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Purchasing models and organizational performance: a study of key strategic tools

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ABSTRACT

Latin American countries show a lack of productivity and innovation compared with OECD economies. Business networks constitute a tool to improve this situation, and purchasing can help organizations create business networks with suppliers, as purchasing has evolved from a support function to a key strategic tool for organizations. Purchasing maturity models reflect this evolution. As their level of purchasing maturity increases, organizations experience increased performance. Unfortunately, however, current models do not specify the purchasing tools and methodologies that firms should use to enhance their purchasing maturity level and thus increase their cost savings. This study advances the literature by identifying 16 tools, methodologies, and strategic and nonstrategic activities, as well as 10 cost-saving levers linked to the stages of purchasing maturity. Based on a study of 278 Chilean companies, this paper identifies which key activities, tools, and methodologies that organizations can use to improve their purchasing performance.

1. Introduction

Productivity and innovation are crucial for Latin American countries to develop and reach per capita income levels similar to those of the richest economies. Recent studies (Daude & Fernández-Arias, 2010a, 2010b) indicate that low productivity growth has been the root cause of the region's poor economic performance over the last four decades, and innovation is essential to increase productivity (Crespi & Zúñiga, 2012).

To improve productivity and innovation Latin American organizations have implemented various actions, plans, and programs. Some of these support programs aim to increase business linkages and networks, and many such programs have become widespread in Latin American countries, especially since the second half of the 1990s (OECD ECLAC).

The integration of business networks could help Latin American companies to diversify exports, create new jobs, and acquire new technological capacities in line with international best practices, thereby strengthening their competitiveness. Moreover, improved and integrated business networks could provide benefits such as supplier development programs and supplier management. Given that organization's purchasing departments play critical roles as network managers for suppliers, enhancing linkages and networks with suppliers is part of the path to productivity and innovation. This paper explores the performance of Chilean purchasing departments with respect to this new strategic role.

As OECD/ECLA notes, for Latin America, "…companies can only achieve the capacities they need by working in networks, where information and technology can flow between businesses and organizations as abundantly as inputs and goods. The companies can thus increase their added value and markedly boost productivity…."

In the past, purchasing in organizations served as a mere operative function in serving other departments (often the production department). Traditionally, the role of purchasing was to process shopping orders for other departments and to obtain maximum price savings. Accordingly, purchasing was a supplementary activity for companies, with little relevance or importance, limited consideration in a company's strategy formulation, responsiveness to internal requests only, and low perceived value among executives and managers (Keough, 1993).

However, the current business environment has changed the role of purchasing in organizations. Strong competition in global markets requires firms to increase their focus on product innovation, time to market, and cost savings and to cater to greater customer demands. Consequently, the role of purchasing has evolved from an administrative and supportive function to a strategic tool for businesses that contributes to overall organizational performance.

The new frontier of the purchasing function is now the management of external resources (suppliers) to obtain value and innovation from them while reducing costs. To serve this function, purchasing must be able to synergize suppliers' strengths with a company's value proposition by acting as a "butt hinge" between the firm and the supplier (Carr & Smeltzer, 1999a; Carter & Narasimhan, 1996; Goh, Lau, & Neo, 1999; Narasimhan & Das, 2001; Shin, Collier, & Wilson, 2000; Yang, Lin, Krumwiede, Stickel, & Sheu, 2013).

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For Latin America countries, a recent OECD/ECLA report (OECD 2013) identifies several factors that determine the incorporation of innovation and new technologies into production activities. In particular, increasing the intensity and changing the orientation of the innovation and productivity process requires (among others) "…i) developing firms' and institutions' technological and organizational capacities,…ii) strengthening the architectures of the networks that the companies belong to and iii) creating a more virtuous connection between the parts of existing networks (companies, universities and technology centers, and consultancies and intermediate institutions)…." Accordingly, there is a new perspective regarding the role of the purchasing function in delivering value to firms.

Theory links value improvement to the purchasing function through purchasing maturity models. Purchasing maturity models characterize the evolutionary process of purchasing. Indeed, such models demonstrate that purchasing is becoming more developed as a business function and more integrated into firms' strategic plans. These models, however, are still in their infancy, and much research remains to be done. For example, Schoenherr et al. (2011) study purchasing maturity models and identify 16 key issues related to purchasing that require further research. One of these key issues is, in their words, to "[i]nvestigate the link between PSM and financial value by utilizing financial measures, demonstrating the impact of strategic PSM" (Schoenherr et al., 2011, p. 5). In subsequent studies, Foerstl, Hartmann, Wynstra, and Moser (2013) and Úbeda and Alsua (2014) answer this call and empirically establish a link between financial performance and purchasing maturity.

The current article continues to answer the call of Schoenherr et al. (2011) and advances knowledge about purchasing maturity models and the extent to which they create relevant inputs for management and business. Specifically, this study aims to empirically establish which strategic activities and best practices are developed at each maturity level of the purchasing department and to link them to financial performance. This paper contributes to both research and practice in four ways:First, this study explains the empirical relationship between strategic activities and cost savings in organizations. Purchasing maturity models proposed in the literature thus far have often failed to describe which specific strategies contribute to financial performance (measured as cost savings) and how these strategies achieve such cost savings. This study addresses this issue and links cost savings, purchasing maturity, and strategic activities.

Second, current purchasing maturity models often mention best practices developed by purchasing departments, but they fail to describe how purchasing departments implement these best practices. In other words, what specific purchasing methodologies, strategies, and tools allow purchasing to improve firm performance? This paper fills this research gap and identifies which methodologies and tools are linked to each purchasing maturity stage and therefore to cost savings.

Third, in contrast to previous studies, this paper provides empirical evidence showing how a purchasing department can strategically evolve into higher purchasing maturity stages. Such evidence is relevant to practitioners because it allows them to determine, based on actual data, which steps to follow to enhance the purchasing maturity in their organization. With such data, practitioners may be able to use more—and more sophisticated—cost-saving levers within their purchasing function.

Fourth, numerous studies focus on productivity and innovation in Latin America. However, few original and detailed studies focus on companies. This work studies a Latin American country, Chile, and is notably completely original, rather than a continuation, extension, or application of another study. By linking purchasing maturity, purchasing methods and tools, and cost-saving levers, this study may help many Latin American companies improve productivity and innovation in Latin American through purchasing.

2. Purchasing maturity models

The literature often defines purchasing maturity broadly; for example, Rozemeijer, Van Weele, and Weggeman (2003, p. 7) describe purchasing maturity as "the level of professionalism in the purchasing function." To better understand the construct of purchasing maturity, this study defines purchasing maturity as a measure of the degree to which a purchasing department is advanced, sophisticated, and professional. Further, purchasing maturity is a measure of how people, strategies, practices, suppliers, and communication are managed in a purchasing department to capture strengths from suppliers. These strengths can include shared and sustainable cost savings, know-how, innovation, shorter time to market, and productivity improvements. More mature purchasing departments are more likely to implement such strategies and to increase company value. Accordingly, purchasing maturity is the extent to which purchasing as evolved from a mere administrative function into a more strategic work and business-supporting function.

Purchasing maturity models describe several auditable stages through which a department may evolve, from the least sophisticated to the most complex. High maturity implies that a purchasing department implements the best practices with respect to purchasing worldwide, while low maturity implies the lack of implementation of such practices (Chiesa, Coughlan, & Voss, 1996; Ellram & Liu, 2002). The assumption is that higher purchasing maturity should lead to better firm performance.

Twelve purchasing maturity models are described in the literature. These models are primarily conceptual, however, as they have not been tested empirically. According to Schiele (2007), purchasing maturity models in the literature over the last thirty years fit into four distinct categories. The first category includes models proposed by Reck and Long (1988), Cammish and Keough (1991), Burt and Doyle (1994), and Barry, Cavinato, Green, and Young (1996). These models are based on primary observation and ex-post assembled stages and are primarily compiled from a series of interviews with experts whose suggestions are then summarized into a stage model. However, no subsequent empirical test is used to verify the assumed purchasing maturity–firm performance link.

The second category includes models that Bhote (1989), Freeman and Cavinato (1990), and Chadwick and Rajagopal (1995) propose. These models are based on dominant theory and ex-ante assembled stages and are primarily deductive, usually with one dominant differentiating criterion. Within this stream of literature, the researchers use ex-ante models to determine the stages of purchasing maturity. While this approach offers the benefit of more consistent modeling, these models base solely on a single dominant determinant of purchasing maturity. Consequently, they often run the risk of being biased and omitting other relevant determinants. Once again, these studies do not run empirical tests to determine the link between purchasing maturity and firm performance.

The third category includes models proposed by Cousins, Lawson, and Squire (2006) and Paulraj, Chen, and Flynn (2006). Although these authors first deduce stages of purchasing maturity from primary observation, they do not use empirical tests to assess the link between purchasing maturity and firm performance in the models.

These early attempts to link purchasing maturity to firm performance yielded promising results; therefore, Schiele (2007) created a fourth category of purchasing maturity models, which includes models proposed by Schiele (2007) and Úbeda and Alsua (2014). The models in this category are based on both theory and an ex-ante identification of the stages of purchasing maturity. However, the authors also establish the purchasing maturity–firm performance link through an empirical examination of 14 organizations (Schiele, 2007) or more than 250 (Úbeda & Alsua, 2014).

The present paper uses a purchasing maturity model based on the findings of Schiele (2007) and Úbeda and Alsua (2014) and develops a matrix for purchasing maturity profiles: One axis contains five management dimensions to measure the level of purchasing maturity (strategy, organization, human resources, suppliers, and communication). These management dimensions cover all the dimensions described in previous models, including those of Schiele (2007) and Úbeda and Alsua (2014). The other axis uses Cavinato's (1999a) stages describing the extent to which purchasing takes a strategic role in an organization, ranging from 1 (low) to 5 (high) (Table A.1).