found that most respondents had worked in the industry for more than a year. The breakdown shows that 23% of the respondents had worked for less than one year. 64% of the respondents worked between 1 and 5 years, 8% worked between 6 and 10 years, and only 5% had worked for ten years and above. The significance of this result is that the respondents have been in the company long enough to understand various issues outlined in the topic of study and, as such, are in the best position to participate. Secondly, it strengthens the claim that the respondents chosen were the best to take part in the study based on their experience level. Thirdly, the experience level implied that they were knowledgeable in the subject area and other industry-related activities. Therefore, their responses to the study's propositions were valid and relevant.

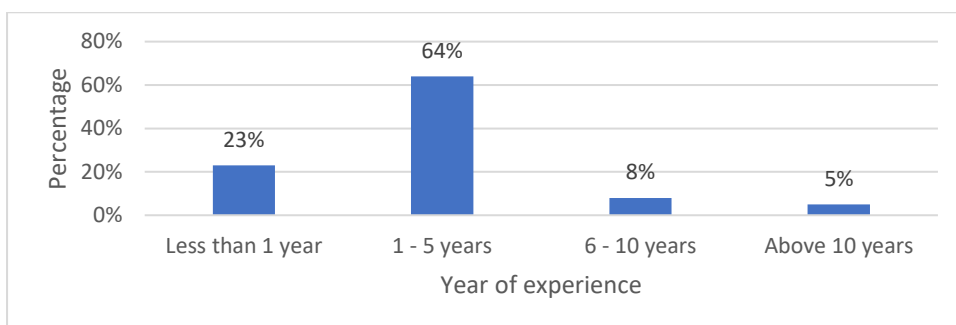


Figure 4 Years of experience
Source: Author's finding (2023)

This section deals with the questions related to the objective of the study. Questions like “Does your company outsource non-core activities?” were asked. The results in Figure 5 show that 89% of the respondents attested that Friesland Campina WAMCO Nigeria (FCWN) plc outsourced some of their non-core activities to a third-party logistics provider. This finding is in line with the study of Sherifat et al. (2022).

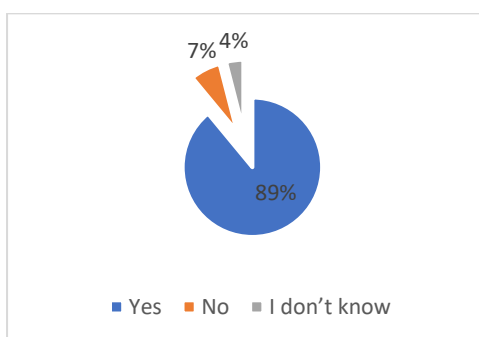


Figure 5 Does your company outsource non-core activities
Source: Author's finding (2023)

Table 2 shows the descriptive analysis result with the mean value of the level of implementation of the outsourcing activities in FCWN. Based on the 5-point Likert scale used, such as not implemented, not sure, neutral, slightly implemented, and fully implemented, the mean value was interpreted as follows: 1.0-1.49 show very low implemented; 1.5-2.49 show low implemented; 2.5-3.49 show moderate implemented; 3.5-4.49 show extensive implemented; 4.5-5 show very large implemented.

The analysis in Table 2 indicates that most respondents affirm that all the listed outsourcing activities, such as transportation, distribution, warehousing, and inventory outsourcing, are fully outsourced, having scored a percentage of agreement more significant than 50%, respectively. The mean score of 4.0, 4.4, 3.8, and 3.6 implies that FCWN has implemented

non-core activities such as transportation, distribution, warehousing, and inventory for third-party logistics providers. However, these results indicate that the most outsourced component is distribution, followed by transportation.

Table 2 Outsourcing logistics activities implementation in the FCWN plc

Outsourcing activities	Not Implemented	Not sure	Neutral	Slightly implemented	Fully implemented	Mean Value
Transportation outsourcing	5%	2%	2%	25%	65%	4.0
Distribution outsourcing	4%	2%	1%	26%	67%	4.4
Warehousing outsourcing	11%	5%	4%	32%	49%	3.8
Inventory outsourcing	5%	6%	11%	31%	48%	3.6

Source: Author's finding (2024)

4.2 The Significance of Transport Outsourcing Activities on the Organisational performance of FCWN

The study sought to assess the effect of transport outsourcing activities on the organisational performance of FCWN Ltd. From the results in Table 3; the descriptive statistical analysis results show that the participants strongly agreed that transport outsourcing leverages the Nigerian manufacturing industry with third-party logistics providers, with a mean of 3.5 within a standard deviation of 0.81542. This agrees with the study of Bore et al. (2020). The findings show that the participants strongly agreed that transport outsourcing activities help the organisation to ship large volumes of commodities at lower prices, with a mean of 3.7 within a standard deviation of 0.8523. Also, the study shows that the participants strongly agreed that transport outsourcing operations help transfer transportation risks to 3PL, with a mean of 3.8 within a standard deviation of 1.0672. The participants agreed that outsourced activities protect the organisation from penalties, with a mean value of 3.983.

Finally, the participants strongly agreed that transport outsourcing activities enhance operational control, with a mean value of 3.7 and a standard deviation of 1.0991. Going by the above result, most of the respondents strongly agree with the statement presented in the study on the impact of transport outsourcing activities on the performance of FCWN Ltd. During the interview session with the head of the transport department; he acknowledged that transport outsourcing strategies had a positive impact on the operation of the company. He affirmed the introduction of transport outsourcing to help FCWN Ltd. save costs such as penalties and charges during the shipment of commodities or products from port to port. Secondly, he also affirmed that transport outsourcing helps improve the company's productivity and service quality in the sense that the company focuses on its main activity, production. This implied that transport outsourcing services have an encouraging impact on the operational efficiency of the Nigerian manufacturing industry. Finally, the study affirmed that the FCWN opted for transport outsourcing due to its advantages and its possible influence on organisational performance, because it helps the organisation focus on its primary business line. According to Wisdom (2016), in his study on the impact of transport outsourcing

activities on organisational performance, the study established that without transport, there is no innovation.

Table 3: the effect of transport outsourcing on the organisational performance

Statements	Agree and strongly agree (Cumulative percentage)	mean	Std derivation
Transport outsourcing leverage Nigeria Manufacturing Industry with third-party logistics provider	61%	3.5	0.81542
Shipment of large volume of commodities with lesser prices	65%	3.7	0.8523
Transport outsourcing totally transfers the risks of transportation	71%	3.8	1.0672
Transport outsourcing activities protects the organisation from penalties	76%	3.9	1.0863
Transport outsourcing activities enhance operational control	72%	3.7	1.0991
Average		3.72	

Source: Author's finding (2024)

The respondents' ratings based on the statements above were cumulated to obtain a composite score for the variable, which was then correlated. The result of the correlation analysis using Pearson product-moment correlation between transport outsourcing and performance is presented in Table 4. The result revealed a positive relationship between transport outsourcing and the performance of FCWN, with $r = 0.713$ and a p -value of 0.001. This implies that the performance of FCWN is associated with the level of transport outsourcing undertaken by industry management.

Table 4: Correlations between transport outsourcing and Performance of FCWN

		Transport	Performance
Transport outsourcing	Pearson correlation	1	.713**
	Sig. (2 tailed)		.001
	N	68	68
Performance of FCWN	Pearson correlation	.713**	1
	Sig. (2 tailed)	.001	
	N	68	68

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Author's finding (2024)

4.3 Assess the Significance of Distribution Outsourcing Activities on the Organisational Performance

Table 5 shows the descriptive analysis of the effect of distribution outsourcing on organisational performance. From the analysis, most of the participants (78%) agreed that distribution outsourcing activities help the organisation have access to specialised skills and technology, with a mean value of 4.3. This result is in line with the study of Bore and Peter (2020). During the interview with the distribution manager, he established that the distribution outsourcing activities adopted help the organisation distribute their product quickly to various business outlets across the country with the help of modern technology equipped by their third-party logistic provider. This implies that both the respondent and the distribution manager are of the same view. Secondly, the results show that most participants agreed that outsourcing distribution activities help the organisation deliver their goods to their warehouses on time, with a mean value of 4.0. The distribution manager also confirmed this during the interview. According to him, customers are satisfied with the distribution strategy because

products are received when needed without damage. All these are the results of the distribution outsourcing strategy. The results show that 77% of the respondents agreed that vehicles are easily tracked when engaged in 3PL. The results also show that most respondents believed order dispatching was done in the nearest outsourced warehouse using the most available distribution outsourcing providers. This was also confirmed by the distribution manager during the interview section. The interview affirmed that FCWN uses an external third-party logistics provider to distribute the product to reduce costs and risks and gain a competitive advantage.

Table 5: The effect of distribution outsourcing on the organisational performance

Effect of distribution outsourcing on organisational performance	Mean	Std derivation
Distribution outsourcing activities help the organisation gain access to specialised skills and technology.	4.3	0.831
Distribution outsourcing activities help the organisation deliver their goods at their various warehouse on time	4.0	0.798
Easy tracking of vehicle and vehicle visibility	4.3	0.892
Dispatching of orders is done in the nearest outsourced warehouse using the most available distribution outsourcing providers	3.8	0.7318
Average	4.1	

Source: Author's finding (2024)

The result of the correlation analysis in Table 6 revealed a positive relationship between distribution outsourcing and the performance of FCWN, with $r = 0.633$ and a p -value of 0.000. This implies that the performance of FCWN is associated with the level of distribution outsourcing undertaken by industry management.

Table 6: Correlations between distribution outsourcing and Performance of FCWN

		Distribution	Performance
Distribution outsourcing	Pearson correlation	1	.633**
	Sig. (2 tailed)		.000
	N	68	68
Performance of FCWN	Pearson correlation	.633**	1
	Sig. (2 tailed)	.000	
	N	68	68

**Correlation is significant at the 0.01 level (2-tailed).

Source: Author's finding (2024)

5. Conclusion

In conclusion, the assessment has shown that outsourcing activities significantly impact the operation and performance of the FCWN. The study established a positive relationship between transport and distribution outsourcing and the performance of the Nigerian manufacturing industry. Based on the significant findings established in the study, when adopting the strategic decision to outsource some non-core activities to 3PL, there is a need to consider whether the operational costs of outsourcing are excessively high. If outsourcing costs are within an acceptable range and are similar to those of running the service by the organisation, then logistics outsourcing should not be undertaken.

References

- Akindele, O. E. (2023). *The effect of out-sourcing logistics activities on the performance of Nigeria's shipping industry*. Federal University of Technology Akure.
- Bhattacharya, A., Singh, P. I., & Bhakoo, V. (2013). Re-visiting the outsourcing debate: two sides of the same story. *Production Planning & Control*, 24(4-5), 399-422.
- Bore, C. L., & Peter, M. (2020). Influence of Logistics Outsourcing Services on Supply Chain Performance in Commercial State Corporation in Nandi County, Kenya. *Journal of Business Management and Technology*, 4(3), 332- 348.
- Bustinza, O., Arias-Aranda, D., & Gutierrez-Gutierrez, L. (2010). Outsourcing, competitive capabilities and performance: an empirical study in service firms. *International Journal of Production Economics*, 126(2), 276-288.
- Cocoa, P., & Alberti, M. (2010). A framework to assess performance measurement systems in Firms. *International Journal of Productivity and Performance Management*, 59(2), 186-200.
- Damilola, A. (2023). *Construction, real estate GDP to Nigeria*. Punch online.
- Diyuoh, C., & Mensah, D. O. (2014). Assessment of Supply Chain Management Practices and Its Effects on the Performance of Kasapreko Company Limited, *European Journal of Logistics Purchasing and Supply Chain Management*, 2(1), 1-16.
- Irina, S., Liviu, I., & Ioana, M. (2012). *A study on the benefits and the risks of outsourcing logistics in the Romanian industry* (Vol. 21). The Annals of the University of Oradea.
- Javed, A., Rafique, A. K., & Muhammad, M. B. (2020). Perceived Effect of Outsourcing on Organizational Performance in Pakistani Construction Industry. *Proceedings of the 5th Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA-5 2020)*, 152, pp. 1040- 1054.
- Jenabata, H. E., & Huang, H. I. (2017). Impact of supply chain management on the relationship between enterprise resource planning system and organisational performance. *International Journal of Business and Management*, 11(12), 109-117.
- Jenatabadi, H. (2018). *An Overview of Organizational Performance Index: Definitions and Measurements*.
- Kaluki, B. (2015). *Supply Chain Management Practices and Service Delivery In Humanitarian Organisations In Kenya*.

- Kroes, J. R., & Ghosh, S. (2010). Outsourcing congruence with competitive priorities: Impact on supply chain and firm performance. *Journal of Operations Management*, 28(2), 124- 143.
- Liao, S.-H., & Wu, C.-E. (2010). System perspective of knowledge management, organisational learning, and organisational innovation. *Expert Systems with Applications*, 37(2), 1096-1103.
- Mahulo, E. (2015). *Supply chain management practices and. Performance of cement companies in Kenya*. Kenya: Unpublished MBA project, University of Nairobi Kenya.
- Muiruri, G., & Iravo, M. (2015). THE EFFECTS OF OUTSOURCING LOGISTICS SERVICES ON Operational efficiency in the manufacturing industry: Case of Del Monte Kenya Ltd. *Journal of Management*, 2(16), 291-316.
- Mulama, O. (2014). *Logistics outsourcing practise and performance of larger manufacturing firms in Nairobi*. Unpublished MBA project, University of Nairobi.
- Nigeria Bureau of Statistics. (2013). *Gross domestic product yearly report*. Punch.
- Otieno, J. Y., & Jackson, M. N. (2020). Influence of Outsourcing Practices on Performance of Construction Projects in Public Level Four Hospitals in Nakuru County, Kenya. *The International Journal of Business Management and Technology*, 4(3), 168-177.
- Pavlov, A., & Bournce, M. (2011). Explaining the effects of performance measurement on performance – an organisational routines perspective. *International Journal of Operations and Production Management*, 31(1), 101-122.
- Petter, H., & Mats, J. (2023). Organising construction logistics outsourcing: a logistics strategy perspective. *Construction logistics outsourcing*.
- Rhee, J., Park, T., & Lee, D. H. (2010). Drivers of innovativeness and performance for innovative Firms in South Korea: mediation of learning orientation. *International Journal of Technovation*, 30(10), 65-75.
- Sherifat, O. A., Olubodun, I. E., & Saka, A. N. (2022). Effect of logistics outsourcing on operational performance of the selected Manufacturing companies in Southwestern Nigeria. *Open Journal of Business and Management*, 10, 3485-3499.
- Siquiet, S. Q. (2015). Examination of the distribution outsourcing logistic and organisational performance. *International Journal of Social Science*, 3(7), 8-15.
- Tinney, A. (2012). *The effects of supply chain orientation, supply chain management and collaboration on perceived performance*. USA: Air Force Institute of Technology, Air University graduate research project.

- Waters, D., & Rinsler, S. (2014). *Global Logistics: New Directions in Supply Chain Management (7th ed.)*. London, United Kingdom: Kogan Page Publishers.
- Wisdom, E. (2016). Impact of human investment on organisation performance. *Journal of human development*, 101- 109.
- Yinka, K. (2023). *Manufacturing sector contribution to GDP*. Punch online.