
Supplier Integration and Organizational Success of Multinational Firms in Rivers State

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Abstract

This study examined the relationship between supplier integration on organizational success of multinational firms in Rivers State. The study adopted the cross-sectional survey in its investigation of the variables. Primary data was generated through structured questionnaire. A sample of one hundred and eight (108) respondents was drawn from a population of 250 managers of 10 multinational companies in Rivers State, using the The Krejcie and Morgan table. The research instrument was validated through supervisor's vetting and approval while the reliability of the instrument was achieved by the use of the Cronbach Alpha coefficient with all the items scoring above 0.70. The hypotheses were tested using the Spearman Rank Order Correlation with the aid of statistical packages for social sciences version 23.0. The findings revealed that there is a significant relationship between supplier integration and organizational success of multinational firms in Rivers State. The study recommends that it is imperative for multinational companies to cooperative and leverage complementary core resource competencies through partnership-based coordination. For an effective and credible management of the customers and consumers, a joint effort of the suppliers, manufacturers and distributors is required.

Keywords: *Supplier Integration, Organizational Success, Customer Satisfaction, Competitive Advantage*

INTRODUCTION

A manufacturer can integrate with suppliers by strategically cooperating with them and collaboratively managing inter-organization processes (Flynn, Huo, and Zhao 2010). Supplier integration aims to improve the efficiency and effectiveness of the information and physical flows between a manufacturer and suppliers, which can lead to seamless processes and cohesive supply networks that cannot be easily matched by competitors (Zhao, Huo, Sun, & X. Zhao. 2013). Although a growing body of studies suggests that higher levels of supplier integration lead to greater potential benefits (Huo 2012; Moyano-Fuentes, Sacristán-Díaz, and Garrido-Vega 2016), some empirical studies fail to establish a positive relationship between supplier integration and performance outcomes (Zhao *et al.* 2013).

Researchers argue that a firm may integrate with suppliers at operational and/or strategic levels (Stank, Daugherty, and Ellinger 1999; Swink, Narasimhan, and Wang 2007; Alfalla-Luque, Medina-Lopez, and Dey 2013; Yu 2015), which may influence performance in different ways. Failing to identify the distinctive effects of different types of supplier integration on firm performance may be one reason for the inconsistent findings (Flynn, Huo,

and Zhao 2010; Zhao et al. 2013). Therefore, empirically investigating the individual effects of information, process and strategic integration with suppliers can extend current knowledge on the mechanisms through which supplier integration improves firm performance.

Supplier integration occurs when a firm partners with its suppliers to structure inter-organisational strategies, develop synchronised processes and share information and knowledge (Flynn, Huo, and Zhao 2010). It has been considered to be a critical source of competitive advantage as it improves inter-enterprise operations (Stank, Daugherty, and Ellinger 1999; Wang, Yeung, and Zhang 2011). Supplier integration provides a unity of effort in meeting customer requirements for products (Narasimhan and Kim, 2002) and in responding to changes in markets (Zhao *et al.* 2013). Firms can acquire insights into suppliers' processes, capabilities and constraints (Huo 2012), ultimately enabling more effective planning and forecasting, better product and process designs and reduced transaction costs (Zhang and Huo, 2013). A firm may collaborate with suppliers through enterprise integration and/or interoperability (Panetto and Moline, 2008). Enterprise integration focuses on interenterprise long-term collaboration and on the homogenisation, coherence, interdependency and standardisation of models, methods, terms, tools and applications among enterprises, and hence a firm and suppliers are tightly coupled (Chen, Doumeingts, and Vernadat 2008). Enterprise interoperability emphasises that each enterprise retains its independence and gains in its capability to collaborate and to synchronise strategies, resources, skills and processes with other enterprises, with the support of the new information and communication technologies, without changing their models, methods, languages and tools, and hence a firm and suppliers are loosely coupled (Chen, Doumeingts, and Vernadat 2008; Panetto and Moline 2008). A firm can integrate with suppliers through information sharing, process synchronisation and strategic alignment (Alfalla-Luque, Medina-Lopez, and Dey 2013; Zhang and Huo 2013).

This study therefore examines the relationship between supplier integration and organizational success of multinational firms in Rivers State.

Furthermore, this study was guided by the following research questions:

- i. What is the relationship between supplier integration and customer satisfaction (CS) of multinational firms in Rivers State?
- ii. What is the relationship between supplier integration and competitive advantage (CA) of multinational firms in Rivers State?

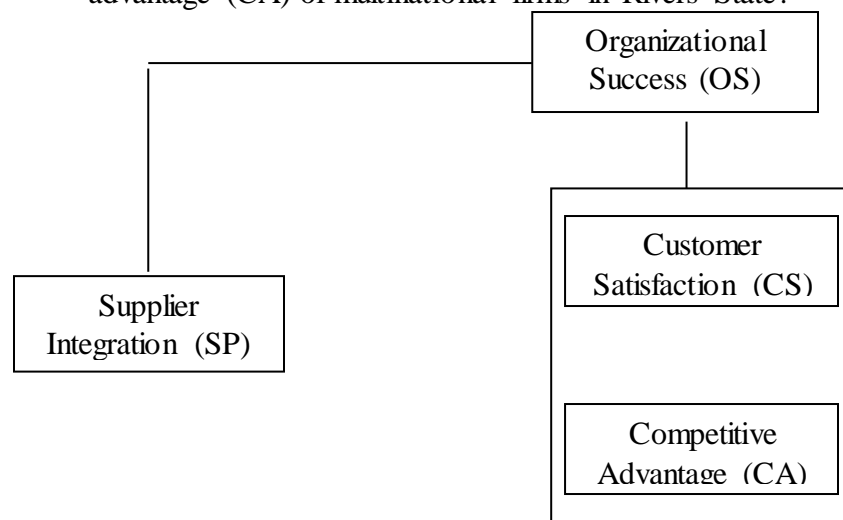


Fig.1 Conceptual Framework for the relationship between supplier integration and organizational success

Source: Author's Desk Research, 2019

LITERATURE REVIEW

The Nature and Concept of Concept of Supply Chain Process Integration

It is suggested that supply chain integration, the practice of realigning firms' operating structures, should be understood from an internal-external perspective and a process view. It is argued that a firm's strategic priorities are key factors of supply chain process integration. Superior performance is likely to be achieved when necessary supply chain capabilities are developed through supply chain process integration.

Successful Supply Chain Management (SCM) requires a change from managing individual functions to integrating activities into key supply chain processes. However, traditional SCM applications fall short when it comes to helping manufacturers manage one critical element, their relationships with suppliers. A firm's social connections guide its interest in new partners and provide it with opportunities. This interest is closely rooted in the processes that underlie a firm's entry into new partnership. Many opportunities for partnerships can be presented to firms through their existing sets of partners is not only economical but also technical and social.

Integration is now widely taken the central concept of successful supply chain management (SCM), because the implementation of SCM needs the integration of processes from sourcing, to manufacturing, and to distribution across the supply chain (Cooper et al., 1997; Ellram and Cooper, 1990; Mentzer et al., 2001). The scope of supply chain integration is not limited but it has wide scope ranging from supplier integration to customer integration covering central concept of internal integration also (Flynn et al., 2010; Zhao et al., 2010). Supply chain management focuses on integration, cooperation and coordination throughout the value chain" (Stank, Keller, and Daugherty 2001). The supply chain integration work on principles of collaboration, shared decision making, open communication, shared vision, shared technology and high level of trust between the producer and their customers (Flynn et al., 2010). The objective of SCI is to achieve accurate, timely and smooth flow of goods and services, information, money and processes, to impart maximum value to the customer at low cost and minimum time in an efficient manner (Bowersox et al., 1999; Frohlich and Westbrook, 2001; Naylor et al., 1999). According to Christopher (1994), a supply chain is a network of institutions that have strong bonds from upstream to downstream in all processes and activities in such a cohesive manner that make a value for organization and for end customer.

The globalisation and rapid developments in the information technologies are changing today's inter-organisational relationships. Competition is no longer among firms, but among supply chains (SCs) (Christopher 1994). Today's manufacturers must not only manage their own organizations but also be involved in the management of the network of upstream and downstream firms (Zhang et al. 2010). Research done on Supply chain practices and their impact on customer satisfaction in pharmaceutical industry in developing countries it was observed that SC practices comprise of three pillars namely collaboration and information sharing, logistics design and IT infrastructure, and organizational culture (OC); all these impact significantly on customer satisfaction (Haque & Islam, 2013).

Supplier Integration

Kim (2009) supplier integration as "an organizational process of buying firms and suppliers sharing and applying operational, financial, and strategic knowledge in order to generate mutual benefits." Regardless of the differences in terminology that have been used to measure supplier integration, the main purpose of supplier integration is to exceed a single

organization's limits so as to coordinate processes easily. Flynn et al (2010) and Kim (2009) described a supply chain integration measurement model that was designed to measure the degree of supplier and customer integration. These two elements are very important areas of the supply chain; information sharing, for instance, is the interchange of information between the partners. External integration is how closely an organization works with its partners (suppliers and customers). Danese (2013) considered the relevant areas of supplier integration to be information sharing between the company and its suppliers' production plans, quality, and design, and direct quality improvement programs. Supplier integration seeks to achieve a smooth, efficient flow of materials within the supplier network, and prevent potential obstacles in the process of procurement and production. The sharing of information with suppliers creates greater confidence while reducing dysfunctional conflicts between buyers and suppliers and allowing for effective communication. Danese (2013) stated that with supply chain and supplier integration, buyers and suppliers can exchange knowledge and information and develop the relationships that are required to manage materials and the flow of information collaboratively and improve procurement and production. The management and development of the relationship is considered a strategic part of the supplier integration process. Souza Miguel and Brito (2011) argued that the benefit of constructing long-term relationships with suppliers is that it reduces the cost of the transaction through trust and reputation building. Supplier integration consists of the interchange of information, knowledge and materials in different directions. There is no particular form that supplier partnerships must take; they can be flexible and could be modified according to the objective of the partnership. Due to the cooperation and coordination among organizations, wasted effort and time can be reduced or eliminated. In this respect, many researchers have demonstrated the fundamental role of supplier integration in differentiating organizations by creating competitive advantage and improving the whole supply chain performance.

Organization Success

Supply chain management is essential to organizational success which includes all of the activities that lead to the success of the organization from beginning of planning, management of all activities and operations of create the source, the procurement and logistics (transportation, warehouse management, inventory management) and marketing operations as well as coordination and cooperation between all parties involved in the supply chains of suppliers and service providers and client (Kim, 2009).

Measures of Organizational Success

For the purpose of this study, we adopted just two (2) elements of organizational success as measuring tools to show how organizational success can be achieved – customer satisfaction and competitive advantage.

Customer Satisfaction

Customer satisfaction is a measure of a firm's customer base in terms of size, quality and loyalty. Customer loyalty and product repurchase are as a result of customer satisfaction among the several ways that an organization can employ to service its customers are through information management and customer collaboration (Eckert, 2007). Satisfaction according to Eckert (2007), refers to the quality of the products, services, price performance ratios as well as when a company meets and exceeds the requirements of the customer. Organizations may identify customer satisfaction in terms of on time delivery as well as customer specification needs. Variables such as customer needs, having the products immediately and on hand to satisfy the customers' needs, vendor partnerships, that is; sharing of information regarding sales, sales forecast as well as amount of inventory and data integrity which assist

in overall inventory management (Lee & Whang, 2001). Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the products of service itself, provided or is providing a pleasurable level of consumption-related fulfillment, including levels of under or over-fulfillment. Attaining a high level of customer satisfaction usually requires more than providing a high-quality product. Hendricks (1997) suggest that meeting a customer's pre-purchase expectations is an important aspect of customer satisfaction that has been described in the marketing and service operations management literature.

It has been proven by authors that an organization that consistently satisfies its customers, enjoy higher retention levels and greater profitability due to increase customer loyalty (Wicks & Roethlein, 2009). For this reason every company works hard daily to win the hearts of customers by satisfying them in order that they become loyal customers to their brands in order to increase sales and profit. When customers have good perception about a brand, they will always choose to go for the brand, because consumers form their preferences relative to perceptions and attitudes about the brands competing in their minds (Larreche, 1998). Thus customers will always prefer a product or service that gives them maximum satisfaction (Hague & Islam, 2013). Customer satisfaction is the main concern of business sectors of today, their researchers are always conducting research about the customers especially on what relates to their satisfaction.

Competitive Advantage

In today's complex connected world, supply chain is more and more recognised as a key source of competitive advantage and differentiation. Companies strive to build powerful supply chains that will enable them to get their products to market faster, more efficiently and more economically than their competition.

For many businesses - particularly those in high tech, consumer electronics, pharmaceutical and fresh produce - time to market and effective distribution channels are critical success factors, and therefore supply chain management competencies and capabilities are what drive competitive advantage.

In that context, there are exciting and evolving synergies between the supply chain and marketing functions - each of them both a functional discipline and a profession - as together they become the principal business drivers for companies in the modern era. Taking the broadest perspective of the two disciplines, these functions together embrace all of the mission-critical business activities of a company - with IT, HR and Finance playing important supporting roles. With marketing comprising the four P's of Product, Price, Promotion and Place and supply chain encompassing the five operational activities of Plan, Source, Make, Deliver and Return, then Logistics becomes the point of intersection and convergence - the essential linkage between the Deliver function of supply chain and the Place (distribution) function of marketing. Together therefore, supply chain and marketing are becoming the primary engines that drive the business - hugely influential in driving business growth, increasing market share and generating revenue and profits. The Chief Marketing Officer (CMO) and the Chief Supply Chain Officer (CSCO) will become the most critical leadership roles to sit alongside the CEO and CFO in the enlightened C-suite of the future.

Supporting this concept that your supply chain ecosystem drives competitive advantage for the business, the FT lexicon explains how "Ecosystems also create strong barriers to entry for new competition, as potential entrants not only have to duplicate or better the core product, but they also have to compete against the entire system of independent 'complementers' and suppliers that form the network".

In benchmarking the Supply Chain Management (SCM) practices of hundreds of companies, we have learned that many companies actually achieve competitive advantage by leveraging the management of their supply chains. All members of the supply chain are integrated together, and all this process causes that supply chain distinct from others and in fact makes it close to gain competitive advantage. Several researchers have examined the relationship between supply chain and competitive advantage and have provided satisfactory results (Lee et al., 2009).

Supplier Integration and Organizational Success

According to Mangan, Lalwani and Butcher (2008) supply chain integration is the alignment and interlinking of business processes, collaboration is a relationship between supply chain partners developed over a period of time". Supply chain integration comprises a set of firm's activities tailored to fostering its relationships with suppliers and customers; these are designed to harmonize supply chain activities with suppliers on the upstream side and enhance customer satisfaction on the downstream side through offering superior products (Petrovic-Lazarevic et al., 2007). The supply chain integration is a building block comprised of bricks of joint collaboration, high level of coordination, shared vision, shared information and technical infrastructure between manufacturer and distributors (Flynn et al., 2010).

Mason and Lalwani (2007) worked on improved transport integration in supply chain system in UK; we can fit it in our model of logistics design integration with external partners (distributors and suppliers). Manufacturing is becoming very much transport intensive now a days and reducing cost and raising quality is hall mark of success for every business, so, different tools are there for integrating transport into supply chain system based on their cost and benefit analysis but all they need is close collaboration between customers and suppliers in our model. Sawik (2013) made research on complex decisions involved in supply chain in presence of barrier of disruption risks. Integrated decisions of selection of suppliers and scheduling customer orders are matter of close coordination in natural incidents or disruption risks. This will ultimately improve the performance in scenario of disruption risks. Mazlan and Ali (2006) worked on finding relationship between supply chain management and outsourcing says that a company should outsource supplies or those function to other parties who have expertise in it but ultimately it will lead to better SCI as company will focus more on core business activities.

From the relevant and empirical literature reviewed agreement with views and opinions of previous researchers is that supplier integration is a determinant of organizational success of multinational firms.

From the foregoing point of view, we hereby hypothesized thus:

H₀₁: There is no significant relationship between supplier integration and customer satisfaction in multinational firms in Rivers State.

H₀₂: There is no significant between supplier integration and competitive advantage in multinational firms in Rivers State.

METHODOLOGY

The study adopted the cross-sectional survey in its investigation of the variables. Primary data was generated through structured questionnaire. A sample of one hundred and eight (108) respondents was drawn from a population of 250 managers of 10 multinational companies in Rivers State, using the The Krejcie and Morgan table. The research instrument was validated through supervisor's vetting and approval while the reliability of the instrument was achieved by the use of the Cronbach Alpha coefficient with all the items scoring above

0.70. The hypotheses were tested using the Spearman Rank Order Correlation with the aid of statistical packages for social sciences version 23.0.

DATA ANALYSIS AND RESULTS

Table 1: Correlations Matrix between Supplier Integration and Organizational Success

| | | | Supplier Integration | Customer Satisfaction | Competitive Advantage |
|----------------|-----------------------|-------------------------|----------------------|-----------------------|-----------------------|
| Spearman's rho | Supplier Integration | Correlation Coefficient | 1.000 | .603 | .668 |
| | | Sig. (2-tailed) | . | .977 | .067 |
| | | N | 120 | 120 | 120 |
| | Customer Satisfaction | Correlation Coefficient | .603 | 1.000 | .663** |
| | | Sig. (2-tailed) | .977 | . | .000 |
| | | N | 120 | 120 | 120 |
| | Competitive Advantage | Correlation Coefficient | .668 | .663** | 1.000 |
| | | Sig. (2-tailed) | .067 | .000 | . |
| | | N | 120 | 120 | 120 |

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

Source: Research Data 2020 and SPSS output version 23.0

Table 1 illustrates the test for the two previously postulated bivariate hypothetical statements. The results show that for

H₀₁ There is no significant relationship between supplier integration and customer satisfaction in multinational firms in Rivers State.

The correlation coefficient (r) shows that there is a significant and positive relationship between supplier integration and customer satisfaction. The *rho* value 0.603 indicates this relationship and it is significant at $p < 0.05$. The correlation coefficient represents a high correlation indicating a strong relationship. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between supplier integration and customer satisfaction in multinational firms in Rivers State.

H₀₂: There is no significant between supplier integration and competitive advantage in multinational firms in Rivers State.

The correlation coefficient (r) shows that there is a significant and positive relationship between supplier integration and competitive advantage. The *rho* value 0.668 indicates this relationship and it is significant at $p < 0.05$. The correlation coefficient represents a high correlation indicating a strong relationship. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between supplier integration and competitive advantage in multinational firms in Rivers State.

DISCUSSION OF FINDINGS

This study using descriptive and inferential statistical methods investigated the relationship between supply chain process integration and organizational success in multinational firms in Rivers State. The findings revealed that a significant relationship between exists between supply chain process integration and organizational success in multinational firms in Rivers State using the Spearman Rank Order correlation tool and at a 95% confidence interval. The findings of this study confirmed that customer relationship management has an effect on customer retention of hotels in Port Harcourt. It implies that it is in the interest of owners and the entire employees of hotels, that adherence to the proper management of the relationship that exist between organization and customers goes a long way in ensuring the retention of these customers and the attraction of more customers. The first and second hypotheses sought to examine the relationship between supplier integration and organizational success. Hence it was hypothesized that there is no significant relationship between supplier integration and organizational success. These hypotheses were tested using the Spearman Rank Order correlation technique.

The finding reinforces previous studies by Flynn, (2010) and Moori, (2012), found supply chain process leads to better organizational success. The supply chain integration is a building block comprised of bricks of joint collaboration, high level of coordination, shared vision, shared information and technical infrastructure between manufacturer and distributors (Flynn et al., 2010). From research on buyer and seller collaborative relationship in dairy sectors, it was concluded that efficient logistics system and adoption of process technologies and information sharing are the means of milk supply chain competitiveness (Moori, Lima and Menezes, 2012).

Mason and Lalwani (2007) worked on improved transport integration in supply chain system in UK; we can fit it in our model of logistics design integration with external partners (distributors and suppliers). Manufacturing is becoming very much transport intensive now a days and reducing cost and raising quality is hall mark of success for every business, so, different tools are there for integrating transport into supply chain system based on their cost and benefit analysis but all they need is close collaboration between customers and suppliers in our model. Sawik (2013) made research on complex decisions involved in supply chain in presence of barrier of disruption risks. Integrated decisions of selection of suppliers and scheduling customer orders are matter of close coordination in natural incidents or disruption risks. This will ultimately improve the performance in scenario of disruption risks. Mazlan and Ali (2006) worked on finding relationship between supply chain management and outsourcing says that a company should outsource supplies or those function to other parties who have expertise in it but ultimately it will lead to better SCI as company will focus more on core business activities. Junquera (2010) in his thesis on logistics and SCM gave governance theory for better SCM it was discussed that SCM practices have significant impact on integration of dairy farmer supplier with company and it build high level of mutual trust and collaboration between the dairy farmers and organization. Research presented in international farm management congress gave insights into TM environmental aspects of SCI in milk sector of Australia, it was stated that milk processors are re aligning-^/ themselves in supply chain with their internal and external partners because of HSE concerns and deregulation policies in developed countries like Astralia (Issar, Cowan and Wegener, 2003).

CONCLUSION AND RECOMMENDATIONS

The study found out that there is a significant positive relationship between supply chain process integration on organizational success of multinational firms in Rivers State. More

specifically, all the following findings emerged: Supplier integration significantly influences organizational success of multinational firms in Rivers State. Information technology significantly moderates the influence of supply chain process integration on organizational success of multinational firms in Rivers State.

The study recommends that as supply chain focuses on the processes management within and beyond organizational boundaries, a measure of its performance is necessary for its effective operation and control. The ultimate success of firms will depend on management's ability to integrate the company's intricate network of business relationships, allowing improved decision making and consequently, reducing cost and customer response time.

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