Available online at www.sciencedirect.com
ScienceDirect
Journal of Operations Management 25 (2007) 482–497
JOURNAL OF OPERATIONS MANAGEMENT
www.elsevier.com/locate/jom

A multi-theoretic perspective on trust and power in strategic supply chains

R. Duane Ireland *, Justin W. Webb [1]

Texas A&M University, Mays Business School, Department of Management, College Station, TX 77843-4221, United States

Available online 27 June 2006

Abstract

Strategic supply chains serve as a potential source of competitive advantage for firms. The ability of a strategy supply chain to engender cultural competitiveness, or joint entrepreneurship and learning aimed at filling market gaps, is a key path through which a strategic supply chain may become a competitive advantage. A balance of trust and power within the supply chain offsets uncertainty and risks associated with the behaviors underlying cultural competitiveness. Using a multi-theoretic perspective, we discuss four strategies that firms use to balance a climate of trust and power in a strategic supply chain. Identifying an authority, generating a common supply chain identity, utilizing boundary spanning ties, and providing procedural and interactive justice are the strategies we discuss.

Keywords: Supply management; Organizational issues; Innovation

1. Introduction

Supply chains may serve as a source of competitive advantage. A supply chain's ability to synchronize demand, supply, and innovation processes (Cecere et al., 2004), optimize delivery speed and frequency (Ha et al., 2003) and increase efficiency and service/product quality (D'Avanzo et al., 2003; Morash et al., 1996) are each possible reasons for this. Firms attempting to develop supply chains as a source of competitive advantage do so partly in recognition of the fact that supply chain costs account for a large portion of operating budgets (McKone-Sweet et al., 2005). Hence, even minor declines in supply chain performance have the potential to significantly decrease firm performance (Hendricks and Singhal, 2003). While some firms understand the practices leading to successful supply chains, the complexity of supply chain management leaves performance improvements elusive for many others (Ellram et al., 2002). Failing to fully commit to effectively using and managing their supply chain is a major source of inefficiencies for firms. Low commitment may be caused by a lack of available slack resources and/or the fear of opportunism (Arend and Wisner, 2005).

Strategic supply chains, the focus of this work, are "chains whose members are strategically, operationally, and technologically integrated," underscored by long-term relations based on stability yet flexibility (Hult et al., 2004, p. 241). When trust and power are simultaneously managed between and/or among members in strategic supply chains, firms become more fully committed to supply chain efficiency and effectiveness. As a unique type of interorganizational relationship,

* Corresponding author. Tel.: +1 979 862 3963.
E-mail addresses: direland@mays.tamu.edu (R.D. Ireland), jwebb@mays.tamu.edu (J.W. Webb).
[1] Tel.: +1 979 219 3399.

0272-6963/$ – see front matter
doi:10.1016/j.jom.2006.05.004

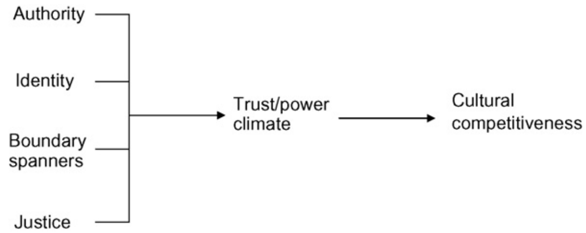

Fig. 1. Strategies for creating a trust/power climate in strategic supply chains, leading to cultural competitiveness.

strategic supply chains realize increased efficiency and effectiveness with moderately high levels of trust and power among partners.

Herein, we integrate social capital theory, resource dependency theory, and transaction costs theory to present a framework for managing trust and power in strategic supply chains. Utilizing the framework, we examine strategies through which trust and power may be appropriately balanced among those participating as members of a strategic supply chain. As shown in Fig. 1, identifying an authority, generating a common supply chain identity, utilizing boundary spanning ties, and providing procedural and interactive justice are strategies that facilitate the evolution of a climate of trust and power within strategic supply chains. This climate creates a context within which the behaviors that are necessary to develop *cultural competitiveness*, or ''the degree to which chains are predisposed to [efficiently] detect and fill gaps between what the market desires and what is currently offered'' (Hult et al., 2002, p. 577), is promoted.

We make three contributions to the supply chain literature. First, in contrast to earlier supply chain work, we examine trust and power as interdependent rather than independent constructs. To do this, we initially discuss the dynamics of trust and power at the dyadic-level as the foundation for exploring how these variables interact to form a network-level trust and power climate. The second contribution is framed around the fact that the existing supply chain research has primarily used an economic lens to examine trust and power. Conversely, we discuss how the integration of social considerations with economic reasoning is pivotal to understanding trust and power in supply chains. Examining trust and power together through a socioeconomic lens allows us to describe how strategic supply chains achieve cultural competitiveness. This analysis leads to our third contribution. Individual firms enter supply chain relationships with varying interests and contexts. As we argue, developing norms of reciprocity is the path through which strategic supply chain partners mutually interact to resolve their differences as well as their concerns about potential opportunistic behavior. We present and explain four strategic supply chain strategies that may be used to form these highly desirable norms of reciprocity. Over time, these strategies can simultaneously facilitate a climate of power that is needed to encourage change and action as well as the trust that is required to elicit and support cooperation and collaboration.

2. Theory development

Trust is a significant predictor of positive performance within interorganizational relationships (Parkhe, 1993; Volery and Mensik, 1998; Currall and Inkpen, 2002; Garcia-Canal et al., 2002; Koka and Prescott, 2002). Evidence of this extends across multiple theories of organization research. Within transaction cost economics, for example, trust is viewed as a substitute for costly control and coordination mechanisms (Bromiley and Cummings, 1995). Social capital theory argues that trust is a relational lubricant, allowing greater benefits of knowledge transfer, joint learning, and the sharing of risks and costs associated with exploring and exploiting opportunities (Inkpen, 2001; Nahapiet and Ghoshal, 1998). Each of these theories describes somewhat different benefits garnered by trust in interorganizational relationships; in each case though, the form of trust primarily responsible for such benefits is goodwill trust (defined later). Most organizational theories fail to adequately describe how goodwill trust emerges and is managed in organizations.

Compared to trust, power remains a more elusive concept. Nonetheless, power plays a role in many organizational theories such as resource dependency theory and transaction cost economics. Power's most prominent theoretical position is as a key dependent variable in resource dependency theory. In other theoretical contexts, power is largely discussed in terms of control, coercion, or legitimacy. Furthermore, within all organizational theories, including resource dependency, power is a unidimensional concept and is wholly separate from trust. This is problematic, in our view, in that several organizational theories such as social capital theory and institutional theory argue that social forces (e.g., trust and power) interact with economic forces to predict the nature of interorganizational relationships.

In the following sections, we use several theoretical lenses to discuss trust and power, highlighting the multi-dimensional nature of and interactions between trust and power. Initially, we discuss trust and power at the dyadic-level. Using this discussion as a foundation, we then examine a network-level trust and power climate as a key component of a strategic supply chain's ability to surface cultural competitiveness.

2.1. Trust

Trust is the decision to rely on a partner with the expectation that the partner will act according to a common agreement (Currall and Inkpen, 2002). At any level of trust, a certain amount of relational risk is present as a partner may not act according to the agreement (Currall and Inkpen, 2002). Firms accept elevated levels of risk to gain access to the social and economic benefits that are associated with trust-based relationships.

There are several categorizations of trust (Barney and Hansen, 1994; Rousseau et al., 1998; Sako, 1992). The difference between trust in a partner and trust in a situation is common to the different categories. Trust between organizations as partners creates an atmosphere in which firms willingly exceed the minimal requirements of a relationship to increase the likelihood of success for all partners. Trust in a situation results in an arrangement in which firms contribute the minimum amount of resources and time to an interorganizational relationship to achieve efficiency. With trust in a situation, a firm is willing to rely on a partner because the transaction facilitates efforts to achieve efficiency goals and the expected benefits of the transaction exceed the expected costs. While the dichotomy of trust in an organization and trust in a situation is an attribute of several of the categorizations of trust that we discuss, to date, other scholars have not sufficiently examined this dichotomy. The difference between trust in an organization and trust in a situation is the primary reason organizational theories fail to capture the essence of trust in socioeconomic relations.

In light of its applicability to supply chain issues (Cousins and Menguc, 2006; Johnston et al., 2004) and commonalities with other categorizations, we use Sako's (1992) categorization as the foundation for exploring various arguments. However, while doing so, we also emphasize the distinction between trust in a partner/organization and trust in a situation. Sako (1992) categorizes trust into contractual, competence, and goodwill forms. Contractual trust entails a mutual understanding by partners to adhere to a specified agreement; competence trust stems from the belief that a given partner has the managerial and technical capabilities to properly perform a given set of tasks; and, goodwill trust exists when partners are willing to act in ways exceeding stipulated contractual agreements. Interorganizational relationships may be characterized by one or more levels of trust, yet goodwill trust only develops within long-term relationships through repeated exchanges (Sako, 1992).

The benefits associated with trust in socioeconomic relations are specified in the domains of several theories, with social capital theory being the one in which these benefits are emphasized. According to social capital theory, exchange is based on norms of reciprocity or the belief that a firm acting to benefit a partner/organization will be reciprocated favorably for such behavior at a future point in time (Blau, 1964; Uzzi, 1997; Adler and Kwon, 2002). To enter any relationship, a certain level of trust must be present between firms, either as contractual or competence trust. As the relationship progresses through repeated exchanges, trust has the opportunity to develop into goodwill trust. This occurs in a stepwise process.

Because of bounded rationality, firms cannot predict every potential relational risk. Drafting contracts to account for all potential unforeseen developments is impossible (Williamson, 1982). When an unanticipated contingency surfaces, partners have the option of showing goodwill or selecting a more self-interested mode of action to a partner's request for changing the contractual agreement. A firm's reaction likely depends on the magnitude of the contingency and the level of trust existing between partners; however, when a contingency does not result in a resource-intensive request from a partner, displaying some measure of goodwill initiates a reciprocity norm. When the initial favor is eventually reciprocated because of other contingencies, the norms and shared values characterizing relational behavior are established (Jones, 2001). As the exchange continues and increases in scope, the trust within the relationship strengthens to a level of goodwill trust (Jones, 2001).

Goodwill trust plays an integral role in social capital theory (Adler and Kwon, 2002). Partners are more willing to exchange knowledge and other resources in an accurate and timely manner when engaged in a trust-based relationship (Inkpen, 2001). If a partner expects opportunistic behavior, it can withhold information until that information is no longer valuable or exchange inaccurate information to avoid firm-specific detrimental effects (Inkpen, 2001). However, when norms of reciprocity are established, the expectation exists that a favor will be returned, influencing goodwill behavior.

Some have argued that trust plays an integral part in reducing transaction costs in interorganizational relationships (Bromiley and Cummings, 1995; Ireland et al., 2005). However, the theory underlying transaction cost economics seems less descriptive of trust in socioeconomic relations. Transaction cost economics does not directly speak to why trust forms within relationships and how firms should manage trust to sustain interorganizational effectiveness and efficiency. In fact, the need to control for opportunism – a lack of trustworthiness in others – is foundational to TCE.

Economic considerations dominate TCE reasoning. Even when used to explain the presence of social factors, TCE uses an economic lens to form relevant assertions. In this instance, firms are argued to be capable of using ‘‘economic’’ power to create contexts in which they trust the situation. For example, mutual hostages (e.g., equity alliances or mutual investments in assets that are specific to a relationship) owned by each firm are used to bind partners to the relationship by escalating the costs of opportunistic behavior (i.e., untrustworthiness). A mutual hostage condition creates a relationship in which partner firms trust that a transaction will be fulfilled efficiently (i.e., contractual trust). Demonstrating this expectation is the finding that if a firm's investments in assets specific to its supply chain are perceived as not similarly reciprocated by others within that chain, the firm develops a lack of trust for others within the chain (Kwon and Suh, 2004). Clearly, investments in mutual hostages create a transitory trust in the situation. Trust in a situation passes quickly once the balance in these investments is disturbed. Further, a mutual hostage context does not allow the benefits available through goodwill trust in that there are no incentives for firms to contribute in excess of the minimum effort needed to achieve efficiency. Additional contributions beyond this level create vulnerability to opportunism, which is what TCE arguments suggest firms seek to avoid.

Until recently, there has been a paucity of research involving trust in a supply chain context (Johnston et al., 2004; McCutcheon and Stuart, 2000). The few studies that have analyzed trust in supply chains have offered conceptual models (Johnston et al., 2004) or utilized an economics approach, positioning trust as the willingness to submit an organization to economic vulnerability (Handfield and Nichols, 2002; Kwon and Suh, 2004, 2005). In these conceptualizations, the inability to evaluate the quality of resources a partner brings to the supply chain, the inability to audit partner behaviors, and situations in which a firm commits more resources to the supply chain than others are identified as three forms of vulnerability (Handfield and Nichols, 2002). To date, researchers have not investigated why and how organizations partnering in supply chains transform trust in the situation (and the willingness to adopt a level of economic vulnerability) into goodwill trust and cultural competitiveness. Thus, an important research question is concerned with identifying strategies through which *strategic* supply chain partners can transform economic vulnerability (Handfield and Nichols, 2002) into goodwill trust. We first discuss power and trust–power relationships in interorganizational relationships as the foundation to our identification of these types of strategies.

2.2. Power

Similar to trust, power is a multi-dimensional construct (commonly categorized as coercive or non-coercive) encompassing an influence that can be used to evoke desired actions from partners. Coercive power concerns actors' control of negative outcomes relative to each other with the intention of gaining rewards from a partner either through punishment or threatened sanctions (Molm, 1997). Coercion is risky, however, as it engenders the possibilities of retaliation and decreased rewards for all partners (Molm, 1997; Rokkan and Haugland, 2002). Non-coercive power is an ability to provide or withhold rewards in promoting desired behaviors. As we will indicate, this reward form of power may serve as a more effective substitute for trust than does coercive power (Lane and Bachmann, 1997; Molm, 1997).

In some form or fashion, power is conceptualized in virtually all organization theories. The coercive form of power, within the context of control, coercion, or legitimacy, is the normal theoretical focus used. Emphasizing coercive power, the theories often explain the detrimental relational effects of interorganizational power but ignore its positive effects on relationships. Non-coercive power provides numerous relational advantages, including the ability to overcome lack of consensus and reach fast decisions, promote innovation and change to address environmental opportunities and threats (Cox, 2001), influence the adoption of advanced information technologies (Hart and Saunders, 1997), and provide legitimacy and stability to a network (Oliver, 1990).

Resource dependency theory provides the major organizational view regarding power's formation and management in interorganizational relations. Here, firms are viewed as interdependent entities seeking to manage uncertainty that is affecting them

(Pfeffer, 1988).[2] The interdependencies create patterns of dependency, a situation in which firms that own or control valuable, scarce resources hold power over firms seeking those resources to the extent that the dependency is not mutual (Pfeffer and Salancik, 1978). Firms lacking control of scarce resources manage the resulting uncertainty (i.e., acquire the scarce resources) through several means, including mergers or acquisitions, board of director interlocks, diversification, and various forms of interorganizational relationships (Pfeffer and Salancik, 1978).

Resource dependency theory fails to explicitly distinguish the role of trust between firms. The theory proposes that firms use boundary spanners, such as board interlocks, to manage interorganizational uncertainty. While boundary spanners may help alleviate uncertainty, trust is not equivalent to a low uncertainty situation. Lack of uncertainty may imply that firms are merely cognizant of other firms' actions—not trustworthy of their intentions.[3] Trusting a situation is not equivalent to trusting a partner, and the benefits of trusting a situation are comparably much lower. However, when the boundary spanning roles support the assumption of a partner's reputation, these roles may facilitate knowledge-based goodwill trust. This may explain the mixed findings (Pfeffer, 1988) regarding boundary spanning roles and organizational actions.

TCE provides a second perspective on power. Unlike trust, TCE does provide insight with respect to how firms gain power within transactions. In this context, power stems from the ability to influence other firms to act in a desired manner for economic gains.[4] Almost each if not every firm participating in interorganizational relationships wields a certain amount of power. Of course, every interorganizational relationship has a participating firm with a greater amount of power relative to partners. This does not imply that weaker firms cannot influence a more powerful actor. In fact, TCE logic is used to describe multiple ways firms can manipulate power *through economic means* to manage uncertainty and the fear of opportunism.[5] There is always a certain degree of mutual interest between contracting parties (Cox et al., 2002). By creating conditions in which the powerful firm would incur significant costs if it were to act opportunistically, the weaker firm leverages the power it possesses to the fullest extent. The ability to do this does not prevent all opportunistic behavior; but this ability reduces a powerful firm's willingness to act opportunistically.

Unlike trust, power within the supply chain context has been examined with resource dependency theory and TCE being the two dominant theoretical lenses for these efforts (Cox et al., 2002). Most of the completed work studies the link between power and conflict in supply chains (Gaski, 1984) with the potential for power and trust to co-exist in a supply chain largely ignored as a research topic. Power in supply chains stems from several sources, including the number of major customers of a supplier's component, a supplier's market share of a given component, the number of suppliers from which a buyer purchases a particular component, the number of potential suppliers for a given component, and the amount of revenue a supplier generates from a single buyer (Krajewski et al., 2005). In each case, the source of power resides in a firm possessing or controlling a scarce resource. Of course, the scarcity of a resource, and the owner's resulting power, is context specific. Given that many global markets are becoming increasingly dynamic, powerful firms understand the need to cooperate with others to continuously update their resource stocks and maintain scarcity through cultural competitiveness. This has created multiple supply chain contexts in which trust and power co-exist, at times in balance and at other times constrained by gross inequity.

2.3. Trust and power

Trust and power exist as different means through which a firm seeks to promote desired behaviors in a

[2] Whereas TCE seeks to manage uncertainty to achieve higher levels of efficiency, managing uncertainty in resource dependency theory is aimed at attaining higher levels of power. Resource dependency theory is one of the first major organizational theories to identify social considerations as a major factor in how organizations decide to manage uncertainty. Nevertheless, the theory fails to distinguish adequately between coercive and non-coercive power, and trust is visibly absent from the theory's stream of research. Therefore, resource dependency theory lacks the necessary components to fully explain differences among socioeconomic relations.

[3] These arguments do not suggest that boundary spanners do not have the ability to form some level of knowledge-based trust between firms. This, in fact, may be the case in many instances, but these interorganizational roles do not guarantee the formation of trust between firms and should not be confused as a substitute for trust in every context.

[4] The purely economic basis of TCE is the reason why this theoretical perspective has the ability to provide insight into power within relationships but at the same time has difficulty explaining the formation and maintenance of trust.

[5] Opportunism is the opposite of trust (Barney and Hansen, 1994). Evidence does not suggest that we should assume a relationship between opportunism and power beyond the fact that firms can use power to thwart opportunistic behaviors. Rather, any firm, powerful or not, may act opportunistically if the context invites such behavior.

partner. Trust and power are complementary *and* opposing components of social behavior. By understanding the dynamics of trust and power, firms can strategically adjust social relations to achieve desired outcomes.

Trust and power are characterized by certain disadvantages with a number of them stemming from high levels of trust. As one firm places increasing amounts of trust in a partner, the firm actually magnifies the extent to which a partner can act opportunistically. Norms of reciprocity are characterized by open rather than simultaneous commitments, and a firm may never collect fully on previous exchanges.

Overembeddedness yields a foundation for a second example of excess trust (Uzzi, 1997). Overembeddedness results from fears of disrupting high-trust relationships. Fears possibly stem from an emotional attachment created by developed trust (Mayer et al., 1995) or concerns that the partner may harm the firm's reputation as a potential partner for future relationships (Granovetter, 1985). High levels of trust reduce transaction costs associated with negotiations, monitoring, and enforcement. However, firms have the tendency to take advantage of these highly efficient relationships rather than seek new or additional partners that may increase effectiveness (Kern, 2000). Over time the level of diverse knowledge in these relationships stagnates, eventually creating a situation wherein partners are unable to engage in competitive levels of innovation (Uzzi, 1997; Kern, 2000).

Power also has disadvantages. Power differentials between partners create opportunities for more powerful firms to act opportunistically by exercising coercion. Doing this, however, ultimately undermines trust within the relationship. For example, large firms are often able to appropriate valuable technologies from a smaller entrepreneurial firm and then discontinue the relationship before the entrepreneurial firm is able to extract an appropriate portion of resources in reciprocity (Alvarez and Barney, 2001). Moreover, entrepreneurial firms commonly lack the resources required to support a transaction framed around legal actions that are taken to establish and/or enforce their rights.

The complementary nature of trust and power extends from the ability of one to substitute for the other when one fails to achieve desired results. This complementarity exists between trust and power within constraints. While coercive power and goodwill trust do not exist simultaneously in relationships, other forms of trust may concurrently exist with coercive power at any point in time, and non-coercive forms of power may exist at the same time as goodwill trust. For example, a firm may voluntarily submit to certain levels of coercive power because perceived benefits still outweigh perceived costs. Here, trust in the situation exists but not trust in partnering firms.[6] Similarly, in a second example, non-coercive power, contractual trust, and competence trust may act as complementary forms of influence. Again, each concerns efficiency and trust in a situation – *not* trust *with* firms to work together to achieve mutual benefits. Non-coercive power, as in the form of mutual hostages, binds partners to a relationship to a greater degree than a mere contract and increases partners' trust that the relational contract will be upheld by raising the costs associated with opportunism or negligence. This power stems from a firm's ability to contribute resources to a relationship. The ability to contribute resources may also increase an organization's competence trust in a partner by creating the perception that the partner has the resources to fulfill the necessary obligations of a transaction.

Conversely, certain forms of trust and power may always be opposed to one another.[7] An excessive use of *either non-coercive or coercive power* may undermine trust in a relationship. Non-coercive power exists as the ability to withhold resources from a relationship. Withholding resources can dissuade unwanted behaviors and influence desired behaviors. For example, a firm may seek additional interorganizational relationships, possibly with a partner's competition. The partner can terminate investments in the existing relationship to discourage the firm from forming competing relationships and to promote greater focus on the existing relationship. Excessively using non-coercive power in this manner may become perceived as a constraint to the firm's opportunities and prospects for long-term survival. Furthermore, the firm may perceive the social exchange of the relationship weighing in favor of the withholding partner, leading to questions of opportunism and undermining contractual trust. Even if contractual trust is maintained, competence trust may be questioned. Withholding resources beyond a certain degree brings into question whether the partner is intentionally but benevolently withholding resources to promote a greater focus on the relationship or whether the partner lacks the capacity to meet the relationship's demands. When the firm perceives the latter to be the case, competence trust in the partner is reduced.

[6] On the other hand, excessive coercive power can eliminate all forms of trust completely as well.

[7] Trust and opportunism can be considered polar opposites (Barney and Hansen, 1994) as can power and weakness.

For cases in which coercive power or goodwill trust exist in a relationship, either acts as the norm for social relations. When a firm is subjected to a partner's coercive power, the incentives for the firm to fulfill any obligations beyond contractual stipulations are negligible. Also, economic incentives for acting opportunistically or for retaliation increase, undermining goodwill trust and diminishing other forms of trust as a result (Molm, 1997).

Goodwill trust also has the ability to reduce the likelihood that power dynamics will surface within a relationship. Indeed, in relationships characterized by goodwill trust, the long-term incentives for cooperation offset the need for non-coercive forms of power and completely negate a role of coercive power. As noted earlier, goodwill trust develops over time through repeated exchanges and with norms of reciprocity. While non-coercive forms of power may exist within the relationship over time, they exist more because of organizational inertia than for the intention of maintaining power. As an additional characteristic of relations based on goodwill trust, consider that as the relationship develops over time, the goals and expectations of partnering firms become aligned. The structural and cognitive embeddedness of the relationship creates higher social and economic incentives for partners to cooperate in addressing change. Therefore, the role for any form of coercive power does not exist, except in situations of overembeddedness.

This discussion highlights the complex dynamics between trust and power. Because power may be easily misperceived as untrustworthy, partners benefit from specific actions that facilitate transparency in and favorable attitudes toward the relationship.

2.4. *Trust–power climate*

Although a dyadic-level analysis of trust and power facilitates a better understanding of these variables, the reality is that firms are embedded within multiple interorganizational relationships. As relational ties become stronger within a coordinated network of firms, the network becomes characterized by increased operational, strategic, and/or technological linkages. These linkages facilitate communication across the network, not only of knowledge to enhance the network's innovativeness but also knowledge of relational behaviors across the network.

Interfirm communication facilitates network-wide knowledge or awareness, which in turn establishes a network-level climate of trust and power. This trust–power climate is similar to existing considerations of individual and corresponding organization-level variables (e.g., Liao and Rupp, 2005). There is compelling reason to expect a trust–power climate to be a stronger predictor of performance in supply chains than dyadic-level trust and power dynamics. Even for those supply chains that are not strategically aligned, a certain level of knowledge is transferred across firm boundaries. In addition, for firms located in the same or similar industries, general knowledge of behaviors and reputations precede the development of knowledge-based trust (Gulati, 1995; Kern, 2000; McEvily et al., 2003) and an awareness of the use of power (McCutcheon and Stuart, 2000). Here, general knowledge includes information regarding both a partner's past and present relational actions with the firm and other network parties.

Given the transfer of knowledge, firms across a coordinated network become aware of the presence of untrustworthy behavior or the use of coercive power within dyadic relationships of the network. More specifically, the effects of behaviors within dyads extend beyond those firms directly affected by other network parties. Those affected indirectly have the option of ignoring or sanctioning these undesired behaviors, depending upon their own level of power and their ties with the directly involved firms. Thus, behaviors within a dyad cascade into a set of actions and reactions within the network, forming norms and expectations that span the entire network. Over time these norms and expectations solidify into a trust–power climate that either guides or derails entrepreneurial behavior and associated learning initiatives and cohesion within the network. Therefore, because of the ease of communication across firms, a trust–power climate can be expected to affect performance of integrated networks (such as supply chains) more so than dyadic trust and power.

3. Strategic supply chains and cultural competitiveness

As with any type of interorganizational relationship, there are multiple supply chain forms that address different strategic intentions and environmental conditions. Given their varying purposes and contexts, different supply chains operate successfully with different levels of trust and power. The focus herein is on strategic supply chains, or long-term oriented supply chains in which the partnering firms are highly embedded *strategically*, *operationally*, and *technologically* (Hult et al., 2004). Strategic supply chains may be expected to generate *less* value for partnering firms when (1) low value-added components are the main components purchased from suppliers, (2) the environment is characterized by a fairly stable underlying technology, and (3) suppliers have the potential to vertically integrate forward, becoming competitors if they were to choose to do so (McCutcheon and Stuart, 2000).

Referring to a supply chain as being ''strategically'' embedded signifies its long-term nature and its integrated planning and implementation processes. The strategically embedded approach reflects the intention of the firms within the supply chain to integrate their actions and to interactively adjust their behaviors while pursuing opportunities over time. The objectives associated with a strategic supply chain include not only short-term goals, such as supplier scheduling, inventory visibility, and capacity planning (Petersen et al., 2005), but also longer-term efforts to achieve joint flexibility and adaptation. These longer-term objectives, of course, require extensive communication and agreement across supply chain members regarding how best to strategically exploit identified opportunities. Furthermore, strategic embeddedness also implies joint efforts to resolve how each firm will coordinate responsibilities efficiently and effectively across the set of activities needed to explore and exploit future opportunities.

From an ''operationally'' embedded standpoint, our concern is with the product and process integration across firms within strategic supply chains. In essence, operational embeddedness surfaces issues that are similar to those associated with operating cross-functional teams. The difference, however, is that the issues now span firm boundaries rather than the parameters of individual teams. Supplier product integration refers to allowing suppliers to assume responsibility for product engineering activities and development of component parts while supplier process integration entails including suppliers to understand the complexity and scope of coordinated processes (Koufteros et al., 2005). A partnering supplier may become involved with aspects of product design or may provide access to technological capabilities (Narasimhan and Das, 1999). Integrating product and process development enables these firms to overcome compatibility issues stemming from manufacturing and technological limitations (Singhal and Singhal, 2002).

''Technologically'' embedded refers to the sharing of knowledge and capabilities within the strategic supply chain. Some supply chains may operate by dividing tasks across a group of firms yet ignore the potential benefits of knowledge sharing because of concerns about opportunism. A lack of knowledge sharing makes it difficult for partners to remain technologically similar and adjust together when market opportunities emerge. Dyer and Nobeoka (2000) surmise that the extensive knowledge sharing within Toyota's strategic supply chain, facilitated by boundary spanning teams, serves as a source of its competitive advantage.

As noted earlier, a performance objective of strategic supply chains is to achieve cultural competitiveness (see Fig. 1). Cultural competitiveness refers to a system of shared values among organizational partners that are committed to consistently fulfilling customer needs through entrepreneurship and learning (Hult et al., 2002).[8] Entrepreneurship encompasses actions taken by the individuals or firms engaged in a partnership that are intended to enhance overall supply chain innovativeness and renewal. An entrepreneurial orientation (EO) facilitates efforts to achieve cultural competitiveness. EO has been used at both the individual and firm levels of analysis. As a firm level construct concerned with strategic supply chains, and based on Lumpkin and Dess's (1996) conceptualizations, we believe that EO's five dimensions can be interpreted as follows: (1) autonomy provided to individual firms, (2) propensity for each firm to engage in and support innovativeness, (3) affinity for risk-taking behavior, (4) the tendency for proactiveness towards future needs or changes, and (5) commonly held interests to enhance the supply chain's competitive aggressiveness.

We operationalize learning, the second component of cultural competitiveness, as the continual adaptation of the overall supply chain knowledge structure (Fiol and Lyles, 1985). Learning occurs through experimentation or search (Levitt and March, 1988), yet the incremental knowledge gained by any partner becomes increasingly valuable as it is disseminated throughout the supply chain. By increasing awareness of internal strengths and weaknesses, competitor actions, and customer needs, interorganizational learning supports an entrepreneurial orientation. In turn, the awareness an EO creates leads to more accurate adaptation decisions and behaviors. When cultural competitiveness is successfully implemented, strategic supply chains

[8] Hult et al. (2002) actually suggest three dimensions (entrepreneurship, learning, and innovation) as underlying cultural competitiveness as a higher-order latent construct. Some scholars (e.g., Drucker, 1985) assert that innovation is the essence of entrepreneurship. To avoid confusion, we refer to only two dimensions of cultural competitiveness – entrepreneurship and learning – assuming that innovation is encompassed within entrepreneurship.

respond to market opportunities efficiently with flexibility and agility (Hult et al., 2002; Lee, 2004).

Strategic supply chains achieve and sustain cultural competitiveness when there is a balance of moderately high levels of trust and power rather than maximum levels of either trust or power. A balance of trust and power facilitates higher cultural competitiveness for a number of reasons. The first reason is grounded in the fact that because organizations are inherently dissimilar in structure, internal culture, and other resource characteristics, they commonly have different motivations (e.g., survival versus efficiency) for participating in a supply chain. Consequently, without alignment of all organizations' interests, supply chain cultural competitiveness suffers. Developing trust through repeated exchanges within the supply chain aligns partners' interests, increases attachment and the exertion of effort by individual organizations (Sako, 1992). Trust also engenders a number of cooperative relationship behaviors such as joint responsibility in problem solving, shared planning, and flexible arrangement to accommodate unexpected situations. All of these behaviors positively contribute to a strategic supply chain's performance (Johnston et al., 2004). Although trust facilitates greater commitment and efficiency, power maintains a supply chain's entrepreneurial orientation and ability to adapt. Non-coercive or reward power can ease the concern of partners when making choices regarding their entrepreneurial behaviors. For example, smaller partners may not possess ample resources to invest substantially in new technologies, or certain partners may lack the cultural characteristics promoting risk-taking and proactive behaviors. Powerful actors able to reward (or withhold rewards in gaining) desired behaviors increase the supply chain's flexibility and the agility with which decisions are made, enhancing cultural competitiveness as a result. In line with these assertions, Benton and Maloni (2005) found the use of non-coercive power to be positively associated with both supply chain buyer–supplier satisfaction and performance; in contrast, coercive power sources had negative effects on these relationships.

4. Balancing trust and power in strategic supply chains

We highlight four strategies firms can use to symbiotically manage trust and power in efforts to achieve cultural competitiveness while participating in a strategic supply chain. Forming an authority, establishing a common supply chain identity, creating boundary spanning roles, and maintaining organizational justice are the strategies of interest to us. Some evidence, as to be discussed, suggests that moderately high levels of power within a relationship can be offset when implementing one or more of these strategies and maintaining a given level of trust.

We chose to examine these four strategies for a number of reasons. First, the strategies are firmly grounded in micro organizational theories concerning, at least partially, social considerations of trust and power. Social considerations are pivotal in understanding how trust in situations can be transformed into trust among partners in instances when power bases are asymmetrical. This fact leads to a second reason for choosing these theory-based strategies; namely, evidence suggests that the formation of cultural competitiveness cannot be explained without balancing economic with social considerations. A number of scholars (e.g., Handfield and Bechtel, 2002) have discussed how supply chain firms use contracts to overcome economic vulnerability and power asymmetry. In turn, effective contractual relationships can generate some trust between firms. We acknowledge that focusing on economic aspects of supply chain relations can explain operational and technological advantages, such as supply chain responsiveness and reduced cycle time. Furthermore, these economic advantages can serve as sources of competitive advantages in some environments. However, for strategic supply chains operating in dynamic markets, cultural competitiveness develops when entrepreneurship and learning take place throughout the chain. When this happens, partners emphasize social relationships as well as economic needs. Sustaining these behaviors within an environment of power asymmetry depends on partners' abilities to engender and maintain a level of goodwill trust. In doing so, successful strategic supply chains tap social resources to complement economic relational components (e.g., contracts and mutual hostages).

The four strategies facilitate forming *and* maintaining contractual and competence forms of trust. In other words, using these strategies does not automatically equate to the formation of goodwill trust, as goodwill trust develops through repeated transactions based on norms of reciprocity. Nevertheless, forming and maintaining contractual and competence trust are critical aspects for reaching levels of goodwill trust over time. As noted previously, partners enter supply chain relationships based upon unique motivations and facing variant contexts. In a supply chain's formative stages, firms are likely sensitive to a partner's actions. If the partner adequately justifies the legitimacy of its actions, however, the supply chain maintains contractual and competence trust. Appropriate strategies then serve two purposes with the first being to ease the supply chain through the early stages of development in aligning differing goals. Secondly, the strategies also facilitate reciprocity, by augmenting knowledge of powerful partners' actions and intentions of participating in the supply chain. Effectively implementing these strategies increases the long-term potential and the ability to form goodwill trust in the supply chain. In doing so, the strategies also enhance the opportunity for developing cultural competitiveness by tapping social resources of supply chain relationships.

To an extent, the strategies we propose herein are interrelated. For example, generating a common supply chain identity and providing justice are interrelated. One method through which cooperating firms develop a common identity is to create a roadmap for the strategic supply chain (Davis and Spekman, 2004). A stronger consensus forms in support of the roadmap when powerful actors allow all partners voice in formulating the chain's major decisions. As a form of procedural justice, voice enhances trust within a relationship by increasing perceptions of fairness in decision-making processes. Promoting justice, however, does not prohibit an overall roadmap based on procedures or actions promoted mainly by powerful actors. Finally, boundary spanners are also related to the other strategies. By physically interlocking partners, boundary spanners alleviate uncertainty within a strategic supply chain, allowing communication of more accurate information regarding the use of power. Consequently, this awareness strengthens the chain's common identity through knowledge-based trust.[9]

Although the strategies are interrelated, different actions are taken in a strategic supply chain to form each one. We discuss these actions in further detail in their respective sections following. Furthermore, as with any set of interdependent constructs, a certain level of complementarity exists between strategies. For example, establishing an authority and utilizing organizational justice to sustain relationships are complementary strategies (Tyler and Lind, 1992). Power extending from an authoritative figure is founded on legitimacy of rules rather than reward power (in other words, distributive justice). Therefore, an authority is an efficient substitute to constantly maintaining organizational justice with reward power (Tyler and Lind, 1992).

4.1. Authority

There are three general forms of authority—rational, traditional, and charismatic (Weber, 1964). Rational authority derives from established rules and the given, yet impersonal right for those in positions of authority to exercise power and issue commands. Traditional authority is based upon the sanctity of traditions, and obedience is owed to a legitimate person of status. Finally, charismatic authority exudes from an individual's exceptional character (Weber, 1964).

An authority offers a number of advantages to strategic supply chains. Unlike other interorganizational relationships formed for the sole purpose of learning, strategic supply chains combine learning and the need to exploit market opportunities as efficiently and quickly as possible. Speed in the decision-making process increases the potential for higher rents, as early movers gain an advantage over late movers (Lee et al., 2000). Within groups of firms with varying interests of survival and performance, a lack of consensus can inhibit effective decision processes. For example, disagreements may arise over the adoption of information technology, as smaller firms seeking short-term survival over long-term efficiency oppose the adoption. An authority possesses the ability to exert power to achieve speed in these decision contexts without disrupting existing levels of trust, as this power is embodied within formal, legitimate rules.

Evidence suggests that individuals are more willing to obey legitimized entities and rules than powerful actors attempting to exert influence (Weber, 1964). An authority provides a legitimate influence without having to establish consensus across partners. In doing so, legitimacy facilitates speed and efficiency in the supply chain decision process. A second advantage stems from the complexity of strategic supply chains. Engendering cultural competitiveness within a group of firms with variant motivations is a complex process of coordination. A centralized, influential authority acts as an efficient substitute to having monitoring functions (Provan and Milward, 1995) for each firm participating in a strategic supply chain.

Different circumstances may call for different types of authority. Most circumstances within strategic supply chains benefit from the use of rational authority. Over time, traditional authorities may develop within the strategic supply chain as entrepreneurship and learning become established. The traditional authority reflects a

[9] This assumes that the accurate information concerns non-coercive power rather than coercive power.

strengthening of a common identity and cultural competitiveness in the chain. These routines serve as a source of advantage, however, only as long as they allow the chain to respond efficiently and effectively to environmental changes. If the routines and traditions become rigid, a charismatic authority may create the impetus to change the direction of entrepreneurial actions. How this final form of authority develops and maintains a balance of trust and power is beyond the scope of this paper. Collectively, the evidence and arguments we have presented suggest the following propositions:

Proposition 1a. A recognized authority within a strategic supply chain allows a greater use of power at a given level of trust.

Proposition 1b. A recognized authority within a strategic supply chain facilitates cultural competitiveness by enabling higher levels of power at given levels of trust.

4.2. *Identity formation*

Social identity theory helps to explain how and why individuals associate with certain groups more readily than with others (Ashforth and Mael, 1989). Identification occurs as an attachment an individual or firm has with a certain group based on similar characteristics (Nahapiet and Ghoshal, 1998). A common identity leads to greater cooperation and cohesion within a group and heightened competition with those individuals or firms outside of the group (Moreland, 1985; Ashforth and Mael, 1989). Identification is established in multiple ways. Certain levels of identification can form immediately merely by recognizing a given categorization (Moreland, 1985). In other cases, identification stems from proactive behaviors promoting desired philosophies and values, regularly scheduled meetings to facilitate knowledge sharing that benefits all those involved, and consulting teams shared across an entire network to enhance learning (Dyer and Nobeoka, 2000).

A strong identity implies commonly shared goals, norms, and principles–outcomes that in turn become antecedents to developing trust within a relationship (Mayer et al., 1995). Furthermore, identification can evolve into internalization over time (Ashforth and Mael, 1989) as organizations within a network come to share commonly held values (O'Reilly and Chatman, 1986).

As identification and internalization strengthen within a strategic supply chain, individual firms begin to share an understanding of the long-term mutualism of interorganizational learning and the behaviors needed to develop an entrepreneurial orientation. To elaborate on the link between identity and trust, when firms identify with a certain group, they act in a way that benefits those within the group while ignoring or even competing with those outside the group. Competence is no longer viewed as firm-specific but as an overall supply chain characteristic. This reduces the extent to which competence plays a role in the relational trust because firms can rely, to a certain extent, on partners for knowledge and possibly resources in renewing competencies. This knowledge transfer underlies cultural competitiveness as partners seek joint learning. Identification also facilitates the development of goodwill trust. As an individual firm within a strategic supply chain faces an obstacle, identification creates the driving force behind cooperation among partners to overcome this. In doing so, identification solidifies the norms of reciprocity that underlie goodwill trust.

Firms sharing a common identity are more willing to overlook actions based on power as the underlying intention of these actions becomes clear. Without a common identity, a powerful actor that withholds rewards may be viewed as acting opportunistically in a relational exchange. A shared identity, on the other hand, explicitly defines what is valued in reciprocity and the ultimate outcome of reciprocal exchange that is being sought. Identification (as formed with a roadmap or another organizational tool) with the strategic supply chain *influences* the necessary cooperative entrepreneurial actions and learning of cultural competitiveness.

The relational benefits of a common supply chain identity translate into economic gains. A common identity has been recognized as a source of value in interorganizational networks (Dyer and Nobeoka, 2000). Identification facilitates the strategic, operational, and technological integration of participating organizations. Given the greater cooperation and cohesion accompanying a common identity, individual firms become more willing to transfer knowledge across the strategic supply chain, enabling such benefits as reduced cycle time, increased intraorganizational learning, and lower transaction costs. This evidence and the arguments we have advanced suggest the following propositions:

Proposition 2a. A common identity shared among organizations within a strategic supply chain allows a greater use of power at a given level of trust.

Proposition 2b. A common identity shared among organizations within a strategic supply chain facilitates cultural competitiveness by enabling higher levels of power at given levels of trust.

4.3. Boundary spanners

Boundary spanners process information from partnering firms and act as representatives of their own firm (Perrone et al., 2003). Scholars have studied both individuals (Geletkanycz and Hambrick, 1997; Liebeskind et al., 1996; Perrone et al., 2003) and interorganizational exchange systems as boundary spanners (Saeed et al., 2005; Teigland and Wasko, 2003). Integrated supply chains using technological boundary spanners gain significant cost benefits over traditional supply chains (Sahin and Robinson, 2005). However, our primary focus here is on how individuals' boundary spanning roles affect trust and power in interorganizational relations.

Boundary spanning individuals exist in many different forms, such as board-of-director interlocks, purchasing managers, and as members of formal and informal networks. The boundary spanning role largely remains the same across these different forms. While just-in-time and other electronic data interchange systems link partnering firms technologically and operationally, boundary spanning individuals integrate firms strategically. Boundary spanners gather information regarding organizations' strategic intentions but may also provide informative perspectives of their own firm's intentions and concerns. Given that strategic supply chains are composed of firms with idiosyncratic objectives and contexts, these roles offer transparency to individual firm actions.

Transparency is especially beneficial when powerful firms act to influence the entrepreneurial and learning actions within the supply chain. Assuming the powerful firm's actions are intended to enhance supply chain efficiency and effectiveness, the information gathered by boundary spanners generates knowledge-based trust. This trust is based upon the intimate knowledge of the powerful firm's previous actions as well as their intended behaviors. Knowledge-based trust can increase the contractual trust of the interorganizational relationship sufficiently to promote cooperative behaviors. If boundary spanners can facilitate cooperation within the supply chain through a number of reciprocal exchanges, the situational trust may evolve into goodwill trust, potentially leading to cultural competitiveness. The evidence and the arguments offered herein suggest the following propositions:

Proposition 3a. Utilizing boundary spanners within a strategic supply chain allows a greater use of power at a given level of trust.

Proposition 3b. Utilizing boundary spanners within a strategic supply chain facilitates cultural competitiveness by enabling higher levels of power at given levels of trust.

4.4. Justice

Until recently, issues of justice have primarily been raised to address aspects of *intra*-organizational relations. Because strategic supply chains are in many ways themselves equivalent to organizations (Dunning, 1995; Ketchen and Giunipero, 2004), justice plays a major role with respect to how trust and power are balanced in this context. In fact, a great deal of the organizational justice literature has been concerned with relational fairness between superiors and subordinates (Sheppard et al., 1992), highlighting the underlying trust and power interdependence that is critical also to effective strategic supply chains.

Distributive justice and procedural justice have been identified as two main forms of organizational justice (Colquitt, 2001). Distributive justice refers to the perceived fairness and equity of an organization's rewards as compared to its inputs in a given process (Adams, 1963). To maintain a repeated social exchange based upon norms of reciprocity, the respective physical inputs of each partner must be perceived as fair by the other partner (Homans, 1958). Procedural justice refers to the fairness of the actual decision-making process, as opposed to the fairness of outcomes as in distributive justice (Lind and Tyler, 1988). For example, procedural justice may exist as consideration of one's opinions, the ability to partially influence or voice opinions in the decision-making process, consistency of the process, or timely feedback (Kim and Mauborgne, 1991; Sapienza and Korsgaard, 1996).

Distributive justice facilitates use of power while maintaining levels of trust. Power is possessed by the individual or firm able to offer greater rewards in an exchange (Blau, 1964). By strategically withholding resources, powerful actors are able to influence partners to act in desired ways. Nevertheless, trust forms in a strategic supply chain when powerful actors distribute rewards fairly following use of their influence. Evidence has shown that the savings associated with technological integration and information sharing in strategic supply chains are not evenly distributed among partners (Sahin and Robinson, 2005). Although an even distribution may not be necessary for trust to remain as a dominant characteristic of a supply chain's operations, allocating savings in a proportion that is consistent with partners' inputs enhances distributive justice. Ensuring that rewards are distributed fairly demonstrates the powerful firm's competence. Furthermore, the rewards reflect the reciprocal exchange for the weaker partners' willingness to be subjected to a partner's influence. Over time, as the powerful firm consistently fulfills the norms of reciprocity, goodwill trust and cultural competitiveness develop.

Procedural justice similarly enables a greater use of power in interorganizational relations while maintaining given levels of trust. As we have noted, the decision-making processes underlying entrepreneurship and learning in strategic supply chains are not without risk. The cultural competitiveness of strategic supply chains benefits from cooperation in the ultimate outcomes of this decision process. This cooperation entails sharing knowledge, mobilizing quickly and efficiently, and maintaining social harmony in the chain. Given the often varying contexts of partners within a supply chain, consensus may not always be possible if the chain is to effectively exploit opportunities as they surface. Procedural justice offers weaker firms in the supply chain indirect control in these decision processes which do not allow complete direct control. Allowing voice in the decision process acknowledges the willingness to consider weaker firm interests, and timely feedback keeps the weaker firms apprised of how the process is proceeding. In doing so, procedural justice has been positively linked to trust, commitment, satisfaction, cooperative behaviors, and social harmony within both inter- and intraorganizational relations (Kim and Mauborgne, 1991, 1993; Korsgaard et al., 1995; Sapienza and Korsgaard, 1996). Such characteristics promote the entrepreneurial and learning behaviors associated with cultural competitiveness. This evidence and the arguments based on it suggest the following propositions:

Proposition 4a. Maintaining organizational justice within a strategic supply chain allows a greater use of power at a given level of trust.

Proposition 4b. Maintaining organizational justice within a strategic supply chain facilitates cultural competitiveness by enabling higher levels of power at given levels of trust.

5. Conclusion

Strategic supply chains are a potential source of competitive advantage for firms competing in the dynamic markets of today's global business environment. When participating in a strategic supply chain, firms seek to develop a level of cultural competitiveness. This desirable outcome is achieved when organizations partnering in the supply chain act entrepreneurially and remain focused on learning as a product of their efforts. Herein, we have argued that cultural competitiveness results from an appropriate balance of trust and power within the strategic supply chain. An optimal level of trust and power in interorganizational relationships stems from actions taken by organizations to alleviate uncertainty surrounding actions based upon power.

Previous research in supply chains has primarily approached issues of trust from an economic lens, describing the use of contracts, mutual hostages, and other efficiency-oriented mechanisms in developing trust. However, we assert that these efficiency-oriented mechanisms develop trust in a situation and engendering goodwill trust (i.e., trust in a partner organization) depends on emphasizing social aspects of relationships. We identified and discussed four strategies that partners participating in a strategic supply chain can use to develop optimal levels of power and trust. These strategies are establishing an authority, forming a common supply chain identity, interlocking organizations through the use of boundary spanners, and maintaining organizational justice.

This work suggests a number of interesting questions for scholarly research. First, trust and power are interdependent and necessary components for achieving competitiveness within socioeconomic relations. The new competitive landscape creates situations in which forming partnerships among different organizations creates a capability to successfully identify and subsequently successfully exploit competitive opportunities as they surface. However, firms are inherently different in their resource endowments and their willingness not to act opportunistically as members of an interorganizational relationship, such as a strategic supply chain. A further understanding is needed as to why organizations enter into interorganizational relationships and how initial levels of trust and power are formed as the foundation for non-opportunistic behaviors and partnership success.

A second set of research questions suggested by this work revolves around optimal levels of power and trust in interorganizational relationships. In this work, we have discussed strategies that are intended to facilitate partners' efforts to determine desirable levels of power and trust. However, the work reported herein requires elaboration and further analysis to improve our understanding of the level of power, kinds of power, and interorganizational circumstances that lead to conflicts and breakdowns in trust in interorganizational relationships. For example, while procedural justice may be used to offset exertion of power, an excessive amount of procedural justice without any change in the amount of power being used may actually be perceived as a form of manipulation. A voice that is consistently ignored may resort to other methods of extricating value from a relationship, reducing the performance of all firms involved. These aspects of the interdependent relationship between power and trust are especially important because when relationships are based on high levels of trust, a breakdown in trust often leads to dramatic social capital losses that may never be regained (Bachmann, 2001).

High levels of trust and power are not necessary in all relationships. For example, relationships formed primarily for learning purposes likely benefit from a predominance of trust in the relationship and minimal levels of power. Relationships established to successfully pursue environmental opportunities benefit from power's ability to stimulate necessary actions without the emotional attachment trust creates (Ireland et al., 2005). Future research should examine these possibilities. Results from these efforts would seem to have the potential to enhance our understanding of why different interorganizational relationships (such as strategic supply chains) require different combinations of trust and power and how to manage these combinations as a path to improved performance.

References

Adams, J.S., 1963. Toward an understanding of inequity. Journal of Abnormal and Social Psychology 67, 422–436.

Adler, P., Kwon, S.-W., 2002. Social capital: prospects for a new concept. Academy of Management Review 27, 17–40.

Alvarez, S.A., Barney, J.B., 2001. How entrepreneurial firms can benefit from alliances with large partners. Academy of Management Executive 15, 139–148.

Arend, R.J., Wisner, J.D., 2005. Small business and supply chain management: is there a fit? Journal of Business Venturing 20, 403–436.

Ashforth, B.E., Mael, F., 1989. Social identity theory and the organization. Academy of Management Review 14, 20–39.

Bachmann, R., 2001. Trust, power, and control in trans-organizational relations. Organization Studies 22, 337–365.

Barney, J.B., Hansen, M.H., 1994. Trustworthiness as a source of competitive advantage. Strategic Management Journal 15, 175–190.

Benton, W.C., Maloni, M., 2005. The influence of power driven buyer/seller relationships on supply chain satisfaction. Journal of Operations Management 23, 1–22.

Blau, P.M., 1964. Exchange and Power in Social Life. John Wiley & Sons, New York.

Bromiley, P., Cummings, L.L., 1995. Transaction costs in organizations with trust. In: Bies, R., Sheppard, B., Lewicki, R. (Eds.), Research on Negotiation in Organizations, vol. 5. JAI Press, Greenwich, CT, pp. 219–247.

Cecere, L., O'Marah, K., Preslan, L., 2004. Driven by demand. Supply Chain Management Review 8 (8), 15–16.

Colquitt, J.A., 2001. On the dimensionality of organizational justice: a construct validation of a measure. Journal of Applied Psychology 86, 386–400.

Cousins, P.D., Menguc, B., 2006. The implications of socialization and integration in supply chain management. Journal of Operations Management 24, 604–620.

Cox, A., 2001. Managing with power: strategies for improving value appropriation from supply relationships. Journal of Supply Chain Management 37, 42–47.

Cox, A., Ireland, P., Lonsdale, C., Sanderson, J., Watson, G., 2002. Supply chains, markets, and power: mapping buyer and supplier power regimes, Routledge, New York.

Currall, S.C., Inkpen, A.C., 2002. A multilevel approach to trust in joint ventures. Journal of International Business Studies 33, 479–495.

D'Avanzo, R., von Lewinski, H., Van Wassenhove, L.N., 2003. The link between supply chain and financial performance. Supply Chain Management Review 7 (6), 40–47.

Davis, E.W., Spekman, R.E., 2004. The Extended Enterprise: Gaining Competitive Advantage Through Collaborative Supply Chains. Financial Times Prentice Hall, Upper Saddle River, NJ.

Dunning, J.H., 1995. Reappraising the eclectic paradigm in an age of alliance capitalism. Journal of International Business Studies 26, 461–492.

Drucker, P.F., 1985. Innovation and Entrepreneurship: Practice and Principles. Harper and Row, New York.

Dyer, J.H., Nobeoka, K., 2000. Creating and managing a high-performance knowledge-sharing network: the Toyota case. Strategic Management Journal 21, 345–367.

Ellram, L.M., Zsidisin, G.A., Siferd, S.P., Stanly, M.J., 2002. The impact of purchasing and supply management activities on corporate success. Journal of Supply Chain Management 38, 4–17.

Fiol, C.M., Lyles, M.A., 1985. Organizational learning. Academy of Management Review 10, 803–813.

Garcia-Canal, E., Duarte, C.L., Criado, J.R., Llaneza, A.V., 2002. Time compression diseconomies in accelerated global alliances. Management Decision 40, 745–754.

Gaski, J.F., 1984. The theory of power and conflict in channels of distribution. Journal of Marketing 48, 9–29.

Geletkanycz, M.A., Hambrick, D.C., 1997. The external ties of top executives: implications for strategic choice and performance. Administrative Science Quarterly 42, 654–681.

Granovetter, M., 1985. Economic action and social structure: the problem of embeddedness. American Journal of Sociology 91, 481–510.

Gulati, R., 1995. Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. Academy of Management Journal 38, 85–112.

Ha, A.Y., Li, L., Ng, S.-M., 2003. Price and delivery logistics competition in a supply chain. Management Science 49, 1139–1153.

Handfield, R.B., Bechtel, C., 2002. The role of trust and relationship structure in improving supply chain responsiveness. Industrial Marketing Management 31, 367–382.

Handfield, R.B., Nichols, E.L., 2002. Supply Chain Redesign: Transforming Supply Chains into Integrated Value Systems. Financial Times Prentice Hall, Upper Saddle River, NJ.

Hart, P., Saunders, C., 1997. Power and trust: critical factors in the adoption and use of electronic data interchange. Organization Science 8, 23–42.

Hendricks, K.B., Singhal, V.R., 2003. The effect of supply chain glitches on shareholder wealth. Journal of Operations Management 21, 501–522.

Homans, G.C., 1958. Social behavior as exchange. American Journal of Sociology 63, 597–606.

Hult, G.T.M., Ketchen, D.J., Nichols, E.L., 2002. An examination of cultural competitiveness and order fulfillment cycle time within supply chains. Academy of Management Journal 45, 577–586.

Hult, G.T.M., Ketchen, D.J., Slater, S.F., 2004. Information processing, knowledge development, and strategic supply chain performance. Academy of Management Journal 47, 241–253.

Inkpen, A.C., 2001. Strategic alliances. In: Hitt, M.A., Freeman, R.E., Harrison, J.S. (Eds.), Handbook of Strategic Management. Blackwell Publishers, Malden, MA, pp. 409–432.

Ireland, R.D., Hitt, M.A., Webb, J.W., 2005. Entrepreneurial alliances and networks. In: Shenkar, O., Reuer, J.J. (Eds.), Handbook of Strategic Alliances. Sage Publications, Thousand Oaks, CA, pp. 333–352.

Johnston, D.A., McCutcheon, D.M., Stuart, F.I., Kerwood, H., 2004. Effects of supplier trust on performance of cooperative supplier relationships. Journal of Operations Management 22, 23–38.

Jones, G.R., 2001. Towards a positive interpretation of transaction cost theory: the central roles of entrepreneurship and trust. In: Hitt, M.A., Freeman, R.E., Harrison, J.S. (Eds.), Handbook of Strategic Management. Blackwell Publishers, Malden, MA, pp. 208–228.

Kern, H., 2000. Lack of trust, surfeit of trust: some causes of the innovation crisis in German industry. In: Lane, C., Bachmann, R. (Eds.), Trust Within and Between Organizations: Conceptual Issues and Empirical Applications. Oxford University Press, pp. 203–213.

Ketchen, D.J., Giunipero, L.C., 2004. The intersection of strategic management and supply chain management. Industrial Marketing Management 33, 51–56.

Kim, W.C., Mauborgne, R.A., 1991. Implementing global strategies: the role of procedural justice. Strategic Management Journal 12, 125–143.

Kim, W.C., Mauborgne, R.A., 1993. Procedural justice, attitudes, and subsidiary top management compliance. Academy of Management Journal 36, 502–526.

Koka, B.R., Prescott, J.E., 2002. Strategic alliances as social capital: a multidimensional view. Strategic Management Journal 23, 795–816.

Korsgaard, M.A., Schweiger, D.M., Sapienza, H.J., 1995. The role of procedural justice in building commitment, attachment, and trust in strategic decision-making teams. Academy of Management Journal 38, 60–84.

Koufteros, X.A., Vonderembse, M.A., Jayaram, J., 2005. Internal and external integration for product development: the contingency effects of uncertainty, equivocality, and platform strategy. Decision Sciences 36, 97–133.

Krajewski, L., Wei, J.C., Tang, L.-L., 2005. Responding to schedule changes in build-to-order supply chains. Journal of Operations Management 23, 451–469.

Kwon, I.-W.G., Suh, T., 2004. Factors affecting the level of trust and commitment in supply chain relationships. Journal of Supply Chain Management 40, 4–14.

Kwon, I.-W.G., Suh, T., 2005. Trust, commitment and relationships in supply chain management: a path analysis. Supply Chain Management 10, 26–33.

Lane, C., Bachmann, R., 1997. Co-operation in inter-firm relations in Britain and Germany: the role of social institutions. British Journal of Sociology 48, 226–254.

Lee, H.L., 2004. The triple–a supply chain. Harvard Business Review 2–11.

Lee, H., Smith, K.G., Grimm, C.M., Schomburg, A., 2000. Timing, order, and durability of new product advantages with imitation. Strategic Management Journal 21, 23–30.

Levitt, B., March, J.G., 1988. Organizational learning. Annual Review of Sociology 14, 319–340.

Liao, H., Rupp, D.E., 2005. The impact of justice climate and justice orientation on work outcomes: a cross-level multifoci framework. Journal of Applied Psychology 90, 242–256.

Liebeskind, J.P., Oliver, A.L., Zucker, L., Brewer, M., 1996. Social networks, learning and flexibility: sourcing scientific knowledge in new biotechnology firms. Organization Science 7, 428–443.

Lind, E.A., Tyler, T., 1988. The Social Psychology of Procedural Justice. Plenum, New York.

Lumpkin, G.T., Dess, G.G., 1996. Clarifying the entrepreneurial orientation construct and linking it to performance. Academy of Management Review 21, 135–172.

Mayer, R.C., Davis, J.H., Schoorman, F.D., 1995. An integrative model of organizational trust. Academy of Management Review 20, 709–734.

McCutcheon, D., Stuart, F.I., 2000. Issues in the choice of supplier alliance partners. Journal of Operations Management 18, 279–301.

McEvily, B., Perrone, V., Zaheer, A., 2003. Trust as an organizing principle. Organization Science 14, 91–103.

McKone-Sweet, K.E., Hamilton, P., Willis, S.B., 2005. The ailing healthcare supply chain: a prescription for change. Journal of Supply Chain Management 41, 4–17.

Molm, L.D., 1997. Risk and power use: constraints on the use of coercion in exchange. American Sociological Review 62, 113–133.

Morash, E.A., Droge, C.L.M., Vickery, S.K., 1996. Strategic logistics capabilities for competitive advantage and firm success. Journal of Business Logistics 17, 1–22.

Moreland, R.L., 1985. Social categorization and the assimilation of 'new' group members. Journal of Personality and Social Psychology 48, 1173–1190.

Nahapiet, J., Ghoshal, S., 1998. Social capital, intellectual capital, and the organizational advantage. Academy of Management Review 23, 242–266.

Narasimhan, R., Das, A., 1999. An empirical investigation of the contribution of strategic sourcing to manufacturing flexibilities and performance. Decision Sciences 30, 683–718.

Oliver, C., 1990. Determinants of interorganizational relationships: integration and future directions. Academy of Management Review 15, 241–265.

O'Reilly, C., Chatman, J., 1986. Organizational commitment and psychological attachment: the effects of compliance, identification, and internalization on prosocial behavior. Journal of Applied Psychology 71, 492–499.

Parkhe, A., 1993. Strategic alliance structuring: a game theoretic and transaction cost examination of interfirm cooperation. Academy of Management Journal 36, 794–829.

Perrone, V., Zaheer, A., McEvily, B., 2003. Free to be trusted? Organizational constraints on trust in boundary spanners. Organization Science 14, 422–439.

Petersen, K.J., Ragatz, G.L., Monczka, R.M., 2005. An examination of collaborative planning effectiveness and supply chain performance. Journal of Supply Chain Management 41 (2), 14–25.

Pfeffer, J., 1988. In: Mizruchi, M., Schwartz, M. (Eds.), A Resource Dependence Perspective on Intercorporate Relations. Intercorporate Relations, Cambridge, pp. 25–55.

Pfeffer, J., Salancik, G.R., 1978. The External Control of Organizations: A Resource Dependence Perspective. Stanford University Press, Stanford.

Provan, K.G., Milward, H.B., 1995. A preliminary theory of interorganizational network effectiveness: a comparative study of four community mental health systems. Administrative Science Quarterly 40, 1–33.

Rokkan, A.I., Haugland, S.A., 2002. Developing relational exchange: effectiveness and power. European Journal of Marketing 36, 211–230.

Rousseau, D.M., Sitkin, S.B., Burt, R.S., Camerer, C., 1998. Not so different after all: a cross-discipline view of trust. Academy of Management Review 23, 393–404.

Saeed, K.A., Malhotra, M.K., Grover, V., 2005. Examining the impact of interorganizational systems on process efficiency and sourcing leverage in buyer-supplier dyads. Decision Sciences 36, 365–396.

Sahin, F., Robinson Jr., E.P., 2005. Information sharing and coordination in make-to-order supply chains. Journal of Operations Management 23, 579–598.

Sako, M., 1992. Prices, Quality and Trust: Inter-firm Relations in Britain and Japan. Cambridge University Press, Cambridge.

Sapienza, H.J., Korsgaard, M.A., 1996. Procedural justice in entrepreneur-investor relations. Academy of Management Journal 39, 544–574.

Sheppard, B.H., Lewicki, R.J., Minton, J.W., 1992. Organizational Justice: The Search for Fairness in the Workplace. Lexington Books, New York.

Singhal, J., Singhal, K., 2002. Supply chains and compatibility among components in product design. Journal of Operations Management 20, 289–302.

Teigland, R., Wasko, M.M., 2003. Integrating knowledge through information trading: examining the relationship between boundary spanning communication and individual performance. Decision Sciences 34, 261–286.

Tyler, T.R., Lind, E.A., 1992. A relational model of authority in groups. In: Zanna, M.P. (Ed.), Advances in Experimental Social Psychology, vol. 25. Academic Press, San Diego, CA, pp. 115–191.

Uzzi, B., 1997. Social structure and competition in interfirm networks: the paradox of embeddedness. Administrative Science Quarterly 42, 35–67.

Volery, T., Mensik, S., 1998. The role of trust in creating effective alliances: a managerial perspective. Journal of Business Ethics 17, 987–994.

Weber, M., 1964. The Theory of Economic and Social Organization. MacMillan, London.

Williamson, O.E., 1982. The economics of organizations: the transaction cost approach. American Journal of Sociology 87, 548–577.