# Chapter 58 Supply Chain Knowledge Integration in Emerging Economies

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#### **EXECUTIVE SUMMARY**

Firms in developed economies have been purchasing from firms in emerging economies for years, but they typically purchase low value, low margin items. Opportunities have arisen for emerging economy manufacturers to supply higher value products and services to firms in developed economies. In today's global, knowledge based economy, suppliers must have cutting edge knowledge, and they must constantly upgrade their knowledge to maintain a competitive advantage. When supplying high-value products, complex knowledge based interactions between the buyer and supplier are necessary. A conceptual model is developed in this chapter, proposing that if suppliers in emerging economies are committed to long term relationships with developed economy customers, they can increase the level of knowledge integration in the relationship, and in turn, improve performance. The primary contribution of this chapter is to show that firms in emerging economies can achieve sales growth by becoming critical links in today's global, knowledge based supply chains.

#### INTRODUCTION

The globalization of supply chains has provided tremendous opportunities for manufacturers in emerging economies to improve their sales and profitability. Responding to these opportunities, however, can be a significant challenge. Firms in developed economies have been purchasing from

DOI: 10.4018/978-1-4666-2625-6.ch058

manufacturers in less advanced economies for many years because of the lower cost of labor and other inputs to production. These purchases have typically been limited to low value products, but more recently they have begun to include more complex, high value products due to the improving capabilities of the emerging economy firms (Koudal & Engel, 2007). Major companies in North America and Europe purchase almost 50% of their raw materials, semi-finished goods, and

finished goods from abroad, so there are many opportunities for emerging economy manufacturers to capitalize on their cost advantage and increase sales (Cudahy et al., 2008). One of the top priorities of emerging economy manufacturers for the upcoming years is the ability to sense and respond to growth opportunities (Pandey, 2010). To achieve these opportunities, suppliers must often meet strict customer demands, which can require significant amounts of knowledge exchange between the firms. Research has begun to investigate the effects of knowledge exchange and learning in cross-border buyer-supplier relationships, and it has shown that significant value can be generated from these interactions (Cheung et al., In Press). The objective of this chapter is to provide insight into how firms in emerging economies can take advantage of growth opportunities through supply chain relationships. A conceptual model is proposed, explaining how long term buyer-supplier relationships affect knowledge integration and sales growth. The next sections provide a literature review, followed by the theoretical framework and model, and finally a discussion of the recommendations that emerge from this research.

#### LITERATURE REVIEW

Competition among manufacturers has evolved in recent years to be supply chain vs. supply chain instead of firm vs. firm (Handfield & Bechtel, 2002). The Supply-Chain Council (2008) defines a supply chain as a network of firms that encompasses every effort involved in producing and delivering a final product from the supplier's supplier to the customer's customer. In the past, efficiency was often gained through vertical integration, with firms designing and manufacturing their complete products. The quintessential example of vertical integration is Ford's River Rouge complex, in which raw materials were brought into one end of the plant and finished

vehicles came out of the other end, and nearly every other step was performed in the plant, from steelmaking to electricity generation (Fine, 1998). This method worked well for standardized, mass produced products. Today, customers demand flexibility and responsiveness, which limits the ability of one firm to meet all possible customer needs. Manufacturers have responded to the call for flexibility and responsiveness in part by relying on supply chain management (Richardson, 1993). By performing only the functions for which they can add significant value to the end product and outsourcing the functions for which they are at a comparative disadvantage, manufacturers have become more flexible and innovative, while reducing costs. A supply chain focus enables the individual firms in the chain to become more specialized, thus making the chain as a whole more efficient (Prahalad & Hamel, 1990). Although the management of the manufacturing process is more complex due to the additional parties involved and their potentially conflicting goals, a firm's supply chain can be a significant source of value and competitive advantage if managed successfully (Porter, 1985).

Suppliers have taken on greater responsibility with the shift towards supply chain based competition. Instead of purchasing only raw materials and low value products, many firms today purchase high value components or complete subsystems, which often represent over 50% of the value of the final product (Holcomb & Hitt, 2007). The quality and cost of the buyer's end product can be directly and significantly impacted by the quality and cost of the supplied component, so it is imperative that suppliers provide superior products (Liker & Choi, 2004). Suppliers can also play a significant role in the success of the end product by participating in the product design process (Petersen et al., 2005). If a supplier provides products with quality or safety problems, there can be significant repercussions for the buying firm. High profile recalls have significantly damaged the reputations and stock prices of firms such as

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