

# Chapter 51

## Process Improvements in Supply Chain Operations: Multi-Firm Case Studies

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### ABSTRACT

*The nature of SCM research is constantly evolving and must address a variety of concerns like poor service, large inventory levels, and friction among suppliers and manufacturers. Analytical databases and techniques in SCM are an important part of this research. Many researchers and practitioners have depended on secondary data, but given the dynamic nature of global competition, more recent and relevant data must be gathered. These efforts need to be geared to the development of properly managed supply chain relationships and corporate sustainability initiatives that ultimately promote broad-based sustainable development objectives for the good of people, plants, and profits (i.e., triple bottom-line).*

### 1. INTRODUCTION

#### 1.1 Successful SCM Considerations

Understanding that supply chain success depends on supplier performance can make supplier relationships, or their lack of, having a huge impact on revenue, inventory, and profitability. There have been a multitude of positive and negative links between suppliers that can directly or indirectly impact the overall operational success of companies, especially in terms of cost, quality, flexibility, and delivery metrics (Ketikidis, Hayes, Lazuras, Gunasekaran, & Koh, 2013; Mateen & More, 2013). ; Park & Min, (2013). Firms and their supply chains must control suppliers, and not let suppliers control their business, through increased levels of mutual benefit and respect. This is the issue where the efforts of lean operations to reduce the waste of inventory and time begins (Basu & Nair, 2012; Brito & Botter, 2012). It is critical to align performance with demand planning. Otherwise, too much of the demand planning horizon is frozen by unnecessarily long-lead times and too much variability in performance. The authors,

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van Weele and van Raaij (2014) made a plea to the academic community for Purchasing and Supply Management (PSM) to engage in greater efforts to adhere to a more rigorous approach to research. They distinguished supply chain management (SCM) as a different entity than PSM, as SCM has moved away from simply a focus on the flow of goods to examining more closely the relationships between different players along the supply chain in an attempt to control more than just inventory management-related concerns. Through the creation of value for a specific customer market, emphasis is placed on proceeding as efficiently as possible (as opposed to effectively). This task may be accomplished through strategic management, of which certain aspects will be examined in the present case study, but van Weele and van Raaij suggested that research into this subject may hold no value unless the findings are executed. As profits became a result of customer satisfaction, firms began to focus on excelling at their core competencies and outsourcing other aspects of their business and shifting to a more supplier-dependent climate. It was suggested that competitiveness was not entirely internal, but relies on external relationships with suppliers, as well. Still, the literature contained a lack of studies that display any new finding on how to leverage this internal knowledge within a firm. One of the purposes of this chapter is to address this apparent lack of multiple industrial studies on internal leverage of SCM-related information.

If management recognizes that SCM processes require integration throughout the organization and beyond with suppliers and customers, problems that may have been historically significant are caught and dealt with prior to them becoming a current issue or problem. Otherwise, gaps in the supply chain are created that can significantly hinder results. Using collaboration with key supply chain participants to provide additional focus and resources to the total supply chain is vital. Assessing the entire supply chain is critical for identifying critical areas, including suppliers, logistics-service providers, ports, and other potential risks that could disrupt a company's supply chain. Essentially, SCM is not only concerned with the management of the flow of goods and services within and without a firm, but maintaining the relationships among all stakeholders that support the supply chain. Goods and service involved in this flow traditionally include fresh raw materials, inventory, and finished products. Raw materials need to be transported using fast and efficient means to make the production process successful. The availability of raw materials and the fast nature of the production process dictates that raw materials need to be constantly available in large quantity and in good condition. Therefore, proper storage of raw materials comes in handy and consequently, this would necessitate adequate storage capacities.

SCM has traditionally concerned with the internal planning, design, execution and control of activities connected to the supply chain (Casadesus & de Castro, 2005; Miguel & Brito, (2011). These activities are usually intended to fulfill certain objectives, but management is always pressured to strategically leverage the supply chain to create net value. This means that firms have to put forth extra effort to enhance their productivity at all levels. Management has to ensure that their overhead expenses do not balloon beyond reasonable levels, which initially would limit profitability. Therefore, the difference that is realized between expenditure on production and revenues from sales constitutes the net value. Effective SCM should strive to ensure the creation of the largest possible net value, yet maintain positive customer and supplier relationships (Smith, 2011, 2012). Logistics also play a fundamental role in the outworking of activities pioneered by an organization. These concerns with the overall oversight of activities, plans, and procedures in which a firm participates can be overwhelming at times and their complex interactions should not be downplayed. In many instances, achieving a sensible form of logistics proves elusive and unrelenting. Consequently, logistics always require to be leveraged against any discrepancy related to harmful gossip of strangers. The leverage of logistics has the potential to determine the general direction that the firm would be willing to take in its SCM activities. Hence, SCM is directly involved with the

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