

Chapter 1

Innovative Strategies for Logistics Processes

Bikem Türkeli

Marmara University, Turkey

Alp Ariburnu

Marmara University, Turkey

Özalp Vayvay

Marmara University, Turkey

ABSTRACT

In a time of rapid revolutionary change, today organizations must innovate in ways that allow them to take advantage of change. Competitive business environments force companies to respond to all changes in the market. This response to that change brings innovation in processes. As a basis of all competitive advantages, innovation should be continuous and the only way to maintain this is having the right innovation strategy. In this study innovative strategies for logistics processes, which can be used practically in business environments, are mentioned. For each innovative strategy title tools that can be used to innovate operations are presented. By innovating logistics processes logistics providers can fulfill customer needs rapidly and increase their profit because of having a competitive advantage.

INTRODUCTION

Logistics is defined as a business planning framework for the management of material, service, information and capital flows. It includes the increasingly complex information, communication and control systems required in today's business environment. Logistical processes, those involving sourcing, inbound logistics (receiving, storing, and disseminating incoming goods or material for use),

configuration and outbound logistics (movement of material associated with storing, transporting, and distribution a firm's goods to its customers.), and third-party partnerships for inventory management and transportation, are extremely important to successful product delivery (Davenport, 1993). We can collect them into four main clusters and these are purchasing, warehousing (storing), delivery (transportation) and post-delivery.

Recently, many logistics service providers try to improve their operation efficiency by continuous implementation of information or automation

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technologies according to their business characteristics. It is important for logistics service providers, in this age of knowledge-based economy, to accumulate and use their skills and knowledge efficiently and consistently (Lin, & Ho, 2007). Competitive business environment forces companies to respond all changes in market. They can be responsive only if they are open for changes in company.

Innovation is the response to change. And, conversely, change is the consequence of innovation. Globally, we are in a time of rapid revolutionary change. Organizations must anticipate this and innovate in ways that allow them to take advantage of change. In other words, innovation is the basis of all competitive advantage: the means by which organizations anticipate and fill customer needs and the method by which organizations utilize technology. (Prestwood and Schumann, 1997) Innovation should be continuous and the only way to maintain this is having a right innovation strategy.

An innovation strategy guides decisions on how resources are to be used to meet a firm's objectives for innovation and thereby deliver value and build competitive advantage. Its crafting is supported by a number of innovative capabilities that steer the configuration and reconfiguration of a firm's resources. It entails judgment about which kinds of innovation processes are most appropriate for the firm's circumstances and ambitions. (Dodgson et al., 2008)

In this study, innovative strategies for logistics processes that can be used practically in business environment are mentioned. For each innovative strategy title, tools that can be used to innovate operations are presented. By innovating logistics processes, logistics providers can fulfill customer needs rapidly and increase their profit because of having competitive advantage.

INNOVATION IN LOGISTICS SECTOR

The modern logistics industry is a complex network of firms involved in the flow and transformation of goods from the raw materials stage to the end user. Three trends spur innovation in logistics. The first is the increase in the demand for high-tech goods. The global market for high-technology goods is growing at a faster rate than that for other manufactured goods, and high-technology industries are driving economic growth around the world.

The second trend influencing the logistics industry is globalization, the integration of many micro economies into one worldwide, interdependent economy. Top firms in the logistics industry which headquartered all over the world, are not only moving logistics services worldwide but are also creating innovation centers close to the new centers of trade. Reliable, timely accurate data is the keystone of the new global supply chain. Software and hardware innovations that enable greater visibility of product movement to shippers and carriers have become critical to success in the logistics industry.

Innovation in the logistics industry has also been spurred by the growth of the Internet and e-commerce. The Internet and computing Technologies have increased the amount of information available to the buyer and manufacturer about the product and fulfillment process. This causes a rise in expectations relating timely and accurate fulfillment. Innovation in warehouse management software and tracking products support firms' efforts to cope with the demands of the Internet environment.

Future Logistics System must be intelligent and sensible system, sensing, GPS and image processing technology must be used. It must enhance validation functionality, must support global sup-

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