

Supplier Collaboration and Operational Performance of Food and Beverage Firms in Rivers State

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Abstract: *This study examined the relationship between supplier collaboration and operational performance of food and beverages firms in Rivers State. This study adopted a cross-sectional survey and correlation investigation to establish relationship between supplier collaboration and operational performance of food and beverages firms in a non-contrived setting. The study population comprised of twelve (12) food and beverage firms operating in Rivers State as enlisted in the Nigerian Stock Exchange Facts Book of 2017/2018. The 12 food and beverage firms from the population of the study constitute our sample size for this study. Furthermore, the researcher equitably distributed questionnaire to five management staff from each of the food and beverage firms operating in Rivers State as respondents for the study hence a total of fifty-four (54) respondents were used for the study. The 54 copies of the retrieved questionnaire were used for the data analysis. A self-administered structured questionnaire was used to collect primary data and the data obtained were accordingly analyzed using Pearson's Product-Moment Correlation. The result revealed that there is significant and positive relationship supplier collaboration and operational performance of food and beverages firms in Rivers State, Nigeria. Based on the findings of this study, the paper concludes that a positive and significant relationship exists between supplier collaboration and operational performance. It therefore, recommends food and beverages firms should establish, identify and develop joint strategies to create value in supplier relationship.*

Key words: *Supplier collaboration, Operational performance, Operational flexibility, Quality*

INTRODUCTION

Supplier relationship management (SRM) is a management approach that manages all interactions between a company and its suppliers (Kroenke, 2012). Suppliers in this context refer to any organization that sells something to the company that runs the SRM application. The primary goal of supplier relationship management is to improve the efficiency and effectiveness of inter-organizational processes, with the delivery of superior value to customers taking precedence. Olendo and Kavale (2016) explain supplier relationship management (SRM) as the method and style of communicating with suppliers. According to supply chain experts, SRM is a comprehensive design of defining what they demand from a supplier and managing the connectivity between the companies

to reach the required necessities (Matunga *et al.*, 2021). Supplier relationship management (SRM) is the SCM process that provides the structure for managing relationships with suppliers; as the name suggests, this is mirror image of customer relationship management; just as close relationships need to be developed with key customers, management should build close cross-functional relationships with a small number of key suppliers (Lambert *et al.*, 2012).

SRM bridges the gap between the organization and the end-user. Numerous companies face difficulties within their network chains, resulting in a loss of business. It is recommended that such firms find and implement Supplier relationship management practices to ramp up their supply chain efficiency (Matunga *et al.*, 2021). According to Hughes *et al.* (2016), inefficiency and ineffectiveness in the supply chain system are the leading causes of deficiency in achieving its set goals. Benah and Li (2020) define supplier relationship management as the long-term relationship between a firm and its suppliers. The buyer-supplier relationship, oriented towards quality management, tends to be very close, based on long-term common interests.

Correspondingly, Al-Abdallah *et al.* (2014) revealed that supply chain management has long-term objectives and short-term objectives. Thus, the long-term and short-term goals. The long-term includes improving production operations' efficiency, creating value for customers, increasing market share, and increasing profits (Williams, 2006). On the other hand, short-term objectives include reducing cycle time, improving productivity, and reducing inventory (Wisner & Tan, 2000). Zsidisin and Ellram (2001) averred that collaborations with selective suppliers result in mutual benefits such as lower overall costs, increased customer satisfaction, flexibility in dealing with changes, increased productivity, and long-term competitive advantages in the marketplace. Collaboration has become particularly important as knowledge and capabilities have become more dispersed in the network economy and the business environment has become more volatile and competitive (Nix & Zacharia, 2014).

Collaboration with suppliers and customers is the fourth pillar along the pathway to building a strategy to deliver supply chain excellence (Slone, 2004). Moore (2012) emphasizes that the relationship that is created in the new paradigm of supplier relationship management creates value in two ways which are; firstly, instances of collaboration have the ability to create value in working relationships which in the long run enhances the value that is derived from each partner.

The food and beverages sector in Nigeria is one of the most productive and most relied upon among other sectors for economic growth and development. It promises immense potential for wealth creation, employment opportunities and resource application. It's a rapidly growing sector with many small and medium enterprises coming up. Most of the well-established food and beverages firms place key emphasis on development of close relationship with other entities in order to remain competitive while improving on their positions in the market. This has ignited the debate and need for establishment of excellent relationship with the suppliers so as to improve on performance of their supply chains.

Ultimately, an effective SRM solution gives an organization a complete edge by allowing it to; reduce direct and indirect costs and improve bottom-line profitability, understand what is being bought and from whom, minimize the risk of supply chain disruption, select the best supplies to gain advantage over competitors, streamline the supply chain

management process by collaborating with business units across the enterprise and assuring that the organization's resources are prioritized on the most critical suppliers (Berkowitz, 2004).

This study aims to examine the relationship between supplier collaboration and operational effectiveness of food and beverages firms in Rivers State. This study will assist different parties involved in food and beverages manufacturing firms to achieve a practical summing up of supplier collaboration implementation.

A conceptual framework depicting the relationship between the variables is depicted below.

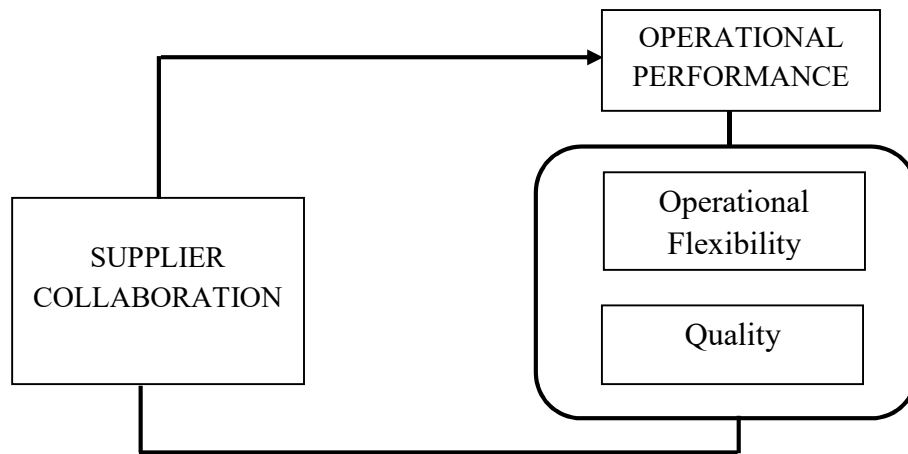


Figure 1: Conceptual Framework of the relationship between supplier collaboration and operational effectiveness of food and beverage firms in Rivers State.

Source: Authors' conceptualization from the review of related literature, 2023.

LITERATURE REVIEW

Theoretical Underpinning

Social Capital Theory (SCT)

The social capital theory was established by Portes (1998). Social capital is defined as the norms and networks that facilitate individuals or people groups to act collectively. The Social capital theory is based on the assumptions that, while separate groups in a capitalistic society seek to attain their individual objectives and goals hence focus most on this, the various entities have recognized that working together with likeminded partners, results to better outcome as compared to working in isolation. In relation to suppliers, they strive to sell their products to any potential buyer who is willing to give the best price while disregarding the nature of relationship between them.

Social Capital theory stresses the importance of establishing collaborations in terms of working relationships between a buyer and a supplier in order to enhance the mutual benefits. According to Granovetter (1992), this therefore demands that both parties deploy their resources towards supporting one another in achieving a common objective. The researcher also asserts that the buyer therefore commits their firm's resources and infrastructure to support their selected suppliers to enhance their capabilities in production

related activities whose effect is shared by the buying firms. The theory basically assumes the relationship between the supplier and the buyer as collaboration.

CONCEPT OF SUPPLIER COLLABORATION

The concept of collaboration is described as two or more companies sharing the responsibility of

exchanging common planning, management, execution, and performance measurement information (Anthony, 2000 cited in Ihunwo & Opara, 2021). Collaboration has been defined as two or more chain members working together to create a competitive advantage through sharing information making joint decisions and sharing benefits which result from greater profitability of satisfying customer needs than acting alone (Togar & Sridharan, 2002). Collaboration can be understood as a form of co-operative inter-organizational relationships, which are socially contrived mechanisms for collective action. By focusing on relational exchange collaboration entails the activities that are undertaken faintly rather than unilaterally (Heide 2003). Simatupang & Sridharan (2003) suggest that the requirements for effective collaboration are mutual objectives, integrated policies, joint decision making, information sharing of benefits and losses.

Collaboration with suppliers and customers is the fourth pillar along the pathway to building a strategy to deliver supply chain excellence (Slone, 2004). Supplier collaboration means working with decision-makers at a supplier level to determine improvements that can be made that will have a measurable, positive financial impact for both organizations. Through commitment partners dedicate resources to sustain and further the goals of the collaboration. Heide and John (2009) and Krause (2006) propose that the expectation of relationship is important for motivating collaboration in inter-organizational relationships. Collaborative relationships must be supported from the entire organization. A buyer must have the authority to negotiate with a supplier and come to an agreement that carries mutual trust and benefit. This is not possible if executives push only for cost savings or if the labor force is unwilling to give up some responsibility to the supplier. Benefits to collaborative relationships are: lower overall costs, higher quality products, less time to market due to open communication and improved technology and innovation.

There is a sharing of proprietary information, strategy, planning, and goals, most firms do not feel comfortable exposing such elements to other firms, fearing a loss of control (Benton *et al.*, 2005). Collaborative relationships might not be desirable when a company has a certain amount of leverage over its suppliers, or if the suppliers have all the power then the buyer might not be willing to enter into a relationship. One of the most commonly observed requirements for customer responsive supply chain management which goes beyond technological capability is that of inter-firm cooperation or 'collaboration'.

Long term, collaborative relationships with a few trusted suppliers have been described as representing a general trend over the past decade or so. There is said to be growing evidence that to be competitive firms are moving away from the traditional approach of adversarial relationships with a multitude of suppliers to one of forging longer term relationships with a selected few suppliers' (Kalwani & Narayandas, 2005). Similar points are made by Spekman (2008) and Spekman & Caraway (2006) as has also been noted, 'For many of the world's most successful corporations, the very things that made them great were neither developed nor owned in-house. They have been achieved through collaborative relationships' (Cardell, 2002).

OPERATIONAL PERFORMANCE

An increasing number of factors prompt organizations to operate more efficiently and to enable them carry out effective operational processes (Hill, 2000; Slack *et al.*, 2004). This encompasses, the need to deliver value adding products or services of unique quality, on time, at a competitive price. Corina, Liviu and Roxana (2011) defined performance as a set of financial and non-financial indicators which offer information on the degree of achievement of objectives and results. According to Gichuru, Iravo, and Iravo (2015) the performance of a firm depends not only on how efficiently it cooperates with its direct partners, but also on how well these partners cooperate with their own business partners. The firm's continuous interaction with other players becomes an important factor in the development of new resources and in situation where the resources of two organizations are combined, they tend to achieve more advantages than through individual efforts (Haakansson & Ford, 2002).

Operational performance focuses on attaining efficient and effective systems that are highly reliable and facilitate the achievement of excellence which exceeds customer expectations (Kivite, 2015). So as to attain such sustainable operational outcome, effective operational strategies are developed that supports the firms towards ensuring the important operational aspects in the organizations are achieved. Operational performance is not only as a result of enhanced efficiency and reduced cost but also improve the supplier's involvement in the general strategy of the organization (Wangeci, 2013). Operational performance has been measured using different measures in the published literature. The most commonly cited measures were cost, quality, flexibility, and delivery (Cua *et al.*, 2001; McKone *et al.*, 2001; Ahmad *et al.*, 2010; Phan *et al.*, 2011).

Operational flexibility

The ability to respond quickly to familiar changes is made possible by the operation's flexibility. Flexibility is the strength of any organization to fulfill the increasing expectations of customers without an increase in cost, time, performance losses and organizational disruptions. Such modifications often result in transient, short-term alterations in the company's business level. In order to adapt to the worldwide volatility in the business sector, organizations need operational flexibility. Integrated processes that provide a broad variety of operational variables (for example, sequencing and planning) reactions are compatible with operational flexibility. The capacity of a system to respond to change is referred to as operational flexibility. Operational flexibility means being able to change the operation in some way. This may mean changing what the operation does, how it is doing it or when it is doing it. Operational flexibility measures how good the supplier is at shortening the agreed lead time when asked, (Roy, 2009).

Operational flexibility is the ability of an organization to respond to threats posed by changing environments while incorporating changes in its routine operations (Yu *et al.* 2015). This process involves a formative approach to meet the demand of a customer during an uncertain business or market environment. It is the ability to improve demand fulfillment with simultaneous reduction in conversion costs that are incurred by an organization (Narsalay 2015).

Quality

Quality is excellence, value, conformance to specification and meeting or exceeding customers' expectation (Lee *et al.*, 2010). Quality is referred to as the conformance to standards (Elshennawy, 2004; Heizer & Render, 2006) in other words, "doing things

right”, but the things which the operation needs to do right will vary according to the kind of operation (Slack *et al.*, 2010). Quality has emerged as strategic entity making supply chain collaboration a necessity for overall operational effectiveness and global competence (Desai, 2008). Although the term quality is quite widely used by practitioners and academics, there is no generally agreed definition of it, since different definitions of quality are appropriate under different circumstances (Sebastianelli & Tamimi, 2002; Ojasalo, 2006). There are different definitions of quality portrayed by authors to fit different circumstances (Corbett, 2008). A widely used definition of quality was introduced by Juran (1951) and Juran & Godfrey (1999) which meets all the previous conditions, where quality is defined as fitness for use. The word use is associated with customer requirements, while fitness suggests conformance to measurable product/service characteristics (Nanda, 2005).

METHODOLOGY

The research design adopted for this study is correlational research design This study is correlational because the researcher gathered two sets of scores. The study population comprised of twelve (12) food and beverage firms operating in Nigeria as enlisted in the Nigerian Stock Exchange Facts Book of 2017/2018. The 12 food and beverage firms from the population of the study constitute our sample size for this study. Furthermore, the researcher equitably distributed questionnaire to five management staff from each of the food and beverage firms operating in Rivers State as respondents for the study hence a total of fifty-four (54) respondents were used for the study. Categories of persons that constituted the respondents were Branch Manager, Operations Manager, Marketing Manager, Administrative Manager and Procurement Manager. The 54 copies of the retrieved questionnaire were used for the data analysis. The Pearson Product Moment Correlation (PPMC) was used in testing the relationship between Supplier Collaboration and Operational Effectiveness of food and beverage firms in Rivers State of Nigeria and the analysis was conducted with the aid of the Statistical Package for Social Sciences (SPSS) version 23.0.

RESULTS

H₀₁: There is no significant relationship between supplier collaboration and operational flexibility.

Table 1 Correlation Analysis showing the Magnitude and Direction of Relationship between Supplier Collaboration and Operational Flexibility Correlations

		Supplier Collaboration	Operational Flexibility
Supplier Collaboration	Pearson Correlation	1	.000
	Sig. (2-tailed)		.722**
	N	54	54
Operational Flexibility	Pearson Correlation	.000	1
	Sig. (2-tailed)	.722**	
	N	54	54

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

Source: SPSS 23.0 Output

Table 1 showed that the probability/significant value is 0.000, this value is less than 0.05 level of significance hence the researcher rejects the null hypothesis and concludes that a significant relationship exists between supplier collaboration and operational flexibility. Table 1 above also revealed that the Pearson Correlation on the relationship between supplier collaboration and operational flexibility is 0.722**, based on the categorisation in table, the value is high indicating that a strong relationship exists between supplier collaboration and operational flexibility. The correlation coefficient is positive implying that a positive relationship exists between them, i.e. increase in supplier collaboration is associated with increase in operational flexibility

H₀₂: There is no significant relationship between supplier collaboration and quality

Table 2 Correlation Analysis showing the Magnitude and Direction of Relationship between Supplier Collaboration and Quality
Correlations

		Supplier Collaboration	Quality
Supplier Collaboration	Pearson Correlation	1	.000
	Sig. (2-tailed)		.662**
	N	54	54
Quality	Pearson Correlation	.000	1
	Sig. (2-tailed)	.662**	
	N	54	54

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

Source: SPSS 23.0 Output

Table 2 showed that the probability/significant value is 0.000, this value is less than 0.05 level of significance hence the researcher rejects the null hypothesis and concludes that a significant relationship exists between supplier collaboration and quality.

Table 2 above revealed that the Pearson Correlation on the relationship between supplier collaboration and quality is 0.622**, based on the categorisation in table, the value is high indicating that a strong relationship exists between supplier collaboration and quality. The correlation coefficient is positive implying that a positive relationship exists between them, i.e. increase in supplier collaboration is associated with increase in quality

DISCUSSION OF FINDINGS

This study examined the relationship between supplier collaboration and operational performance of food and beverage firms in Rivers State. It specifically investigated the relationship between supplier collaboration and operational performance. The findings of this study revealed that there is significant and positive relationship between supplier collaboration and operational performance. This position is consistent with Chiou et al. (2011) who claimed that long time strategic benefits can be secured through collaborating with suppliers. Collaborative relationship helps firm share their tacit and explicit knowledge and enhance knowledge creation and innovation with the suppliers (Yan & Dooley, 2014; Grekova et al., 2015). Collaboration can reduce buying cost through minimizing contracting cost, instant communication, enhanced coordination and mutual operational problem solving approach. Key suppliers can have significant impact on overall wellbeing of focal firm (Kopfer et al., 2005).

CONCLUSION AND RECOMMENDATION

This study reestablished that there exists relationship between supplier collaboration and operational performance, and that supplier collaboration relationally influence operational performance of food and beverage firms in Rivers State. Conclusively, this study has bridged a gap in literature. Based on the theoretical and empirical findings, the researcher therefore, recommends that food and beverages firms should establish, identify and develop joint strategies to create value in supplier relationship. Collaboration presents itself as a fundamental element in the building of favorable relationships in the pursuit of excellence in terms of performance, considering the degree of interdependence of the partners. Additionally, through collaboration, interdependent organizations can find joint strategies aimed at reducing excess inventories between the various links, and, in this sense, the possibilities of seeking common goals for all partners in the supply chain can be expanded supplies.

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