

Supplier Integration Strategy and Performance of Brewing Firms in Nigeria

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Abstract: *This study explored the influence of supplier integration strategy on the performance of the brewing firms in Nigeria. The research was aimed at establishing empirically the influence exerted by supplier integration strategy on the performance of brewing firms in Nigeria. The survey research design was adopted for the study. The population of this study was 273 managerial staff who were sourced from selected brewing firms in Nigeria while the sample size was 162 as determined through Taro Yamane sample size determination formular. The questionnaire was designed and used for data collection from respondents. The study had a response rate of 73.5%. The simple regression technique was used in testing the research hypothesis. Findings from the study indicated that with an R^2 value of 0.353, there was a significant positive influence of supplier's integration strategy on the performance of brewing firms in Nigeria. Based on this result, it was concluded that supplier integration strategy can determine the performance of brewing firms in Nigeria. In line with the result of the study and its conclusion, it was recommended that brewing firms in Nigeria should consider different ways of improving upon their suppliers' dealings and its overall supplier integration strategy. The brewing firms can do this by strengthening its relationship with their service providers to enhance and improve their service delivery towards improving its performance.*

Keywords: Suppliers integration strategy, Performance, Brewing firms, Nigeria

INTRODUCTION

Given the heightened level of competition in business sectors and the global economy generally, there has been a search for improved ways of gaining advantage to stay relevant or outwit the competition in various businesses. This has made supply chain managers and professionals look at integration as a possible strategy of creating strategic partnerships to improve supply chain operations particularly in responding to changing market demands making them switch their models to meet emerging scenario. This necessarily requires a consideration of strategies that can enhance purposeful integration.

For manufacturing firms, a number of strategies have been deployed in supply chain management. These include, Integration Strategy, Total Quality Management, Benchmarking; and Innovation and Technology, Six Sigma, among others (Amue and Ozuru, 2019; Schoenheer and Swink, 2015). Among these strategies, the integration strategy is particularly appropriate given the difficult and complex nature of the present-day business environment where firms' supply chain is somewhat unreliable,

experience increased costs and in some instances may not meet the organisations' peculiar circumstances. Here lies the importance of integration strategy. Three core integration strategies have been identified in literature; these are supplier integration, internal integration and customer integration strategies (Wambue 2021; Saleh 2019). This study focuses on supplier integration strategy.

Supplier integration is the dimension of integration strategy with a focus on the extent to which a business organisation can effectively partner with its strategic supplier members. It is concerned with the core competencies required for co-coordinating critical suppliers (Flynn *et al*, 2018). As a key element of integration strategy, supplier integration strategy is said to influence organisational performance (Wambua, 2021).

Performance serves as the basis through which organisations evaluate the extent to which their set goals are being achieved. Organisational performance has two main categories; these are financial performance and non-financial performance. The financial aspect of performance deals with indices such as Return on Equity (ROE), and Return on Asset (ROA) among others while the non-financial aspect of performance deals with indicator such as customer satisfaction, retention, product quality and the like. For the manufacturing sector particularly the brewing industry, its performance indicators should focus more on gains of the supply chain in areas such as on-time order deliveries, faster response rate, reduced costs, profitability, market share and customer satisfaction (Crandall *et al.*, 2018). There is paucity of related studies in Nigeria. However, Peterson (2015) assessed supplier integration and product development in France and found that supplier involvement had significant effect on new product development. Another study by Koutleros *et al* (2017), who examined supplier integration and product development in Tunisia, revealed that supplier integration has a positive impact on product development. Similarly, Chris *et al* (2017) in their exploration of supplier selection and supply chain of pharmaceutical firms, showed that strategic supplier selection significantly influences supply chain in pharmaceutical firms. These studies were conducted outside the brewing industry and in other countries which are contextually different from Nigeria. The present study complements existing studies in the area by asking the question, does supplier integration strategy determine the performance of brewing firms in Nigeria?

REVIEW OF CONCEPTUAL AND THEORETICAL ISSUES

Supplier Integration Strategy

Kuo and Yang (2021) posited that for organisations to achieve supply chain effectiveness, supplier chain integration strategy should be an invaluable focus. The reason for this is that information regarding supplier anticipation which will help to ensure that demand forecasts, inventory and production processes are properly managed to maximize the ultimate benefits of the external supply chain. As organisations interact together using supply integration, the firm's partnership will, however, help them to reduce lead time with the view of enhancing quality and innovation in service delivery.

Li *et al.* (2020) posit that supplier integration strategy is the initiative on the long term relationship between suppliers and organisations. This was established to foster their relationships and leverage the operational and strategic capabilities of suppliers in supporting the organisation to achieve operational benefits. Integration strategy is characterized by different activities and aspects such as information sharing, coordination, trust-shared technology and other managerial activities which the organisation needs to advance and innovate within the supply chain (Mohan, 2019). The degree of

commitment can be enhanced through trust which is one of the focal points in supplier integration (Yadar and Dutta, 2023). An integration strategy incorporates trust that assists management in reducing conflicts. It is a means of advancing cooperation between an organisation and its suppliers that fosters information sharing, material, knowledge and experiences. Supplier integration strategy is a move that improves and smoothens the relationship between the organisation and its suppliers (Huo *et al*,2019).

The thrust of supplier integration is on how enterprises collaborate with their strategic partners in the business. Flynn, *et al.*, (2019) have observed that a key consideration of supplier integration is competency which is needed to be able to coordinate many suppliers effectively to have positive results. Again, Mehdikhani and Valmohammadi (2019) are of the opinion that supplier integration facilitates transactions between business organisations and their supply chain partners. Supplier integration ensures that the firm cooperates well with its suppliers of goods and services which it needs in its business and which will help it to provide service to its customers (Danese *et al.*, 2019). The implication of supplier integration strategy is an indication that a typical manufacturing business such as a brewery cannot on its own alone deliver products and services to its customers. External partners such as suppliers of raw materials contribute towards service delivery by products from breweries; such partners are central to the success of the brewing firms. On account of these, there is the need to properly integrate them as strategic partners. Such integration is an indication that the breweries are aware of the role played by its suppliers in their service to customers and in their overall success as a business.

Concept of Performance

Daft (2017) explains that performance represents the organisation's ability to achieve its set objectives efficiently and effectively. Flapper *et al.* (2016) define performance as the way the organisation carries its objectives into effect. Organisational performance is the product of interactions of different units in the organisation (Mohan, 2019). Jones and Singhal (2019), assert that a performance management system considered effective would provide useful information in decision making which bothers on current performance level as well as any deviation from goals. Objectives must be monitored to make sure they serve their goals, which in turn serve the stated purpose. Objectives are short-term achievements while goals are long-term achievements. Performance is important to any business. This is because a major objective of business is to make profits. Performance comprises financial and non-financial performance indices. Whichever way, these factors need to be established for effective measurement. It is not limited to financial measurement. It is not limited to financial factors such as return on equity, sales growth, profitability and return on investment, but also, the quality of service, teamwork and decision making which are considered factors of administrative performance indicators. The performance of a business, therefore shows its capacity in attaining set goals through an effective use of its resources

An organisation's performance is influenced by its operating environment. It is the organisation's capacity in achieving its established goals (Kuo and Yang, 2021). Li and Zang (2022) believes that performance management system is effective when it provides useful information in decision making on how the organisation is currently performing against planned performance. This implies that planned objectives must be monitored to make sure it serves its goals, which in turn serve the stated purpose. Objectives are short-term achievements while goals are long-term achievements. Ranjan and

Read (2021) believe that accurate an assessment of performance would provide direction for performance improvements.

Tzery and Chen (2022) conceived organisational performance as a multidimensional factor. According to the author, performance includes profitability, productivity, competitive position, employee development, employee relations, technological leadership and public responsibility. Yadar and Dutta (2023) listed organisational performance measures to include sales, market share, ability to gain market share, sales growth rate, return on investment, profits and competitive position or advantage. Similarly, Desarbo (2019) posited that performance indicators include, profit, return on assets; relative market share; overall customer retention; retention of major customers; sales growth rate; and overall profit margin relative to the objective for a business unit. Thus, organisational performance does not depend on a single attribute, but rather on the fit among the elements of an organisation (Donaldson, 2018). There is, however, no perfect measure of performance since each measure individually has strengths and weaknesses (Cardon, 2019). The author concluded that multi-dimensional measures will probably be required to capture more fully the concept of organisational performance.

The success of organisations over the years was not completely achieved due to the fact that most organisations have not been operating well in the management of their activities (Alavi and Khedmati, 2021). As a result of the current competitive environment which is driven by an increase in technological advancement, modern-day organisations have advanced into integration strategy in order to effectively handle its corporate coordination, complaints management strategy and partnership with other organisations with a view to gaining competitive advantage and recording above average return from their investments (Alavi and Khedmati, 2021).

Some authors have emphasised that integration strategies facilitate the flow of resources and that resources facilitate the creation of value in the form of service delivery to customers (Jia *et al.*, 2020). Other authors have argued that integration strategies create value for customers and as a result lead to customer satisfaction, improve business financial performance and grow business market share (Li, *et al.*, 2020; Madhani, 2020; Zhao *et al.*, 2021). In the same vein, Zhang *et al.*, (2019) explain that integration strategies enhance interdependency in implementing supply chain processes and promotes speedy flow of information, materials and other resources required to deliver products to customer's. As seen in the different positions and arguments presented by these authors, integration strategies create value for customers and requires interdependency among supply chain members, thus the quality of the interdependency becomes essential to deliver products or service and customers impression about the products /services enjoyed.

The Network Perspective Theory was used to support this study theatrically. The Network Perspective Theory was developed by Granovetter in 1990. The network perspective theory describes the relationships between business organisations located in the same supply chain. The concept developed over time from the simple consideration of relationships or strategic alliances between just two companies, towards the explanation of relationships between several counterparts. Within a supply network, are they suppliers, organisations, buyers, customers or manufacturers'. The network perspective theory is supposed to define the relationships among competitive firms within the supply chain network.

The Network Perspective Theory is understood as a form of network governance that is necessary to ensure that participants engage in collective and mutually supportive action, that conflict is addressed, and that network resources are acquired and utilised efficiently and effectively (Jones and Singhal, 2019). The functionality and the objective of an organisation do not depend solely on how the partners work together to achieve common goals and objectives, but how the partners cooperate with the organisation. Therefore, interacting with other players becomes an essential element in the development of a new set of capabilities and resources. Thus, it becomes important and easier to achieve greater success because organisations are integrated with other members (Kumar and Rehman, 2021). By implication, supply chain integration requires a flow of relationship and interactions among parties. This is possible given that there is effective integration of the parties. The importance of Network Perspective Theory in the present study is seen in the area of emphasising the role played by coordination and harmony in assisting the supplier groups and the brewing firms in the supply chain toward effective service and product delivery.

Peterson (2015) assessed supplier integration and product development in France. And found that supplier involvement had significant effect on new product development. Another study by Koutleros *et al* (2017), who examined supplier integration and product development in Tunisia, revealed that supplier integration has a positive impact on product development. Similarly, Chris *et al* (2017) in their exploration of supplier selection and supply chain of pharmaceutical firms, showed that strategic supplier selection significantly influences supply chain in pharmaceutical firms.

METHODOLOGY

The survey research design guided the conduct of this study. The population of the study was 273 managerial staff sourced from selected breweries in Nigeria, namely, International Breweries Plc, Nigerian Breweries Plc, Champion Breweries and Infacto Breweries. The questionnaire was used in data collection while data analysis was done with multiple regression analysis. Performance was estimated as a function of integration strategy namely, internal integration strategy, supplier integration strategy and customer integration strategy.

The following simple regression model was stated:

$$y = \alpha_0 + b_1 x_1 + e_t$$

where

y	=	Performance
α_0	=	Intercept (constant)
b_1	=	Coefficient of Supplier Integration Strategy
e_t	=	error term

RESULTS AND DISCUSSION**Table 1 Demographic Profile of Respondents**

Variables	Categories	Frequency	Percentage%
Gender	Male	76	63.87
	Female	43	36.13
Age	Under 30	18	15.13
	31-35	26	21.85
	36-40	37	31.09
	41-45	22	18.48
	46 and above	16	13.45
Education	B.Sc/HND	58	48.74
	M.Sc/MBA	39	32.77
	PhD	8	6.73
	Others	14	11.76
Work experience	Under 1 year	15	12.61
	1-5 years	37	31.09
	6- 10 years	26	21.85
	11-15 years	35	29.41
	16 years and above	6	5.04

Source: Field Data, (2024)

Table 2 is an analysis of the demographic characteristics of the respondents in this study. From Table 2, the gender distribution shows that out of the 119 respondents who took part in the survey, 76 of them were male. This represented 63.87% while 43 respondents were female. This represented 36.13%. The result implied that majority of the respondents in the study were male. The table indicates the age distribution of the respondents. In terms of age, 18 respondents were under 30 years of age. This number represented 15.13%, 26 respondents fall between 31 – 35 years of age. This represented 21.85%, 37 of the respondents fall between the age of 36 – 40 years of age. This represented 31.09%. Furthermore, 22 respondents were between 41– 45 years. This represented 18.48% while 16 of the respondents were aged 46 and above representing 13.45%. The analysis indicated that more respondents in the study belonged to the age bracket of 36-40. Also, the table presents the educational background of the respondents. with respect of level to the education, 58 of the respondents possessed a BSc/HND. This represented 48.74%, and 39 of them had MSc/MBA. This represented 32.77%, 8 respondents had PhD. This represented 7.69 while 11 respondents had other qualifications. This represented 6.73%. The analysis showed that most of the respondents were holders of BSc/HND. Table 4.4 also presents the ‘years of experience of respondents. It shows the number of respondents that had work experience under one year was 15. This represented 12.61%, 37 of the respondents falls between 1-5 years of experience. This represented 31.09%, while 26 of them fall between 6-10 years of experience representing 21.85%, and 35 of the respondents fall between 11-15 years of experience. This represented 29.41% and 6 of them falls between 16 years and above of work experience. This represented 5.04%. The result means a majority of the research participants were well experienced.

Hypothesis

Ho: Supplier integration strategy has no significant positive influence on the performance of brewing firms in Nigeria

Hi: Supplier integration strategy has a significant positive influence on the performance of brewing firms in Nigeria

Table 1: Regression Analysis Result on the influence of Supplier Integration Strategy on the on the performance of brewing firms in Nigeria

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.594 ^a	.353	.318	0.01389		
Goodness of Fit of the Model^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.523	1	52.571	31.309	.000 ^b
	Residual	38.038	117	2.742		
	Total	79.561	118			
Coefficients^a						
Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
1	(Constant)	.518	1.409		.337	.704
	Supplier Integration Strategy	1.463	.628	.942	2.330	.000

a. Independent Variable: Supplier Integration Strategy

b. Dependent Variable: Performance

Table 1 shows the result of regression analysis on the influence of supplier integration strategy on the performance of brewing firms in Nigeria. The generalized model summary showed an R^2 value of 0.353 implies that supplier integration strategy influenced the performance of brewing firms in Nigeria by 35.3%. The model also showed a goodness of fit at 95 percent (p-value <0.05). The influence of supplier integration strategy on the performance of brewing firms in Nigeria was statistically significant at 95 percent (also p-value <0.05). Based on the result, the null hypothesis which stated that supplier integration strategy has no significant positive influence on the performance of brewing firms in Nigeria was therefore rejected while the alternative was accepted.

The result of this study is in line with Janaki *et al.*, (2018), Sukati *et al.*, (2020) who respectively established the effect of integration strategy on business performance. In other literature, Mehdikhani and Valmohammadi (2019) are of the opinion that suppliers integration strategy facilitates transactions between business Organisations and their supply chain partners. Thus, in this regard, suppliers integration strategy ensures that the firm co-operates well with its suppliers of goods and services needed in its business and which will help it to provide services and products to its customers (Danese

et al., 2019). Thus, suppliers' integration strategy affirms the need for business organisations such as brewing firms to acknowledge and encourage the role played by its suppliers of materials and services in their service to customers and in their overall success as a business. The result is in line with The Network Perspective Theory because the brewing firms do not dispense business in isolation but rather work with other service providers who support their business operations. Therefore, the capacity of brewing firms to deliver products to their customers may be influenced by the quality of their integration with its supplier groups.

CONCLUSION, RECOMMENDATION AND LIMITATION

The conduct of this study was triggered by the curiosity to establish the influence of supplier integration strategy on the performance of the brewing firms in Nigeria. In the test of formulated hypothesis, it was found that supplier integration strategy has a significant on the performance of the brewing firms in Nigeria. this implied that supplier integration strategy can serve as a good predictor of performance in the brewing firms in Nigeria. It is concluded that supplier integration strategy can determine the performance of brewing firms in Nigeria. A key recommendation made in the study is that brewing firms in Nigeria should consider different ways of improving upon their suppliers' dealings and its overall supplier integration strategy. The brewing firms can do this by strengthening its relationship with their service providers to enhance and improve their service delivery towards improving its performance. This study has contributed to literature by empirically confirming the influence of supplier integration strategy on the performance of the brewing firms in Nigeria, which can offer inputs to brewing firms on supplier integration strategy related issues and approaches. However, the study involved only four brewing firms in Nigeria, therefore, this limits generalization of findings. To address this limitation with a view to improving generalization of findings, more studies involving increased number of brewing firms in Nigeria are suggested.

REFERENCES

- Alavi, S. and Khedmati, R. (2021). Exploring Integration Strategies for Digital Transformation". *International Journal of Project Management*, 3(3), 235-248.
- Amue, G. and Ozuru, H. (2019). Supply Chain Integration in Organisations: An Empirical Investigation of the Nigeria Oil and Gas Industry. *International Journal of Marketing Studies*, 6 (6):129-140.
- Cardon, V. (2019). Liquidity Management and Profit Performance of Pharmaceutical Manufacturing Firms listed in Nigeria Stock Exchange. *International Journal of Management Sciences and Business Research*, 5(7), 1-13.
- Crandall, G.; Crandrall, D.; and Chen, C.(2018). Production Management. India: SAGE Publications Ltd.
- Chris, S.; Jones, A. and Williams, E. (2017). Analysis of Supplier Selection and Supply Chain of Pharmaceutical Firms. *Journal of Business Logistics*, 8(7): 22–31.
- Daft, R.L. (2017). Management (10th ed.). Mason, Ohio: South-Western, Cengage Learning.
- Danese, P.; Romano, E. and Formentini, M. (2019). The Impact of Supply Chain Integration on responsiveness: The Moderating Effect of Using an International Supplier Network: Transportation Research Part E: Logistics and Transportation Review, 4(9): 125- 140.
- Desarbo, P. (2019). *Supply Chain Management: Strategy, Planning, and Operation*. 3rd Edition. NJ, USA: Prentice Hall Inc.

- Donaldson, L. (2018), *The Contingency Theory of Organisations*. Thousand Oaks, CA: Sage.
- Flapper, S. D. P., Fortuin, L., and Stoop, P. P. (2016). Towards Consistent Performance management systems. *International Journal of Operations and Production Management*, 16(7): 27-37.
- Flynn, B. B., Huo, B., and Zhao, X. (2018). The Impact of Supply Chain Integration on Performance: A Contingency and Configuration Approach. *Journal of Operations Management*, 28(1), 58-71.
- Huo, B., Ye, Y., Zhao, X., and Shou, Y. (2019). The Impact of Human Capital on Supply Chain Integration and Competitive Performance. *International Journal of Production Economics*, 17(8):132-143.
- Janaki, D., Izadbakhsh, H., and Hatefi, S. (2018). The Evaluation of Supply Chain Performance in the Oil Products Distribution Company, Using Information Technology Indicators and Fuzzy TOPSIS Technique. *Management Science Letters*, 8(8), 835-848
- Jia, F., Blome, C., Sun, H., Yang, Y., and Zhi, B. (2020). Towards an Integrated Conceptual framework of Supply Chain Finance: An Information Processing Perspective. *International Journal of Production Economics*, 219, 18- 30. <https://doi.org/10.1016/j.ijpe.2019.05.013>.
- Jones, L. and Sigal V. R. (2019). “The Strategic Importance of Integration: A study in the Automotive Industry “ *International Journal of Production Economic*, 211, 104819.
- Kuo, Y. F. and Yong C. Y. (2021) “Navigating integration: Strategies for Integrated Marketing communications. *International Journal of Advertising* 4(3) 407-426.
- Koutleros, M.; Joe, S. and Donaldson, D. (2017). Supplier Integration and Product Development in Tunisia. *International Journal of Production Economics*, 4(2):16-23.
- Kumar, P. and Rahman Z. (2021) “Integration Strategy in Industry 4.0 A Systematic Literature Review” *Journal of Business Research*, 124. 817-829.
- Li, J., Chen, C. W., Wu, C. H., Hung, H. C., and Lin, C. T. (2020). How do Partners Benefit from IT Use in Supply-Chain Management: An Empirical Study of Taiwan’s Bicycle Industry? *Sustainability*, 12(7), 1-24. <https://doi.org/10.3390/su12072883>.
- Li, S. and Zhang, Y. (2022). Factors Affecting Supply Chain Integration: A Study of the Chinese Manufacturing Sector. *International Journal of Production Research*. 60(12), 3565- 3581.
- Madhani, P. M. (2020). Customer Focused Supply Chain Strategy: Developing 4Rs Framework for Enhancing Competitive Advantages. *International Journal of Services and Operations Management*, 36(4), 505-530.
- Mehdikhani, R., and Valmohammadi, C. (2019). Strategic Collaboration and Sustainable Supply Chain Management: The Mediating role of Internal and External Knowledge sharing. *Journal of Enterprise Information Management*, 32(5), 778- 806. <https://doi.org/10.1108/JEIM07-2018-0166>
- Mohan, A. (2019). Integration Strategies in Multinational Corporations: A case Study Analysis: *International Journal of Business and Management*, 14(11), 45-57.
- Peterson, D. (2015). Supplier Integration and Product Development in France. *The International Journal of Logistics Management*, 8(2): 12-21.
- Ranjan, J. and Read, S. (2021). Emerging Integration Strategies in Health Tech Startups. *Health Servian Research*, 5(6), 26-33.
- Saleh, V. (2019). The Effects of Retail Channel Integration through the use of Information Technologies on Organisational performance. *Journal of operations management*, 30(5), 368-381.
- Schoenheer, T., Swink, M. (2015). Revisiting the arcs of integration: cross-validation and extensions. *Journal of Operations Management*. 30, 99–115.

- Sukati, S.; Sanyal, M. and Awaon, D. (2020). Supply Chain Information Systems Strategy: Impacts on Supply Chain Performance and Organisational Performance. *International Journal of Production Economics*, 147, 340–350.
- Tzeny, S. F., and Chen, Y. K., (2022) “A Holistic Approval to Integration Strategies in Project Management” *International Strategies in Project Management* 40 (4) 355-317.
- Wambue, A. (2021). The Antecedent Role of Quality, Information Sharing and Supply Chain Proximity on Strategic Alliance Formation and Performance. *International Journal of Production Economics*, 96, 301 – 313.
- Yadar, S. and Dulta, A. (2023) “Exploring the Relationship Between Supply Chain Integration and Customer satisfaction supply chain management: *An International Journal*, 28(1) 102-117.
- Zhang, M., Guo, H., Huo, B., Zhao, X., and Huang, J. (2019). Linking Supply Chain Quality Integration with Mass Customization and Product Food Sector. *Sustainability*, 13(16), 1- 21. <https://doi.org/10.3390/su13168734>
- Zhao, X., Wang, P., and Pal, R. (2021). The Effects of Agro-Food Supply Chain Integration on Product Quality and Financial Performance: Evidence from Chinese Agro-Food Processing Business. *International Journal of Production Economics*, 231, 1-59. <https://doi.org/10.1016/j.ijpe.2020.107832>.