# Chapter 14 Supply Chain Management and Strategy Implementation for Perishable Goods

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# **ABSTRACT**

Supply chain management is the active management of supply chain activities to maximize customer value and achieve a sustainable competitive advantage for a longer time. The supply chain firms put an extra effort to develop and run in the most effective & efficient ways possible. There are issues of concern that need attention, like huge losses in perishables (food) because of infrastructural deficiencies. The demand for food remains highly unfulfilled in most of the country and outside in spite of high production of food. This is because of highly ineffective, inadequate and very weak supply chains for food that require temperature controlled conditions to retain quality and safety of food and curb the decay process. An effective food retail supply chain thus becomes vital (Bourkakis and Weightman, 2004). Supply chains for perishable and time-sensitive products, pose specific and unique challenges. The temperature controlled supply chains or cold chains are a significant proportion of the retail food market which is still in the nascent stage.

# INTRODUCTION

Business today is being conducted in a global environment. Globalization has forced countries and companies to become more efficient, creating the infrastructure and competitive advantage necessary to survive in the overwhelming market scenario. Companies are going truly global with supply-chain management to cater the needs of everyone throughout the globe. For example, a company, now a day, can develop a product in the United States, manufacture in India and sell in Europe. Companies have changed the ways in which they manage their operations and logistics activities according to the situation. Changes in trade, the spread and modernization of transport infrastructures and the intensification of competition have elevated the importance of flow management to new levels. The country like India

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which is having a geographic diversities with different types of soil, habitats, climates and vegetation is a major producer of food like, vegetables, fruits, wheat, pulse, milk, spices etc. in the world after China. Agricultural sector is a significant economic component, employing nearly 60% of the country's population and contributing to around 25% of India's gross domestic product. It is a challenge to manage a food supply chain that require all players in the supply chain to adhere to stringent operational practices in order to ensure the product is safe for consumption once it reaches the end consumer. Especially, in a global supply chain, when fresh or frozen foods are being transported, the procedures and equipment has to maintain the integrity of the cold chain to a more critical role to provide better outcome. Two issues that continue to drive best practices for managing the cold chain are food safety and food quality.

# **Supply Chain**

In the 21<sup>st</sup> century, companies are going through a revolution of new strategies and operational technologies implementation out of the demand. Companies are struggling hard to overcome client's satisfaction and challenge those who were waiting for high quality products with low prices as they must be responsive to the client's demand. According to Gunasekran et al (2008), companies are exploring the management supply chain concepts as a solution to improve their profits, providing high quality and low prices items. Supply chain management consists of all activities associated with items flow and transformation, since the raw material till it reaches at the hands of the customer. (Handfield & Nicholas, 1999; Shephard & Gunter, 2005).

Customer's orientation emphases are regularly cited as catalyst for the high interest in supply chain management (Gunasekaran, 2001; Webster, 2002). The supply chain efficient management is treated as a key to build a sustainable competitive advantage through the improvement of inter and intra relationships of the companies (Ellinger, 2000). The food industry has observed great changes in their structure. Like market globalization, the technology improvement, smaller lifetime of products, and diversification of customer demand (Lindgreen & Hingley, 2003; Fattahie et al, 2013).

Supply Chain Management has the ability of improving the delivery of goods, services and all related information from supplier to customer. It is concerned with the effectiveness of dealing with the demands of the end consumer (Cooper et al, 1997). Supply chain management has been found to be the systemic, with strategic coordination of the traditional business functions and the tactics applied across the business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole (Mentzer, John T., William DeWitt, James S. Keebler, Soonhoong Min, Nancy W. Nix, Carlo D. Smith, & Zach G. Zacharia, 2001). According to APICS Dictionary (2013), Supply chain management has been defined as the designing, planning, executing, control, and monitoring of supply chain activities with the objective of creating net value, building a competitive infrastructure, leveraging worldwide logistics, synchronizing supply with demand and measuring performance globally.

Supply Chain Management is based on two core ideas. Firstly, that every product that reaches an end user represents the cumulative effort of multiple organizations. These organizations referred collectively as the supply chain. The second idea is that while supply chains have existed for a long time, most organizations only paid attention to what was happening within their "four walls" as only few businesses understood that it is much less managed and the entire chain of activities that ultimately delivered products to the final customer. The result was lacking coherence and thus ineffective supply chains (Handfield, 2011).

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