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The effects of trust and coercive power on supplier integration ☆

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ABSTRACT

Supply chain integration nowadays is considered an important approach to building and sustaining competitive advantages. Many previous empirical researches have investigated trust and power between suppliers and customers, yet, the effects of trust and coercive power on supply chain integration are still largely unknown. This study investigates trust, coercive power and their interaction and their impact on internal and supplier integration, based on data collected in Chinese supply chains. The results reveal that both trust and coercive power improve internal and supplier integration, but when trust is low, coercive power reduces internal integration. Contradictory to conventional wisdom that coercive power hinders cooperation, this study found that coercive power improves supplier integration in Chinese supply chains, with or without the presence of trust. This study provides significant insights for Chinese inter-organizational trust–power relationship management and supply chain integration practices.

1. Introduction

Nowadays in an ever changing and fiercely competitive marketplace, solely being cost efficient in supply chain management (SCM) does not suffice. Instead, supply chains should be agile, adaptable and aligned to meet the challenges of competitive environments (Lee, 2004). In this context, the need for supply chain integration has echoed in various industries, and companies are learning that they must collaborate to compete (Bleeke and David, 1993; Hulsmann et al., 2008). Van Der Vaart and Van Donk (2008) reviewed 33 survey-based research and find that supply chain integration greatly improves company performance. Furthermore, today's manufacturers are becoming increasingly reliant on their suppliers to gain competitive advantages. Partnerships with suppliers have become the lifeblood of the supply chain, and the issue is not whether to build partnership with suppliers, but how (Liker and Choi, 2004). Previous studies have linked the importance of supply chain integration to competitive advantage (e.g. Lee and Billington, 1992), supply chain performance (e.g. Narasimhan and Kim, 2002), operational performance (e.g. Frohlich and Westbrook, 2001), as well as low transaction costs (e.g. Zhao et al., 2008). However, only a few studies elaborated on the initiators of supply chain integration and how they function. Yet, most of these studies fail to explain the interrelationship among the initiators and supply chain integration.

The rationale behind supply chain integration is to combine partners' resources and perspectives into a firm's value propositions, thus allowing all companies in a supply chain to excel in performance. Historically, it was

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found that hidden information and actions among supply chain partners, as well as lack of trust (Narayanan and Raman, 2004), refrain companies from cooperating with their supply chain partners (Fawcett and Magnan, 2002). The reason for the lack of trust is embedded in the fact that supply chain partners have differing interests (Beth et al., 2003). Yet, trust was found to be a pivotal factor that affects supply chain cooperation (Kelle and Akbulut, 2005).

Alongside with trust, use of power is another important supply chain attribute which influences supply chain practice. Supply chain partners are conditioned by the power to make substantial investments to sustain business relationships (Cox, 2001). Furthermore, the power structure of the supply chain also greatly influences supply chain integration (Van Donk and Van Der Vaart, 2005; Zhao et al., 2008).

Although supply chain scholars have expressed great interest in trust and power, an in-depth examination of prior studies indicates that most research focuses on the effects of the sole relationship of power and SCM (e.g. Crook and Combs, 2007; Griffith et al., 2006), or trust and SCM (e.g. Johnston et al., 2004; McCarter and Northcraft, 2007), with little attention paid to the interaction effect of power and trust in SCM. Hart and Saunders (1997) proposed that both power and trust play important roles in the adoption and use of electronic data interchange between trading partners, and that the demonstration of trust is related to the use of power. Ireland and Webb (2007) proposed that firms will be more fully committed to supply chain relationships when trust and power are simultaneously managed between participants. Yet, both previous studies fail to test the postulated hypotheses with large scale empirical evidence. Our research covers this gap by integrating resource dependence theory (RDT) (Pfeffer and Salancik, 1978) and transaction cost theory (TCT) (Williamson, 1975) to explore the roles of trust and power simultaneously on supplier integration, using a large scale empirical study.

Most previous empirical research on supply chain integration, trust, and power are based on Western economies, while our study focuses on China, which supply chains play an increasingly important role on a global scale (Su et al., 2008). In addition, because Chinese culture varies substantially from a western culture on issues such as collectivism, high power distance, and guanxi, this study provides significant managerial insights on how to use trust and power to influence supply chain integration in China (Zhao et al., 2006a, 2007, 2008).

2. Literature review and research hypotheses

2.1. Supply chain integration

There is a growing recognition that firms need strategic resources that lie beyond their boundaries to gain competitive advantages (Das and Teng, 2000). To obtain these resources and reduce transaction costs, suppliers and buyers need to cooperate in processes ranging from product design, market launch, promotion, and fulfillment, to recycling (Kopczak and Johnson, 2003). Collaborative relationship between suppliers and buyers is identified as a vital strategy for securing competitive advantage in a dynamic environment (Bleeke and David, 1993), or when entering new markets (Mabert and Venkataramanan, 1998). The establishment and maintenance of such a relationship is a socialization process which facilitates two-way information exchange, problem solving, and knowledge transfer between buyer and supplier (Cousins and Menguc, 2006), the management process of which is identified as supply chain integration.

The challenge of supply chain integration is the managerial capacity for combining resources and competencies from various supply chain partners and business units, and directing all relevant parties towards an expanded resource base and competitive advantage. As such, it should be strategically managed as an integrated system, as opposed to individually optimized fragmented subsystems (Vickery et al., 2003). Supply chain integration is "the degree to which a firm can strategically collaborate with its supply chain partners and collaboratively manage the intra- and inter-organization processes to achieve effective and efficient flows of product and services, information, money and decisions with the objective of providing maximum value to customers at low cost and high speed." (Zhao et al., 2008, p. 374). Two key supply chain integration themes include information sharing and process coordination.

Information sharing is the degree to which a firm can coordinate the activities of information sharing, and combine core elements from heterogeneous data management systems, content management systems, data warehouses, and other enterprise applications into a common platform, in order to substantiate integrative supply chain strategies (Jhingran et al., 2002; Roth et al., 2002). This makes information sharing both a managerial and technology issue in a supply chain. Only when information sharing is coordinated, will a firm develop a capability to effectively link those diverse systems. For example, buyers sharing information about production plans and demand forecasts with their suppliers can reduce the well-known "bullwhip effect" (Lee et al., 1997).

The second theme of supply chain integration is process coordination, which is the degree to which a firm can structure its operational processes, as well as the sharing of resources, rewards and risks across organizations into consensus agreements, in order to achieve competitiveness. Process coordination views inter-firm relationships as strategic assets (Anderson et al., 1994), and firms must maintain ongoing buyer–supplier relationships in order to facilitate progressive involvement between partnering firms (Webster, 1992). Process coordination integrates the processes of different functions within a company or different firms within a supply chain (Arshinder et al., 2008). Process coordination practices, such as supplier involvement in buyers' design and production, can help suppliers to better understand the market environment and respond to changes quickly.

Substantive literature has identified supplier integration, internal integration and customer integration as three