Chapter 12

Distribution and Logistics
Outsourcing in the Pharmaceutical Sector

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ABSTRACT

The scope of this chapter is to provide useful insights of the pharmaceutical supply chain and identify the prospects of outsourcing, with special reference to the Greek pharmaceutical sector. This goal is facilitated by a threefold analysis in combination: first, by the development of an integrated interdisciplinary research methodology framework; second, by the identification of the special characteristics of the pharmaceutical supply chain with special attention to the role of outsourcing; and third, by the description of the current pharmaceutical distribution channels in Greece and the identification of the potential opportunities for outsourcing. The findings of this study are outlined in an attempt to contribute in the yet unsettled research methodology issue which has particular importance for the R&D in the pharmaceutical sector. Certain specific suggestions for future research are expected to support the sustainability of the Greek pharmaceutical sector, with potential broader relevance.

INTRODUCTION

The use of medicines and pharmaceutics is part of the modern western culture, society and the way of life and has important impacts in public health and welfare, employment, manufacturing production and distribution. A pressing research question is whether pharmaceutical production and distribution perform within the new business and technology environment, towards the “historical challenge” of attaining sustainable competitive advantage. Consequently, the sustainability “bet” for any sector is the adjustment to the new mandate of quick adjustment to the global competition environment. It prevails in particular with the pharmaceutical sector which is additionally characterized by significant state intervention for the protection of public health. Globalization besides the hardening of competition raises the possibilities of “outsourcing.” so
that it can transform the threats to opportunities through designed integration at value supply chain (Voss, 2003).

This paper starts with a brief literature review concerning the advance of research towards holistic supply chain strategy and performing implementation, in view of that the “sustainability challenge” constitutes a transition to a new and irreversible business, economic, social, physical and technological environment. In view of the yet an unsettled issue of modern R&D methodology framework, the integrated R&D framework proposed in this paper, is identified by interdisciplinary research to help mobilization of all available knowledge infrastructure and maximization of “collective capabilities” and “synergy effects” at overall supply chain level. More specifically, the attention to the research methodology – the “R” aspect – is designed to contribute in maximization of the “D” outcome, for the benefit of social health and business and economic robust (Yu-Chung et al., 2005).

Within this integrated R&D framework, this paper proceeds to reveal the special characteristics of the pharmaceutical market and supply chain. Emphasis is given in the distinction between core and non-core processes, subject to outsourcing, to provide useful insights for contribution in “best practices” and quality standards, critical within the highly regulated pharmaceutical / healthcare industry.

In outline, the goals of this paper are the following:

• To formulate an “integrated supply chain” research framework
• To enlighten the pharmaceutical market and supply chain special features
• To describe the current pharmaceutical distribution channels and identify the potential opportunities for outsourcing in Greece and finally,
• To provide useful guidelines to academics and practitioners for future research

The chapter’s structure is presented in Figure 1.

METHODOLOGY RESEARCH FRAMEWORK

Methodology Literature Review

Most companies, including those in the chemical industry, have recently begun focusing on their supply chains and the research on SCM has gradually freed from the extreme individual and sectarian conventional methodologies and practices of the past (NUS, 2008). The literature review regarding the advance towards integrated research frameworks in dynamic perspective can be summarized as follows:

• Traditionally firms tracked performance largely on financial accounting principles and short-term firm profit maximization.
• Widespread dissatisfaction by 1970s.
• Multi-dimensional, comprehensive performance measurement frameworks in the late 1980s and early 1990s.
• Advance to performance management to keep up competitive advantage with dynamic company environments (Barber, 2008).
• Modern “value-chain analysis”: beyond critical choice to a unique strategy between “generic strategies,” in line with “two main types of competition: optimizing and strategic” (Porter, 1980; 1985; 1996).
• Combination of lean manufacturing and agility with the “leagile” approach (Towill & Christopher, 2002; Fernie et al., 2010).
• Extended use of “business process re-engineering” (BPR) for the aim of ensuring resilience to mitigate risks of rising vulnerability and turndowns (Cranfield University, 2002; Malindretos et al., 2002; Jüttner et al., 2003).