

SUPPLY CHAIN INNOVATION AND MARKETING EFFECTIVENESS OF PAINT MANUFACTURING COMPANIES IN RIVERS STATE

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Abstract

This study focused on supply chain innovation and marketing effectiveness of paint manufacturing companies in Rivers State. Correlational research model was adopted to test 6 hypotheses formulated for the study. The population comprised 15 paint manufacturing companies in Rivers State. Unit Heads of procurement, operations, logistics and customer service were identified as respondents for the study, to arrive at 60 management staff. A 5-point likert-scale type questionnaire was used to collect data. 53 copies of questionnaire were retrieved and used for analyses. The study adopted Pearson Product Moment Correlation as the test statistic. The found that supply chain innovation strongly relates to marketing effectiveness and concludes that, supply chain innovation is a key determinant of marketing effectiveness of paint manufacturing companies in Rivers State. The study therefore recommends that the management of paint manufacturing companies that seek improved marketing effectiveness should promote innovation in their supply chains.

Keywords: Marketing effectiveness, market profitability, operational efficiency, supply chain innovation

Introduction

The concept of marketing effectiveness has been extensively discussed because of its strong association with many valuable organizational outcomes such as stable, long-term growth, enhanced customer satisfaction, competitive advantage and strong marketing orientation (Nwokah & Ahiauzu, 2009). The original obligation of marketing effectiveness, according to Zhou et al. (2005), is that managers must recognize the primacy of studying the market, distinguish opportunities, choose the best market to serve, and provide superior customer value to satisfy their needs and wants. Marketing effectiveness manifests in the firm's culture and serves as antecedent to organizational practices and decisions associated with allocating resources and seizing opportunities.

According to Hacioglu and Gok (2013) marketing effectiveness is not synonymous with profitability. The premise is that levels of return on investment, sales, market share and others depend on marketing effectiveness. The importance of leading new supply chains is that they help the organization create value for customers and increase the competitiveness and functionality of the entire chain. Organizations use the latest technology to create the best and most unique products in the market, offering products that are flexible, unique, cost-effective and more customized to consumer needs.

Supply chain innovation enable the transformation of firms, as they respond to environmental change. Brettel and Neubauer (2011) argue that innovative products are cost friendly and of

high quality. Organizations that utilize supply chain innovation tailor their products in a manner that meets the needs of customers in terms of cost, quality and flexibility. This attracts more customers leading to increased sales and increased organizational performance.

Innovative supply chain focus on relentless improvement of supply chain cost structure through standardization and simplification (Roy & Wilkinson, 2004). This improves customer satisfaction and lowers materials costs. With innovative supply chain, an organization can collaborate with business partners through integration of data and processes. This improves information sharing and minimizes communication costs leading to improved decision making.

However, little is known about supply chain innovation and how it affect marketing effectiveness. Extant literature on the topic are from studies conducted developed economies like Europe, Asia and other developed countries (Croom & Brandon-Jones, 2007; Gunasekaran et al., 2009), with only few of coming from Sub-Saharan African countries (Eei et al., 2012; Kotaka, 2012). Also, existing studies on supply chain innovation focused on adoption of supply chain innovation without looking at its impact on organisational outcomes. This demonstrates that the area is under-studied, hence, provide research opportunities.

Therefore, this study sought to assess the relationship between supply chain innovation and marketing effectiveness of paint manufacturing companies in Rivers State. The study was guided by the following hypotheses.

H₀₁: Supply chain innovation does not significantly relate to profitability of paint manufacturing companies in Rivers State.

H₀₂: Supply chain innovation does not significantly relate to operational efficiency of paint manufacturing companies in Rivers State.

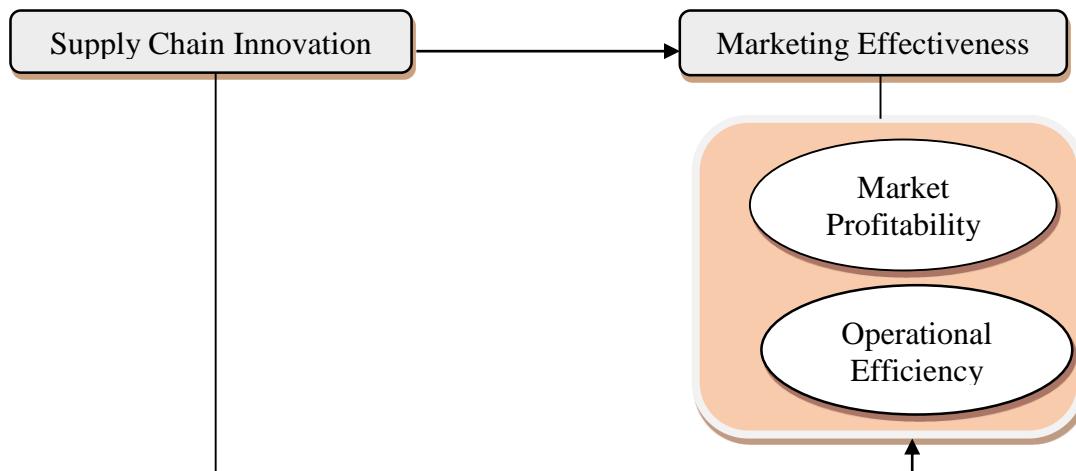


Fig. 1: Conceptual framework of relationship between supply chain innovation strategies and marketing effectiveness of paint manufacturing companies in Rivers State

Concept of Supply Chain Innovation

Supply chain innovation can be defined in many ways. Coltman et al. (2010) stated that supply chain innovation is vital across product categories for the provision of new services. Lee et al. (2014) proposed that supply chain innovation is a tool that can be used to improve organizational processes that require interactions between distributors, manufacturers, customers, and suppliers. Cohen and Levinthal (1990) explained that supply chain innovation can be enhanced by process compliance, which is a way to effectively absorb (recognize, evaluate, assimilate, and apply) aspects of supply and demand-side competence from the absorptive capacity paradigm.

Lavastre et al. (2011) define supply chain innovation as a set of methods and tools that previously nonexistent in companies or their subsidiaries that will be generated, developed and deployed within supply chains to tackle different supply chain issues such as quality, costs and lead-time. Supply chains innovation has been defined based on procedures and tools not available to companies or their organizations and those that are designed, developed, and used in supply chains to solve the problems of such chains as well (Lavastre et al., 2011).

Recent supply chain innovations include logistics network reconfiguration, just-in-time, mass customization, reverse logistics, integration, and outsourcing. These practices are unique and difficult for competitors to follow, and allow a company to benefit from the use of its core assets. The development of supply chain innovation strategy enables companies to create value for their customers and improve their competitiveness and performance of the entire chain (Chan & Qi, 2003). These innovations often combine information and related technology developments and new marketing and logistic procedures to enhance service effectiveness, improve operational efficiency, increase revenue and maximize joint profits (Bello et al., 2004).

Supply chain innovation can be defined as complex processes that deal with environmental uncertainty and respond to customer needs by using new technologies to improve organizational processes in new ways (Lee et al., 2011). Ojha et al. (2016) stated that success in supply chain ultimately leads to continuous innovation overtime. Isaksson et al. (2010) illustrated that the realization of supply chain innovation leads to stable competitive advantage and sustainable development. Bello et al. (2004) argued that supply chain innovation include distributing activity sets and new investments to channel participants, to increase revenue through high service effectiveness and maximize joint profits by reducing costs through greater operational efficiency.

Supply chain innovation has become important in business-to-business marketing practice, because of its potential effects on organizational outcomes, including operational efficiency (Ranganathana et al., 2011; Yaibuathet et al., 2008), service effectiveness (Coltman et al., 2010; Sampson & Spring, 2012), economic prosperity (Ageron et al., 2013; Huo et al., 2013), environmental protection (Melnyk et al., 2009; Miao et al., 2012), and social responsibility (Isaksson et al., 2010; Lee et al., 2011).

Concept of Marketing Effectiveness

Marketing effectiveness measures how well a firm's marketing strategies increase its revenue while decreasing its costs (Ateke & Nwokah, 2022). In today's competitive business environment, effective marketing strategies are to promote products to target audiences. The advent of digital platforms have intensified competition among businesses, making it imperative for companies to employ innovative and impactful marketing techniques.

Marketing effectiveness, according to Berry and Parasuraman (1991), requires managers to have adequate knowledge and distribute suitable resources to distinct markets. According to Nwokah (2006), businesses with high marketing effectiveness are those that are close to their customers, have a common set of values, and have a market orientation. Those with strong marketing effectiveness do better than companies without (Benjamin et al., 2003).

In today's competitive business world, marketing must be implemented for an organization to be successful in moving forward in its chosen market sector. The marketing effectiveness concept has drawn increased attention among academic researchers and business practitioners over the years. Marketing activities are increasingly becoming a crucial part of the

Marketing effectiveness manifests in different forms, including customer philosophy, integrated marketing organization, marketing information adequacy, strategic orientation and operational efficiency (Kotler, 1977, as cited in Ateke & Nwokah, 2022). In this study however, we adopt market profitability and operational efficiency to represent marketing effectiveness.

Market profitability

Market profitability refers to financial factors that affect a company's ability to make money after subtracting overhead costs like employee salaries, rent and equipment hence, when it comes to market profitability, not all firms are created equal (Suttle, 2017). Suttle (2017) states Apple commands the largest percentage of the computer hardware market, ranks No. 51 (of 60) in terms of profitability. The most profitable markets include the food and beverages industry (Chukwu, 2009). Profitability primarily reflects current performance of a firm (Vorhies & Harker, 2000).

Profitability of any sort is the ability of a firm to use its resources in terms of strategies to generate revenues more than its expenses (Abdulrahman, 2017); hence it is a company's capability of generating profits from its operations. Profitability is one of four building blocks for analyzing financial statements and company performance. By implication, it is the ability of a business to earn a profit. A profit is what is left of the revenue a business generates after it pays all expenses directly related to the generation of the revenue, such as producing a product, and other expenses related to the conduct of the business activities (Suttle, 2017).

Operational efficiency

The term efficiency" refers to the situation where cost is minimized, and resource utilization is maximized. Efficiency refers to performance in manufacturing firms measured through factor productivity analysis (Ahmed & Haider, 2013). Johnson and Lee (2012) defined operational efficiency as the ability to deliver products and services cost-effectively without sacrificing quality.

According to Johnson et al. (2012), operational efficiency as the ability to deliver products and services cost effectively without sacrificing quality. Operational efficiency is a term used to describe the state or level at which a manufacturing firm is producing the greatest number of units while utilizing the least number of resources possible. The idea is to achieve a balance of task assignments in the workstations as not to overload or under-load a given workstation (Bagshaw, 2020).

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Methodology

This study adopted a descriptive research design. The population of the study consists of 15 registered paint manufacturing companies in Rivers State. Whose authentic list was obtained from Finlib.com. Since the population was small the study took a census. 4 staff members from each of the 15 paint manufacturing companies (logistics manager, operations manager, logistics

manager and customer service manager). 60 copies of structured questionnaire were distributed to the respondents to collect data related to supply chain innovation strategies and marketing effectiveness. But the final analyses was conducted based on data collected from 53 respondents. The Cronbach's Alpha test was used to determine the reliability of the study instrument. The results of the reliability analysis are reported in Table 1. The Pearson Product Moment Correlation was used to test the correlation between supply chain innovation and measures of marketing effectiveness, relying on SPSS version 25.0.

Table 1: Reliability coefficients for Supply Chain Innovation and Marketing Effectiveness

Variable	Items	Alpha Coefficient
Supply Chain Innovation strategies	3	0.881
Marketing Effectiveness	3	0.794
Profitability	3	0.769
Operational Efficiency	3	0.797

Source: SPSS Output, 2025

Data Analyses and Results

Table 2: Relationship between Supply Chain Innovation and Market Profitability

		Supply Chain Innovation	Market Profitability
Supply Chain Innovation	Pearson Correlation	1	.898**
	Sig. (2-tailed)		.000
	N	53	53
Market Profitability	Pearson Correlation	.898**	1
	Sig. (2-tailed)	.000	
	N	53	53

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

Source: SSPS Output 2025

Table 2 shows that the correlation coefficient between supply chain innovation and market profitability is 0.898, implying that there is a very strong positive correlation between supply chain innovation and market profitability. This implies that increase in supply chain innovation by paint manufacturing companies will lead to improvement in market profitability.

Table 3: Relationship between Supply Chain Innovation and Operational Efficiency

		Supply Chain Innovation	Operational Efficiency
Supply Chain Innovation	Pearson Correlation	1	.822**
	Sig. (2-tailed)		.000
	N	53	53
Operational Efficiency	Pearson Correlation	.822**	1
	Sig. (2-tailed)	.000	
	N	53	53

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

Source: SSPS Output 2025

Table 3 shows that the correlation coefficient between supply chain innovation and operational efficiency is 0.822 implying there is a very strong positive correlation between supply chain innovation and operational efficiency. This implies that increase in supply chain innovation by paint manufacturing companies will inform improved operational efficiency.

The results of the test of hypotheses show that the supply chain innovation has very strong positive correlation with market profitability and operational efficiency. This means that supply

chain innovation is key to market profitability and operational efficiency of paint manufacturing companies in Rivers State. Our findings align with the study of Akani et al. (2023) which investigated green supply chain management practices and marketing effectiveness of pharmaceutical firms in Port Harcourt; and found that green supply chain management practices have significant positive relationship with marketing effectiveness.

Conclusion and Recommendations

The study examined supply chain innovation and marketing effectiveness of paint manufacturing companies in Rivers State River States. The results of the tests conducted showed that supply chain innovation has strong links to marketing effectiveness. The study therefore concludes that, there is a significant relationship between supply chain innovation and marketing effectiveness of paint manufacturing companies in Rivers State. In line with the observations and conclusion reached, the study recommends that management of paint manufacturing companies in Rivers State should maintain or improve on supply chain innovation if they seek to enhance their marketing effectiveness.

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