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A firm's responses to deficient suppliers and competitive advantage

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Abstract

Supplier development involves the customer firm's support of a deficient supplier in a channel. This research examines the relationship between supplier development, improvements and the support of the customer firm's competitive strategy with the resource-based view and the relational view as theoretical explanatory perspectives. The results show that appropriate supplier development activities are powerful to substantially back up the customer firm's differentiation as well as cost leadership strategy. Supplier development activities focusing on supplier relationship improvement demonstrate to have a strong impact on both generic competitive strategies. Furthermore, this research questions the benefits from direct supplier development measures. Supplier development in channel research is a widely neglected interfirm relationship management practice, and should therefore receive more attention from practice and research.

Keywords: Supplier development; Competitive advantage; Survey

1. Introduction

Firms in most industries more and more focus on their core competencies and outsource products and activities that were previously considered integral to the firm. Several studies have reported that the materials purchased from suppliers account for up to 60% or even 70% of the budget (Chapman et al., 1997; Heberling et al., 1992). As a result, in order to identify and realize significant cost savings or added customer value, firms have to work through suppliers and can no longer limit such efforts to their firm boundaries. They increasingly rely on their suppliers' contributions to accomplish strategic ends and create competitive advantage.

Business marketing and marketing channel research extensively explores how competent suppliers and the management of relationships with such suppliers can boost the buying firm's performance and can contribute to the accomplishment of strategic goals and the creation of competitive advantage. Most research in this area addresses factors and antecedents of buyer–supplier relationships, such as cooperative norms (Anderson and Narus, 1990; Heide and John, 1992), trust and commitment (Anderson and Weitz, 1992; Doney and Cannon, 1997), information exchange and communication (Mohr and Nevin, 1990; Mohr and Sohi, 1995) or dependence and safeguarding of relationship-specific investments (Buvik and Reve, 2001; Heide and John, 1988). Furthermore, there are quite a few investigations concerning the outcomes of buyer–supplier relationship characteristics and collaborative processes (i.e., collaborative product development) on key performance outcomes of the firm (Jap, 1999; Johnson, 1999; Noordewier et al., 1990) and the supplier (Kalwani and Narayandas, 1995; LaBahn and Krapfel, 1999).

However, very little is known about the impact of firms' supplier development efforts. While the facilitating conditions for performance improvements and contributions to competitive advantage through the collaboration with capable suppliers has been studied, no one has asked the ensuing question: How does the development of deficient suppliers support firms in the creation of competitive advantage? Motivated by this question, the objective of this study is to contribute to the business marketing and supply chain management literature by providing new insights about the effect of supplier development practices on (1) the supplier's product and delivery performance, (2) the buyer–supplier relationship, and (3) the customer firm's competitive advantage. Specifically, this research is intended to find out whether supplier development is a fruitful approach

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to follow, and how supplier development should be carried out to support a company's competitive strategy.

To achieve this objective, this article reviews pertinent literature in Section 2. Section 3 draws on supplier development, supplier relationship management and marketing strategy research as foundations for the proposed conceptual model. Section 3 develops hypotheses regarding the effect of supplier development practices on the suppliers' product and delivery performance and supplier relationships, as well as their effect on the customer firms' competitive advantage. Section 4 describes the empirical study that I conducted to test these effects. Section 5 presents the results of the data analysis. The article concludes with a discussion of the results and managerial implications.

2. Literature review

In situations when firms must upgrade the delivery performance or quality of goods or services (for brevity, hereafter I use the term "product" to refer to both goods as well as services) that a supplier provides in order to regain or sustain competitiveness on the market, they can principally follow one of three avenues. The first option is to switch the supplier, that is, to search for alternative sources of supply and source the product from a more capable supplier (Demski et al., 1987; Sambandam and Lord, 1995). This option, however, might not be viable if alternative suppliers are not available or if switching costs are excessively high. Second, through vertical integration the firm can bring the needed product in-house by acquiring the supplier or setting up capacities to turn out the product internally (Langlois and Robertson, 1989; Monteverde and Teece, 1982). Vertical integration might require substantial investments and be in contradiction to the firms' intention to focus on their core competencies and outsource non-core activities. The third option is to assist the deficient supplier so that the supplier's performance or the supplier's capabilities are upgraded to the desired level.

Watts and Hahn (1993, p. 12) define supplier development as "a long-term cooperative effort between a buying firm and its suppliers to upgrade the suppliers' technical, quality, delivery, and cost capabilities and to foster ongoing improvements." Krause and Ellram (1997a, p. 21) define the same term as "any effort of a buying firm with its supplier to increase the performance and/or capabilities of the supplier and meet the buying firm's supply needs." In essence, by intensifying the relationship with a deficient supplier, the customer firm's supplier development effort can aim at improving the product sourced from this supplier and/or at capabilities of the supplier (e.g., as classified by Day, 1994) in the hope of upgrading processes critical for the customer firm.

Recognizing the long-term and strategic benefits of supplier development, many companies have established supplier development programs and teams in recent years. John Deere, for example, relies on a systematic supplier development approach to upgrade suppliers' just-in-time capabilities. Working with John Deere's supplier development teams, suppliers were able to achieve dramatic cycle time reductions (Golden, 1999). The BP (Best Practice, Best Process, and Best Performance) supplier development program of Honda of America performed by a dedicated supplier development group supports suppliers in adopting the Kaizen philosophy for continuous improvement and organizational change (MacDuffie and Helper, 1997). Through consulting and problem solving teams of Toyota's Operations Management Consulting Division (OMCD) in Japan and the Toyota Supplier Support Center (TSSC) in the United States, a large number of suppliers has received assistance from Toyota in building up lean manufacturing capabilities. These organizational capabilities benefited the suppliers and Toyota on the long run (Dyer and Nobeoka, 2000; Sako, 1999). Other examples are the Kaizen seminars of Porsche (with support of consultants from Porsche Consulting), the PICOS (Purchased Input Concept Optimization with Suppliers) program of General Motors, or the Allen Bradley HPM (High Performance Manufacturing) supplier consortium. Although the authors of these prominent examples report substantial performance improvements and claim positive relationships between supplier development programs and the firms' competitiveness, all studies were of qualitative nature, limiting the generalizability of the findings. In addition, the dominance of these firms in their supply chains, their size and channel power may not be representative. This present research overcomes these drawbacks by operationalizing a supplier development model and statistically testing effects on supplier improvement and the customer firms' competitive advantage with a sample of firms from various industries and of different sizes.

3. Model development

3.1. Conceptual background

A firm's effort to develop suppliers with the aim to achieve positive outcomes for its own competitiveness is a two-stage process. First, the firm performs supplier development activities, resulting in improvements. The supplier will be able to deliver products of higher quality and with a better delivery performance. Alternatively, the customer firm can benefit from an improvement of the buyer–supplier relationship. A higher level of delivery performance and relationship quality, in turn, will positively influence the customer firm's attainment of competitive advantage. Fig. 1 depicts the supplier development framework underlying this paper. The hypotheses pertaining to this framework are developed next.

3.2. Effects of supplier development activities on improvements

An important distinction of supplier development activities concerns the role of the buying firm in terms of the resources committed to a supplier. In case of "*indirect*" (also called "externalized") supplier development, the buying firm commits no or only limited resources to a specific supplier (Krause et al., 2000; Monczka et al., 1993). There is no active involvement of the buying firm in the supplier's operation, and know-how transfer from the buying firm to the supplier does not occur. Instead, the customer firm may assess suppliers, communicate supplier evaluation results and performance goals, promise