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Top and bottom line relevance of purchasing and supply management

Evi Hartmann [a,*], Dieter Kerkfeld [b,1], Michael Henke [b,2]

[a] Friedrich-Alexander-University Erlangen-Nuremberg, Lange Gasse 20, 90403 Nuremberg, Germany
[b] EBS University, Supply Chain Management Institute, Soehnleinstrasse 8F, 65201 Wiesbaden, Germany

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ABSTRACT

Getting a substantial value addition out of investments in purchasing and supply management (PSM) is of central importance to senior management. However, the empirical evidence of a financial value contribution is fragmented. The current study addresses this fragmentation by using a comprehensive performance measurement model to validate empirically (a) whether PSM contributes to the company's financial success and (b) whether the financial value contribution is mediated by benefits of three operational performances (cost, quality, and innovation performance). Our findings from an international survey of 306 major companies from eight industry sectors suggest that an advanced, comprehensive implementation of PSM activities contributes to an improvement in PSM outcomes, which in turn mediates company success.

1. Introduction

The disintegration of formerly vertically integrated value chains into globally dispersed supply chains opened prospects for competitive advantages (Carter and Narasimhan, 1996; Krause et al., 2001). An effective and efficient management of purchasing and supply activities allowed many global companies to become a leader in their industries (Saranga and Moser, 2010). The growing importance of the function of purchasing and supply management (PSM) was further amplified by the recent economic crisis with intensifying price pressures and demands for cost savings, which have led to a significant change of the role of PSM over the past years. PSM is no longer considered a clerical function that is only affecting the bottom line. It has become a value-contributing function capable of affecting both top and bottom line (Reck and Long, 1988; Chen et al., 2004). An emerging view considers PSM equally important to other strategic functions, e.g., product development or marketing (McIvor et al., 1997). The necessary transformation of PSM, to fulfil its new role, has been conceptualised in a variety of development models outlining the evolution of PSM from a mere clerical function toward becoming a strategic contributor (e.g., Watts et al., 1992; van Weele, 2009). Similarly, aligning PSM strategy with firm strategy, managing the supply base, and collaborating with other functions are examples for PSM activities with a growing degree of professionalism (Ellram et al., 2002).

The potential of PSM to influence not only operational but also financial performance attracted the attention of academia and senior management (Carr and Pearson, 2002; Das and Narasimhan, 2000; Ellram et al., 2002). Operational benefits directly stemming from PSM activities are cost savings, improvements in quality of goods and services, or innovations in cooperation with suppliers (Das and Narasimhan, 2000). However, what eventually matters most for senior management is the improvement PSM can contribute toward the financial success of the company (Saranga and Moser, 2010). Chief Executive Officers (CEO) and Chief Financial Officers (CFO) understandably want justification of investments into PSM while CPOs are given shared accountability for the company's financial success (Ellram and Liu, 2002). Thus, showing a substantial value contribution is of central importance for PSM which poses a major challenge due to the generally supportive role of PSM instead of being a directly value-adding function (Nollet et al., 2008).

A multitude of studies have demonstrated a generally positive impact of PSM activities on a variety of operational and financial performance measures (Carr and Pearson, 1999; Narasimhan and Das, 2001; Rozemeijer et al., 2003; Sanchez-Rodriguez et al., 2003). However, the evidence is somewhat fragmented for three reasons: (1) the scope of investigated PSM activities, (2) the breadth of performance measurements, and (3) sample and method specificity. First, the majority of studies focuses on specific PSM activities such as training and skill development (Carr and Smeltzer, 1999, 2000), global sourcing (Trent and Monczka, 2003), supplier selection (Kannan and Tan, 2002) or seek to identify the performance contribution in strategic

* Corresponding author. Tel.: +49 911 5302 444; fax: +49 911 5302 460.
E-mail addresses: evi.hartmann@wiso.uni-erlangen.de (E. Hartmann), dieter.kerkfeld@ebs.edu (D. Kerkfeld), michael.henke@ebs.edu (M. Henke).
[1] Tel.: +49 211 136 4128; fax: +49 211 5605 4129.
[2] Tel.: +49 611 7102 2133; fax: +49 611 7102 10 2133.

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alignment or internal integration (Narasimhan and Das, 2001; Gonzalez-Benito, 2007). Integration along the supply chain receives particular attention (van der Vaart and van Donk, 2008) with regard to its financial impact. However, investigating single PSM activities limits the explanatory power (Saranga and Moser, 2010). Second, studies that investigate the relationship between PSM activities and company success often link PSM activities directly to general financial performance outcomes, e.g., market share or return on investment (Ellram et al., 2002). This is a research approach that limits the explanatory value of a study because general measures cannot account for the many other factors in the organisation that exert an influence on the financial outcome (van der Vaart and van Donk, 2008). Third, most studies are built on purely perception-based survey data and/or focus on individual countries or industries limiting the generalisability and allowing only for narrow predictions. In summary, empirical research to-date tends to confirm an expected positive relationship between PSM activities and performance improvements while the narrow scopes of the surveys limit the generalisability of the results (Ellram et al., 2002).

The current study addresses this gap by applying a comprehensive performance measurement framework for PSM practices in a broad empirical survey combining objective and perception-based data. Specifically, our research objective is to show a value contribution of PSM to operational performance and subsequently the financial success of the company.

The remainder of the article is organised as follows: Next, we review relevant literature to define measures for PSM activities and operational as well as financial performance outcomes. In Section 3, we develop the research model and its underlying hypotheses. Section 4 describes the research methodology and analyses the data using structural equation modelling. Section 5 presents the results and explores their implications. In the last section, we close the paper with conclusions, limitations of the study, and direction for future research.

2. Conceptual foundations

Performance measures can be categorised into performance drivers on the input level and performance outcomes on the output level (Saranga and Moser, 2010). In this study, PSM performance drivers (short: PSM drivers) describe aggregated measures of input levels that affect the output level. The performance outcomes measurement follows two different perspectives. The first perspective, PSM performance outcomes (short: PSM outcomes), refers to measures for operational PSM results, e.g., cost reductions of landed costs, improvements of supplier's capabilities, or contribution to product development. The second perspective relates to financial performance outcomes (short: financial outcomes) measuring financial company success.

2.1. PSM performance drivers

It would be desirable for academia and management to measure the performance contribution of each PSM activity to financial outcomes. However, the diverse and closely related range of PSM activities and their cross-functional character on the input level make this objective unobtainable. Moreover, the many factors that affect financial outcomes on the output level make this effort very complex if the analysis is going to provide sufficient explanatory value, which is an issue not only for researchers but also for controlling departments (Nollet et al., 2008).

The stages of PSM transition from a clerical to a strategic function are often referred to as evolutionary stages or purchasing competence in PSM development models (Das and Narasimhan, 2000; Schiele, 2007). This study characterises the achieved latent level of purchasing competence by the deployment of five aggregated PSM drivers along the company's value chain (Porter, 1985). The PSM drivers aggregate related, directly measurable PSM practices that cover primary and support activities in the value chain, e.g., supply base management, supplier development, and the integration with the product development process. By looking at aggregated PSM drivers, we can reduce some of the input level complexity caused by the diversity and close relation of PSM practices. The PSM drivers in this study have been used repeatedly in earlier PSM studies: (1) supplier management (Carter and Narasimhan, 1996; Ogden et al., 2007), (2) cross-functional integration (Narasimhan and Das, 2001), (3) strategy development (Carr and Smeltzer, 1997; Ellram et al., 2002), (4) human resource management (Carter and Narasimhan, 1996; Ogden et al., 2007), and (5) PSM controlling (Ellram et al., 2002; Schiele, 2007). Additional support for the inclusion of these five PSM drivers is provided below.

The core responsibility of PSM is the management of the sourcing process in which supplier management deals with the interface to the supply base. Research indicates a shift for many categories away from the traditional emphasis on cost and quality toward increasing technological reliance on suppliers' capabilities to design products and processes (Narasimhan and Das, 2001). The growing dependency on the supply base to create competitive advantages has increased the expectation of senior management about supplier performance (Paulraj et al., 2006). Thus, PSM has a strong interest in managing the capabilities and performances of the supply base (Hahn et al., 1990).

The cross-functional interaction and collaboration within a firm highlights the contribution of PSM in terms of improvements in other functions such as product development and marketing (Narasimhan and Das, 2001; Pagell, 2004; Trent and Monczka, 2003). An emerging view advocates that the purchasing function is equally important to other strategic functions including production, finance, and marketing (Carter and Narasimhan, 1996; McIvor et al., 1997). The roles that PSM professionals take in cross-functional collaborations indicate how well the purchasing function is institutionally accepted and legitimised by other functions and senior management (Carr and Smeltzer, 1997). Before other functions consider inputs from PSM as relevant, they must accept it as being strategic and legitimate (Cavinato, 1999; McGrath et al., 1992). The cross-functional integration then creates strategic consensus, which in turn strengthens the ability to participate in further strategic activities and contributes to company success (Hayes and Wheelwright, 1984; Kotabe and Murray, 2004).

The alignment of PSM with the firm's strategic goals creates the basis for PSM's performance contribution (Gonzalez-Benito, 2007). The purpose of strategy development lies in directing PSM toward opportunities consistent with the firm's capabilities to support the firm's strategic goals (Carr and Smeltzer, 1999). Studies have illustrated that PSM needs to be genuinely involved in the strategic planning process of a firm in order to be considered strategic (Cavinato, 1999; Ferguson et al., 1996; Freeman and Cavinato, 1990). To demonstrate that PSM is aware of the firm's strategy and contributes to it rather than being reactive, three requirements must be fulfilled (Carr and Smeltzer, 1997; Freeman and Cavinato, 1990; Gelderman and van Weele, 2005). First, PSM must have a formally written strategy. Second, PSM's strategy needs to be reviewed and adjusted regularly to match changes in the firm's strategy. Third, PSM's strategy needs to include a strategic category sourcing approach.

Human resource management is a combination of selective staffing of employees, comprehensive training, and appropriate