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Triggers and patterns of integration initiatives in successful buyer–supplier relationships

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ABSTRACT

While previous studies have focused on the benefits, risks and outcomes of buy–sell relationships, little is known about the dynamics of these relationships. Our study takes an initial step in this direction by examining how firms develop successful relationships. We review the literature and analyze multiple buyer–supplier relationships to explore developments over time, identify triggers for change, and identify effective management practices for long-term inter-organizational relationships. We employ retrospective data to compare six long-standing buyer–supplier relationships. Our data suggest a recurring pattern of *integration initiatives* in the evolution towards a successful buy–sell relationship. Specifically, our field data indicate that this pattern starts with *initiatives for logistics responsiveness*, followed by *knowledge exchange initiatives* and finally *initiatives to increase the use of common resources*. Each of these initiatives are triggered by specific opportunities and are emergent in nature. By examining the triggers in the development and maintenance of buy–sell relationships, our study adds to the integration of existing life-cycle frameworks, which increases our understanding of a life-cycle theory for inter-organizational relationships.

1. Introduction

A significant body of literature examines the antecedents and the outcomes of inter-organizational relationships (e.g., Schoenherr and Swink, 2012; Villena et al., 2011; Swink et al., 2007; Frohlich and Westbrook, 2001; Monczka et al., 1998), yet there has been little research regarding the time-phased development of these relationships (Arino and de la Torré, 1998). Since changes in any of the variables of the relationship to the respective partners, whether external or endogenous, do necessarily lead to changes in the efficiency and the quality of the relationship, Arino and de la Torré (1998) call for a better understanding of these time-phased developments. Similarly, Grayson and Ambler (1999, p. 139) note that "the length of the relationship changes the nature of the association between relational constructs" and "the exact nature of these relational dynamics remain elusive". In fact, the knitting thread of the process of relationships is the series of interactions between partners over time (Ring and Van de Ven, 1994; Madhok, 1995; Arino and de la Torré, 1998). Moreover, investigating how new buy–sell relationships are born and develop into long-term relationships has been highlighted as a promising research direction (Villena et al., 2011; Lumineau and Henderson, 2012; Palmatier et al., 2013). This gap was also noted by Lewicki et al. (2006, p. 991), namely, that little attention focuses on "conceptualizing and measuring relationship development over time". Instead, most research has taken a 'static, snapshot' view of relationships and fails to account for the information contained in a relationship's trajectory.

While previous research of Dwyer et al. (1987), Ring and Van de Ven (1994) and Jap and Anderson (2007) describes conceptual frameworks for inter-organizational relationship development over time, we investigate how these frameworks fit together. In particular, we want to understand the process of developing a successful buy–sell relationship and the triggers and patterns of integration initiatives on the road towards committed buyer–supplier relationships. We believe that insights in the development of inter-organizational relationships provide managers with valuable information on when to start up new integration initiatives. Managers need to know the conditions, necessary investments and organizational structures that facilitate mature inter-organizational relationships. Moreover, we believe that timing and conditions of these initiatives influence not only performance, but also future developments of the relationships.

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Providing managers with guidelines on if and when to start up new integration activities will stimulate thoughtful decision making.

The overall objective of this paper is to explore the development patterns of inter-organizational relationships, and more specifically of buy–sell relationships by increasing our understanding of how different life-cycle frameworks as described in the literature fit together. Specific objectives include answering three questions. First, how do buy–sell relationships develop over time? Second, which integration initiatives do successful relationships engage in over time? Finally, what triggers new integration initiatives and how does this strengthen the relationship in terms of governance and relationship characteristics?

This study makes three contributions to literature. First, it helps to create an integrated framework of inter-organizational relationship development. Second, it links integration initiatives to the life-cycle of inter-organizational relationships, resulting in the description of a clear recurrent pattern of integration initiatives. Third, the study provides insights into the triggers for integration initiatives and the development of relationship characteristics throughout the relationship life-cycle.

Since constructing a theory of inter-organizational relationship development requires analysis over time and since we want to answer questions that explain both the 'how' and 'why', we believe that rich data is the most appropriate way to address this gap. Towards this end, we conducted six case studies of different buy–sell relationship trajectories. In each case study, our unit of analysis was the relationship and not the individual companies, thus we collected paired retrospective data from both the supply and the buy sides of the relationship.

The paper begins with a literature review of supply chain integration initiatives. Next, we examine the literature on inter-organizational relationship development. More specifically, we compare the different frameworks in the literature. Third, we describe our case study methodology, including company selection, data gathering protocols and analytical techniques. Next, we analyze the cases from a within and between case perspective. This leads to theoretical propositions and explanations in the discussion part. The paper concludes with a discussion of the limitations and future research opportunities.

2. Literature review

2.1. Inter-organizational integration initiatives

Inter-organizational relationships are defined as long-term cooperative relationships designed to increase the operational performance of the buyer and supplier. Some of the main benefits of these relationships are the increase in synchronization of the supply chain, the reduction of total costs, the improvement of quality and cycle time, and a stronger competitive position than any possible (Monczka et al., 1998). The literature describes inter-organizational relationships as being different from traditional buy–sell contractual arrangements in terms of the following three necessary and sufficient conditions (Yoshino and Rangan, 1995): interdependence of the parties, shared benefits among the parties and on-going, joint participation in one or more key strategic areas such as technology, products or markets.

Dyer and Singh (1998, p. 662) suggest that relational rents are possible when partners "combine, exchange or invest in idiosyncratic assets, knowledge and resources/capabilities, and/or employ effective governance mechanisms that lower transaction costs or permit the realization of rents through the synergistic combination of assets, knowledge or capabilities". Accordingly, Frohlich and Westbrook (2001) suggest three integration initiatives to create these relational rents: knowledge exchange, logistics responsiveness and, use of common resources. They describe these three at the operational and tactical level. Subsequent authors (e.g., Koufteros, 2005; Swink et al., 2007; Krause et al., 2007; Schoenherr and Swink, 2012) have supplemented their work with descriptions of integration initiatives at the strategic level.

Knowledge exchange is about sharing and accessing information on planning, setting up information and knowledge exchange systems, and creating visibility in the supply chain. This knowledge exchange positively affects relationships by revealing points of similarity, resolving problems, providing a means to discover and align goals, and finding opportunities to create value for both partners (Palmatier et al., 2013). In dynamic environments, accumulated knowledge and established information exchange processes that result from effective interactions allow partners to be responsive to changing conditions, such that partners can continue to create new value for customers and contribute to relationship growth. Alternatively, an inability to exchange knowledge and information causes the relationship to stagnate, problems to fester, and partners to miss opportunities (Ulaga and Eggert, 2006).

Product development is an area in which knowledge sharing in the supply chain is of high importance. Koufteros (2005) investigates how product development initiatives, in which a buyer and seller collaborate in the design process and exchange technical expertise to develop a product, might enhance their product innovation capabilities and subsequently quality (Mohr and Spekman, 1994; Nelson, 1995; Petersen et al., 2005; Tan, 2001). Such initiatives include the temporary allocation of personnel to improve the skill base of the supplier, technical assistance, training and information sharing that build on the knowledge base of the buying firm. The buying firm may be prepared to help the supplier in return for the benefits of improved performance and joint value creation (Zajac and Olsen, 2003). Dyer and Hatch (2006) showed that knowledge sharing by Toyota resulted in learning from the supplier and as a result a reduction of the defects by 50%. This reduction of the defects was twice as high as for other buyers, who were not involved in knowledge exchange initiatives with this supplier.

Logistics responsiveness initiatives, a second type of supply chain integration initiatives, include initiatives such as the customization of packaging or the adaptation of delivery frequencies towards the partners' requirements. The aim of these initiatives is to synchronize supply chain activities (Frohlich and Westbrook, 2001), which requires close coordination of solutions and timing among the different members of the supply chain. This is not easy in a supply chain context since firms tend to manage their operations independently and customers require different services (Fraser, 1997). An example of a successful initiative is the development by Hyundai Motor Company of a synchronized production planning system which allowed its supplying partners to formally request changes in the master production plan (Hahn et al., 2000). To provide full-information transparency, Hyundai agreed to communicate every change in its own master production plan to all its supply chain partners. This approach required Hyundai to install a centralized coordination group to synchronize the planning efforts in the supply chain. Li and Fung, Hong Kong's largest export trading company, offers another example of supply chain coordination. This company's core activity is the synchronization of virtual supply chains of firms located in diverse geographical areas (Neela and Gupta, 2005).

Finally, buyers and suppliers might use *common resources* such as containers and third-party logistics providers to perform activities in the supply chain. We know from Transaction Cost Economics (TCE; Williamson, 1979) that the performance of a firm is linked to the extent to which the firm and its suppliers make site, physical (e.g., customized tools, dies, machinery), and human asset-specific (e.g., dedicated engineers or knowledge building) investments. In particular, Dyer (1996) found that firms realize a competitive