# Chapter 1 Strategic Value Creation in a Supply Chain

Gowri Vijayan

Universiti Putra Malaysia, Malaysia

Nitty Hirawaty Kamarulzaman

Universiti Putra Malaysia, Malaysia

Aroop Mukherjee

Universiti Putra Malaysia, Malaysia

Selvakkumar K. N. Vaiappuri

Universiti Putra Malaysia, Malaysia

#### **ABSTRACT**

This chapter is designed to give the readers a concise understanding of supply chain strategies and the process involved in its formation. It is a background study on the changing role of supply chain in gaining competitive advantage for the firm. The chapter discusses on traceability and integration along a supply chain, its inception and the advantages to the corporate world through its implementation. The chapter focuses on the topic of value creation in a supply chain through strategic management decisions like vertical and horizontal integration. The value chain analysis model for competitive advantage is covered in this chapter. A discussion on the differences between vertical and horizontal integration systems and the best strategic decision among them is provided. The concepts of sustainable supply chain integration, traceability, and the limitations to their implementation have also been discussed. The best examples on practitioners of supply chain strategy and integration are provided along the chapter.

#### INTRODUCTION

Globalization and market fluctuations have created the need for flexible, responsive supply chain networks. Along with reducing operational inefficiencies, such supply chain designs also help in implementation of sustainability and traceability processes along the value chain. The vast advantages from its differentiation have molded supply chains into a strategic weapon for market competitiveness among firms. This chapter gives a summarized view on the process of strategic decision making for supply chain integration. The chapter further discusses corporate examples on supply chain designs for value creation.

DOI: 10.4018/978-1-7998-0945-6.ch001

#### **Learning Objectives**

After reading this chapter, readers will be able to:

- 1. Trace the decision phases of value creation in supply chain
- 2. Understand the concepts of competitive advantage and value creation
- 3. Summarize the value chain model for competitive advantage
- 4. Identify the supply chain processes for differentiation
- 5. Familiarize with the concepts of horizontal and vertical integration
- 6. Understand the concept of sustainable supply chain integration and its limitations
- 7. Familiarize traceability in the supply chain and its limitations

#### **BACKGROUND**

We are currently in the era of supply chain-supply chain competition among corporates (Li, Ragu-Nathan, Ragu-Nathan, & Rao, 2006). Competitive advantage now depends on the ability of a firm to leverage the intelligence inherent in supply chain networks in order to transform existing business processes (Horvath, 2001). An optimized supply chain requires a certain level of information sharing and collaboration among enterprises. This requires the acknowledgement of the role played by all the stakeholders in a supply chain like transporters, distributors, customers, and suppliers (Sahay, 2003). Coordination forms, their complexity, and a firm's willingness to create long-run relationships with other actors in its supply chain all heavily affect the opportunities to collect and manage information.

Globalization and open trade policies have further complicated supply chain networks worldwide. Meeting of market demands and simultaneously assuring the quality of products require integration of the highest order along the supply chain. Strategic initiatives like traceability, horizontal, and vertical integrations help in supply chain integration and sustainable business operations. They also act as P-O-P (Points of Parity) for business differentiation in markets. The European Community regulation 178/20002 of the European Union (EU) defines traceability as "The ability to trace and follow a food, feed, food-producing animal or substance intended to be, or expected to be incorporated into a food or feed, through all stages of its production, processing and distribution" (Canavari et al., 2010, p. 172). Traceability is crucial for product recalls, especially in cases of contamination or product malfunctions. This requires the establishment of a transparent system within the supply chain and the use of tracking technology like RFIDs (Radio Frequency Identification) to support immediate product pull-offs from the markets. Traceability also plays a vital role in product quality assurance and sustainable management of resources.

While traceability concerns product responsibility, vertical and horizontal integration concentrates on streamlining the supply chain. Vertical integration is a major corporate level strategy that many companies use to gain control over their industry's value chain. Vertical integration differs from horizontal integration, wherein a corporate usually acquires, or mergers with a competitor in the same industry. Both vertical and horizontal integration leads to monopolistic or even oligopolistic market development (Katie, 2013).

Traceability and integration models like vertical and horizontal integration are created based on future expectations of the market. Such initiatives ensure transparency across the entire supply chain and the industry as well as meeting quality specifications and adaptation of sustainability across the supply

## 17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/strategic-value-creation-in-a-supply-chain/239265

#### Related Content

#### A Location Allocation Model for a Territorial Design Problem with Dense Demand

María Beatríz Bernábe Loranca, Rogelio González Velázquez, Elias Olivares Benítezand José Luis Martínez Flores (2016). *International Journal of Applied Logistics (pp. 1-14)*.

www.irma-international.org/article/a-location-allocation-model-for-a-territorial-design-problem-with-dense-demand/158172

### Counterfeiting Activities in Manufacturing Versus Service Organizations: A Supply Chain Perspective

Mauro Falasca, Scott A. Dellana, William Jason Roweand John F. Kros (2022). *International Journal of Applied Logistics (pp. 1-24).* 

www.irma-international.org/article/counterfeiting-activities-in-manufacturing-versus-service-organizations/302093

#### Research on Movie Box Office Prediction Model With Conjoint Analysis

Wei Luand Ruben Xing (2019). *International Journal of Information Systems and Supply Chain Management (pp. 72-84).* 

www.irma-international.org/article/research-on-movie-box-office-prediction-model-with-conjoint-analysis/229050

#### A Game Theoretic Approach for Sensitive Information Sharing in Supply Chain

Xiaofeng Zhang, William K. Cheung, ZongWei Luoand Frank Tong (2010). *International Journal of Applied Logistics (pp. 1-12).* 

www.irma-international.org/article/game-theoretic-approach-sensitive-information/52081

## Research on the Application of Virtual Reality Technology in the Cultural Exchange of Tourist Attractions Under the Background of Artificial Intelligence

Na Hou (2024). *International Journal of Information Systems and Supply Chain Management (pp. 1-19).*<a href="https://www.irma-international.org/article/research-on-the-application-of-virtual-reality-technology-in-the-cultural-exchange-of-tourist-attractions-under-the-background-of-artificial-intelligence/341801</a>