Chapter 4
The Impact of Supplier's Administrative Attributes on Production Process and Marketing Benefits

José Roberto Mendoza Fong
Universidad Autónoma de Ciudad Juárez, Mexico

Cuauhtemoc Sánchez Ramírez
Instituto Tecnológico de Orizaba, Mexico

Jorge Luis García-Alcaraz
Universidad Autónoma de Ciudad Juárez, Mexico

Giner Alor-Hernández
Instituto Tecnológico de Orizaba, Mexico

ABSTRACT

Supplier selection process is one of the daily activities of purchasing departments in the maquiladora industries, but traditionally the attributes analyzed are those that can be quantified, ignoring others because its impact on the production process or on the company's revenues is unknown. This article presents a structural equation model in which three latent variables associated with administrative attributes are integrated, the benefits obtained along production process and marketing, where three hypotheses which relate them are exposed. The information is derived from a survey of 253 managers who works in maquiladoras in Mexico, thus a descriptive analysis of the sample and the items are obtained. The hypotheses were validated according to a structural equation model and the results indicate that there is a direct and positive effect between the variables analyzed, but the most interesting due to its size, is between the profits made by the production process and the marketing benefits.

DOI: 10.4018/978-1-5225-2036-8.ch004

INTRODUCTION

The term Supply chain (SC) was introduced in the 1980s, since then it has been used to describe planning and control of materials, information flows and logistics activities inside and outside of a company (Cooper, Lambert, & Pagh, 1997). Initially, SC was focused mainly on material flows, but nowadays in order to ensure a good performance of SC, it must involve more than just the material flow. Thereby, the SC can be defined as all activities involved in delivering a product since raw material to final customer, which includes obtaining raw materials and parts, manufacturing and assembly, storage and inventory tracking, entry and order management, distribution through all channels, customer delivery, and information systems needed to monitor all these activities (Lummus, Krumwiede, & Vokurka, 2001).

Therefore, the SC is neither a single chain nor series of process, but rather is a complex network that involves a number of components to perform it successfully, which can be seen graphically in Figure 1, where are included the material acquisition, process of turning of raw materials into finished products (manufacturing), internal and external logistics and product distribution to customers in order they meet the demand efficiently (Singh, 2014). As shown, the supply chain begins with the purchase of raw material to suppliers, so it represents the first entity in the supply chain, which is discussed below.

Suppliers

As is shown in the Figure 1, suppliers represent the beginning of the supply chain and hence the importance of develop a correct selection of them. The suppliers are those that provide raw materials, components or services to a manufacturer who is responsible for assembling and add value to them. A proper supply selection is the first step in the supply chain evaluation. At present, in the global manufacturing environment, suppliers represent a vital partner in an organization, means the correct selection provides quality products, in a quantity required and reasonable prices (Kuo & Lin, 2011). Therefore, supplier selection is an operational and strategic task for the development of a company and represents a complex problem

Figure 1. Supply chain
Source: Doron, 2015