INTERPRENEURSHIP: HOW THE PROCESS OF COMBINING RELATIONAL RESOURCES AND ENTREPRENEURIAL RESOURCES DRIVES COMPETITIVE ADVANTAGE

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ABSTRACT

This chapter introduces the term “interpreneurship” to refer to entrepreneurship that occurs through inter-organizational alliances, which represent a salient vehicle for combining complementary resources and capabilities across firms in order to gain a competitive advantage. The interpreneurship concept implies the integration of internal (firm) and external (network) resources through alliance formation and management. The purpose of this research is to introduce social structure to the rational action paradigm by examining the complementarity of...
entrepreneurial and relational resources in achieving organizational goals in an alliance context. In this study, interpreneurial capability is operationalized as the combination of entrepreneurial resources (via an internal growth strategy) with relational resources (via an external growth strategy). These effects are assessed through the examination of three competing research models. The hypothesized interaction-only model tests the impact of complementarity of entrepreneurial and relational resources on firm-level performance for both partners to an alliance. A second model tests relational resources as a mediator of the relationship between entrepreneurial resources and the alliance partners’ performance. Finally, a third model assumes that the two resources have independent effects on the alliance partners’ performance. We find that the interaction-only model yields the strongest relationship to organizational performance, supporting the interpreneurial perspective we proffer in this chapter.

Organizations are experiencing intense competition in the “new competitive landscape,” which has resulted in, among other things, increased business risk and uncertainty (Bettis & Hitt, 1995). The competitive rivalry of modern industry has “heightened the need for organizations to become more entrepreneurial in order to survive and prosper (Dess, Lumpkin, & McGee, 1999, p. 85).” However, in addition to the necessity for firm-centric entrepreneurial focus, precedent research has shown that as market uncertainty increases, firms increasingly interact with other firms in order to address competitiveness issues (Podolny, 1994; Lorenzoni & Lipparini, 1999). Thus, combining entrepreneurship theory with discrete theory addressing inter-organizational relationships presents a distinctive opportunity for advancing the field of entrepreneurship. This integration of research streams is justified by current business practice. For example, previous research in the context of biotechnology has found that entrepreneurial innovation occurs at the inter-organizational network level, due to the complexity of domain-specific knowledge and the rapidly expanding sources of expertise involved in R&D and product/service innovation management (Powell, Koput, & Smith-Doerr, 1996). Similarly, in the personal computer industry, Dell Computer appears to be entrepreneurial due to cutting-edge process innovation extending across their supply chain, in spite of their lack of actual product innovation. In the case of Dell, strong supplier relationships coupled with well-developed internal brand management and manufacturing processes create a fresh and
unique type of competitive capability in the aggressive and volatile computer marketplace.

In this chapter, we use the term *interpreneurship* to refer to the combination of internally- and externally based entrepreneurial resources directed toward increased business-level competitiveness. Interpreneurship draws on and combines two extant entrepreneurial concepts, namely intrapreneurship and alliance entrepreneurship. The term intrapreneurship was originally coined by Pinchot (1985) in discussing how the entrepreneurial spirit can be cultivated within established companies and refers to a more macro (i.e., firm) level conception of entrepreneurship (e.g., corporate entrepreneurship). Intrapreneurship has also been used to refer to entrepreneurship occurring within lower organizational units (e.g., strategic business units (SBUs)) in larger firms (Lumpkin & Dess, 1996). Thus, intrapreneurship is used to identify entrepreneurship within an organization or business unit. Similar to intrapreneurship, the interpreneurship concept introduced herein adopts a macro-level perspective, with innovative activity occurring at the firm level of analysis (e.g., corporate entrepreneurship). However, interpreneurship is conceptualized to occur between, rather than within, firms, and takes a relational view of the entrepreneurial process.

Alliance entrepreneurship (Sarker, Echambadi, & Harrison, 2001) is also tangential to interpreneurship in that each of these concepts adopts a multi-firm perspective on the locus of entrepreneurship. However, alliance entrepreneurship is primarily concerned with a focal firm’s proactiveness in identifying and responding to partnering opportunities. Alternatively, interpreneurship represents a capabilities-based approach to understanding entrepreneurship between partners and takes more of a relational perspective to inter-organizational relationships. With interpreneurship, we are most concerned with the “how,” i.e., how the quality of the relationship not only relates to the focal firm’s entrepreneurial capabilities (i.e., the supplier firm in the current study) but also importantly, to *both* partners’ competitive advantage (i.e., both the supplier business units and its customers in the current study).

In our development of the interpreneurship concept, this chapter studies the effects of combining external (alliance) and internal (entrepreneurial) growth strategies. Successful resource combination requires effective integration of resources in order to realize synergy (Harrison, Hitt, Hoskisson, & Ireland, 2001), and the firm’s ability to manage relationships with alliance partners is central to the ability to integrate resources. Thus, in this chapter, we hypothesize an “interaction-only model” (Lumpkin & Dess, 1996; Boal & Bryson, 1987) that tests the complementarity of
entrepreneurial and relational resources. We find that the interaction-only model has a significant relationship with organizational performance.

The remainder of the chapter is organized as follows. First, reviews of entrepreneurship theory and social capital provide the theoretical background for our research. Following these two sections, specific hypotheses are derived that illustrate two existing models of entrepreneurial performance that compete with the proposed interpreneurial model. The three models are comparatively tested and evaluated with respect to their ability to explain firm-level performance for both members of the alliance. We conclude with a section directing the implementation of interpreneurial capabilities, including anecdotal evidence from existing firms.

A REVIEW OF PERTINENT ENTREPRENEURSHIP THEORY

Different market participants hold varying beliefs and make differential valuations of resources allocated for entrepreneurial opportunity in factor and product markets (Kirzner, 1997). Drucker (1985) finds that entrepreneurial opportunity exists according to an entity’s ability to exploit market (product and factor) inefficiencies resulting from information asymmetry. In addition, entrepreneurial activities also create value when they facilitate “access relationships” to resources and capabilities that are strategic to competitiveness and performance (Stuart, 2000). Thus, entrepreneurship theory is concerned with not only the product markets, but also factor markets. With respect to these issues, our view of entrepreneurship is most aligned with Morris’ (1998) definition, in which he conceptualizes entrepreneurship as the process through which individuals and teams create value by bringing together unique packages of resource inputs to exploit opportunities in the environment. Using Morris’ definition, entrepreneurship can occur in any organizational context, and can result in a variety of possible outcomes, including new ventures, products, services, processes, markets, and technologies.

Many firms that are not necessarily viewed as being product innovators may still be considered entrepreneurial if they are able to obtain resources that enable the organization to obtain above-normal returns and maintain a competitive advantage (Hunt, 2000). Therefore, we ground our study using concepts from the resource-based view of the firm, which holds that the existence of imperfect strategic factor markets (Barney, 1986) and incomplete
strategic factor markets (Dierickx & Cool, 1989) provides firms with a basis for a competitive advantage. The core idea of the resource-based view is that firms are heterogeneous in terms of their endowments of productive resources and the resulting efficiency differences yield differential rents (Barney, 1986, 1991; Dierickx & Cool, 1989; Amit & Schoemaker, 1993; Conner, 1991; Hunt, 2000). Additionally, the utilization and bundling of sets of these resources is organized in an administrative framework and yields different “services” when organized and structured differently (Penrose, 1959).

Although numerous definitions and perspectives describing entrepreneurship exist (e.g., Cooper & Dunkelberg, 1986; Schollhammer, 1982; Webster, 1977), there had until recently been little consensus between researchers as to its conceptual boundary, definition dimensions, and/or purpose. However, over the past decade, the entrepreneurial orientation (EO) approach has emerged, proposing that the degree to which a firm or business unit acts entrepreneurially can be viewed in terms of the organization’s innovativeness, risk-taking, and proactiveness (Lumpkin & Dess, 1996; Zahra, Jennings, & Kuratko, 1999; Covin & Slevin, 1991; Hitt, Ireland, Camp, & Sexton, 2001; Hitt & Ireland, 2000). The EO is a managerial, process-oriented approach to the study of entrepreneurship. Rather than attempting to identify individual traits, such as personality attributes, EO takes a process approach in identifying capabilities that organizations develop to increase their ability to compete.

Researchers studying corporate actors and entrepreneurship’s relationship to performance often use EO (Covin & Slevin, 1988, 1991; Miller, 1983) dimensions as prominent theoretical foundations. One dimension of the EO construct is proactiveness. In our study, we conceptualize proactiveness as a multi-dimensional construct and use it as a proxy for entrepreneurial capability. Consequently, we perform a fine-grained analysis of proactiveness and its relationship to the firms’ relational resources.

**STRATEGIC PROACTIVENESS**

Proactiveness is the ability of the entrepreneur to notice and react to market opportunities. Proactiveness is central to the Austrian economics perspective of an entrepreneur whom Kirzner (1997) defined as having the ability to perceive new opportunities. In fact, when people consider entrepreneurship, they often envision individuals, teams, or organizations developing innovative products and value-added services, and advancing them to market before their rivals. Although proactiveness represents a single dimension of
EO (Covin & Steven, 1991; Lumpkin & Dess, 1996; Zahra et al., 1999; Hitt & Ireland, 2000; Hitt et al., 2001), in this chapter we offer a more granular conceptualization of proactiveness. Established entrepreneurship research has tended to focus exclusively on the external component of proactiveness; however, the literature suggests that this perspective may be incomplete. In this article, we use the term strategic proactiveness to jointly identify a higher-order construct including internal (operational) and external (market) dimensions. The entrepreneurship literature supports this reconceptualization, suggesting that the traditional approach to proactiveness would be improved by including both internal and external proactive capabilities. For example, Gerybadze and Reger (1999) find evidence that competitive advantage is a “triumvirate” function of three value-creating activities: marketing, R&D, and innovation. Their findings demonstrate the strategic nature of proactiveness, where managers combine internal and external processes for innovation, resulting in entrepreneurial rents. Academic research addressing strategic proactiveness is surprisingly infrequent, especially given its vital role in determining the entrepreneur’s financial performance.

This research considers both the internal and external perspectives in developing proactiveness capabilities. The internal dimension of strategic proactiveness, termed operational proactiveness, refers to a characteristic of individuals or business teams in an organization to proactively seek solutions to problems and continuously improve operations. Thus, operational proactiveness is an inveterate, operations-level approach to competing in the firm’s chosen market (Hyatt & Ruddy, 1997). However, there is also an external dimension of strategic proactiveness, termed market proactiveness. Market proactiveness is “an opportunity-seeking, forward-looking perspective involving introducing new products or services ahead of the competition and acting in anticipation of future demand to create change and shape the environment” (Lumpkin & Dess, 2001, p. 431). Adopting this definition, market proactiveness implies the taking of a proactive approach when dealing with downstream supply and demand chain partners. Compared with other firms, market-proactive firms have more interaction with their environments (Luo, 2004), especially when those environments are hostile, dynamic, and complex (Tan, 1997). As technological change and globalization transform the new competitive landscape (Bettis & Hitt, 1995), market proactiveness is requisite for firm survival and wealth creation (Ireland, Hitt, Camp, & Sexton, 2001). In fact, highly market-proactive firms are posited as more effective at finding and exploiting new product and market opportunities (Miles, Snow, & Meyer, 1978). Therefore, strategic
proactiveness, formed by operational and market proactiveness, constitutes a productive capability, and a key entrepreneurial resource.

**RELATIONAL RESOURCES**

Relational resources are also a key foundation of the interpreneurship concept. In this chapter, we use social capital as a representation of relational firm-level resources. The central thesis in social capital theory is that certain interfirm relationships provide an important and valuable component to the firm’s resource mix. The social capitalist may be an individual or a collectivity such as a group, business unit, or entire organization. Like other forms of capital (e.g., human, financial, structural, customer, and relationship), social capital is productive, in that it facilitates action (Adler & Kwon, 1999; Coleman, 1988). One approach to accessing resources outside the firm is via inter-organizational alliances. In fact, strategic alliances are vehicles to combine inter-organizational resources (Harrison et al., 2001). Although corporate entrepreneurship research has focused on single firms, in this chapter we apply entrepreneurship theory to firms as they enter into a variety of relationships with other organizations in order to obtain complementary resources that augment existing resources and develop capabilities from internal resources (Sarker, Echambadi, & Harrison, 2001). We introduce the term interpreneurship to identify a capability that takes an inter-organizational perspective on firm entrepreneurship. Thus, interpreneurship allows the firm to implement entrepreneurial strategy processes that “exploit product-market opportunities through innovative and proactive behavior” (Dess et al., 1999, p. 85) by leveraging relationships with alliance partners.

To gain access to external resources, managers routinely turn to strategic alliances. Vertical alliances (i.e., between buyer and supplier) are a subset of strategic alliances aimed at creating competitive advantage by organizing exchange activities across both value chains (supply and demand) among trading partners (Conner & Prahalad, 1996; Monczka, Petersen, Handfield, & Ragatz, 1998). For example, in 2003, Toyota launched a joint program with its suppliers to cut prices (30%) for all key components on new models⁴. Toyota experienced a $2.6 billion savings in 2003 and approximately $2 billion savings in 2004 by leveraging its relationships with suppliers. Vertical alliances serve as vehicles for combining interfirm resources across the value chain and constitute “external growth strategies.” Today, organizations are pursuing record numbers of alliances in lieu of pursuing growth through
increased vertical integration. Simultaneously, firms also employ internal growth strategies such as corporate venturing, new product development, organizational change, and process innovation, with the goal of growing their businesses.

However, no identifiable research has assessed the concurrent utilization of both internal growth strategies and external alliances, and there is reason to believe that these initiatives must be aligned in purpose and scope. Ford and Motorola provide excellent examples of the effects of failing to leverage both internal and external growth strategies. Both firms attempted to maintain their independence and rely solely on internal growth until each began to lose to Japanese competitors in the 1970s and 1980s and consequently developed external growth strategies by partnering with other global firms. While each continued to develop innovative products and invest in R&D, each also pursued alliance partners successfully. Consequently, Ford and Motorola remain powerful, global enterprises today.

Viewing organizational “social capital as a resource is one way of introducing social structure into the rational action paradigm” (Coleman, 1988, p. S95). The first systematic study of social capital by Pierre Bourdieu (1986) defined the concept as “the aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition (Bourdieu, 1986, p. 248),” thereby indicating the presence of multiple resource factors. We conceptualize social capital herein as a latent construct formed or caused by three dimensions of an inter-organizational relationship: trust, commitment, and compatibility. Each of these three dimensions are indicative of those elements of social relationships that constitute useful firm resources.

**Organizational Trust**

The first dimension of social capital is organizational trust. The social capital literature often notes trust between actors (e.g., a supplier and its preferred customers) as an indicator of social capital (Coleman, 1984, 1988; Adler & Kwon, 1999). In general, the typical discussion of trust and trustworthiness corresponds to the economic nature of trust (Deutsch, 1958), in which trust emerges through interaction and facilitates exchange relationships between the parties. Organizational trust is a key enabler of organizational innovation (Fountain, 1998) and key to all positive relational exchanges between organizations (Dwyer, Schurr, & Oh, 1987; Morgan & Hunt, 1994; Spekman,
1998), and also to creating intellectual capital in organizations (Nahapiet & Ghoshal, 1998). Additionally, positive capabilities for actors in a given society, which are the direct result of the degree of trust between societal actors, arise from social capital (Fukuyama, 1995). Finally, organizational trust has explanatory power for the success of alliances by mitigating risk associated with malfeasance, as well as leveraging complementary resources (Ring & Van De Ven, 1992; Dyer & Singh, 1998; Jap, 1999; Monczka et al., 1998; Das & Teng, 2001; Sivadas & Dwyer, 2000). This conceptualization of organizational trust as a dimension of organizational social capital is consistent with the egocentric approach, in which social capital is a productive resource that an organization or business unit may leverage (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998; Walker, Kogut, & Shan, 1997).

**Organizational Commitment**

The second dimension of social capital, organizational commitment, creates the structure necessary for relational resources and capabilities to be productive. Organizations that have increased relational capital, as evidenced by being committed to relationships with other organizations, tend to be willing to forego short-term losses for long-term gains as well as constrain opportunism (i.e., the principle of reciprocity) (Chung, Singh, & Lee, 2000). Organizational commitment facilitates the creation of organizational trust (Coleman, 1988), which has significant empirical support in organizational relationships in the marketing literature (e.g., Morgan & Hunt, 1994), community relationships in the sociology literature (e.g., Putnam, 1993), and strategic alliances in the management literature (e.g., Ring & Van De Ven, 1992). Additionally, long-term, committed relationships with other organizations increase a firm’s ability to compete because they are the firm’s resources that lead to competitive advantage (Arnett, German, & Hunt, 2003; Hunt, 1997, 2000; Hunt & Morgan, 1995). Organizational commitment is one of the main factors influencing the success of inter-organizational relationships (Anderson & Narus, 1990; Lambe, Spekman, & Hunt, 2002; Mohr & Spekman, 1994; Morgan & Hunt, 1994; Ring & Van De Ven, 1992; Sivadas & Dwyer, 2000), resulting in the formation of organizational social capital.

**Organizational Compatibility**

The third dimension of social capital, organizational compatibility, also constitutes a productive resource. Organizational compatibility has positive
empirical support for enhancing the effectiveness of relationships between functional departments (Ruekert & Walker, 1987) and inter-organizational relationships (Van de Ven & Ferry, 1980). Organizational compatibility provides a role in the development of synergy between resources, especially with complementarity of resources having a significant effect on alliance success (Chung et al., 2000). In fact, under the VIRO framework (Barney, 1991), resources must be bundled and fit within the organization’s cultural context in order to lead to competitive advantage. Consequently, in the case of inter-firm resources in strategic alliances, organizational compatibility is an important relational resource that enhances business performance. Furthermore, organizations that are more compatible with one another are more likely to fully commit to and invest in these inter-organizational relationships (Dwyer et al., 1987; Morgan & Hunt, 1994). Thus, organizational compatibility helps form organizational social capital.

HYPOTHESIS DEVELOPMENT

The previous sections have developed two constructs that are central to the understanding of interpreneurship: strategic proactiveness and social capital. First, the degree of strategic proactiveness represents the internal capability of a firm to act entrepreneurially. Second, the organization’s relational resources allow the firm to leverage its entrepreneurial capabilities in its relationships with other firms. Each of these resource bases are thought to engender corresponding organizational capabilities. As Helfat (2003) notes “an organizational capability refers to an organizational ability to perform a coordinated task, utilizing organizational resources, for the purpose of achieving a particular end result.” Providing greater specificity, Amit and Schoemaker (1993) refer to capabilities as tangible or intangible assets, which have the following characteristics: firm-specific, created over time through complex interactions among the firm’s resources, and based on developing, carrying, and exchanging information through the firm’s human capital. The marketing literature uses the term “competence” to refer to the same construct and defines a competence as higher-order, socially complex, interconnected, combinations of basic resources in that they are knowledge-based skills and abilities to combine, accumulate, and leverage existing stocks of resources (Hunt & Arnett, 2003; Hunt, 2000). Each of these definitions highlights the role of accessing and combining resources that result in the development of capabilities. This view is consistent with a
broader conception of Schumpeter’s (1934) entrepreneurial innovation as resulting from new combinations.

Schumpeter (1934) defined entrepreneurship as new combinations including doing new things or the doing of things that are already being done in a new way. He included examples of new combinations such as: (1) introduction of new good, (2) new method of production, (3) opening of a new market, (4) new source of supply, and (5) new organization. Previously, we discussed the role of resource combination in the development of capabilities. In extending Schumpeter’s (1934) concept of entrepreneurship as new combinations, it can be argued that the most basic combination is that of resources and/or capabilities. Consequently, an interpersonal capability is the consequence of the combination of strategic proactiveness and organizational social capital. Innovation contributes to the dynamism of competition and the creation of value. An interpersonal capability is an intangible, socially complex capability that organizations leverage in order to innovate and is created by combining entrepreneurial and relational capabilities. In this case, the combining of entrepreneurial (e.g., proactiveness) and relational (e.g., social capital) resources results in an innovative, interpersonal capability. This is modeled as an interaction-only effect (e.g., Lumpkin & Dess, 1996; Boal & Bryson, 1987) and stated formally as (see Fig. 1):

\[ H_1. \text{ An interpersonal capability is formed by the interaction between strategic proactiveness (formed by operational proactiveness and market proactiveness) and social capital (formed by organizational trust, commitment, and compatibility).} \]

The basic argument of this study is that entrepreneurial factors (e.g., operational proactiveness, market proactiveness) interact with certain relational processes or factors (e.g., trust, commitment, and organizational compatibility) for firms trying to gain competitive advantage and venture growth via strategic alliances with their preferred organizational customers (see Fig. 2). Consequently, the expectation is that small changes in either construct result in large changes in performance, which support the synergistic effects of resource combination (Hunt, 2000; Dierickx & Cool, 1989; Amit & Schoemaker, 1993; Black & Boal, 1994).

Strategic proactiveness entails market and operational action aimed at developing and disseminating value-added resources to customers and end consumers (Lumpkin & Dess, 2001). Social capital is especially important as more of the resources needed to take a product from development to market lie outside of a single organization (Lesser, 2000). Consequently, social capital is central to resource exchange and combination between actors and
Fig. 1. Interpreneurship Capability: Higher-Order Measurement Model.

Fig. 2. Hypothesized Interaction-only Model.
results in product innovation (Tsai & Ghoshal, 1998; Nahapiet & Ghoshal, 1998). Social capital facilitates action by actors (Coleman, 1988) with direct ties (Sandefur & Laumann, 1988; Walker et al., 1997), such as those between vertical alliance partners. Thus, the alliance relationship is critical for the strategic proactiveness of supplier firms to be useful and result in marketplace actions. Vertical relationships characterized by organizational trust, commitment, and compatibility are appropriaible, meaning a supplier’s relationships with customer firms act as a conduit for proactive behavior to positively affect supplier performance outcomes. In order to optimize the success of product and service offerings, supplier firms must have vertical linkages to populations of end-users having need for the offering (Kotabe, Martin, & Domoto, 2003; Helfat & Raubitschek, 2000). Strategically proactive firms are better able to access marketplace consumers when social ties with their direct customers – who serve as intermediaries linking them to end consumer bases – are strong. Conversely, strategically proactive firms without social capital are able to develop resources with significant market value (Lumpkin & Dess, 2001), but rendered unable to fully leverage marketplace opportunities due to the weakness of their customer linkages (Uzzi, 1996). Thus, strategic proactiveness and social capital each represent necessary but insufficient conditions for business-level success; both conditions must be present in order for firms to perform optimally, especially in vertical alliances where the customer firm holds a significantly powerful position in its own industry (i.e., holds disproportionate market share).

In vertical alliances with customers, one might expect that the interaction between strategic proactiveness and social capital will result in significant competitive and economic advantages based on the preceding discussion. Such firms should experience enhanced sales growth as a result of increased exchange with end-users (Uzzi, 1996, 1997). Formally stated:

**H2.** The interaction between strategic proactiveness and social capital will be positively associated with the supplier sales growth.

Strategically proactive suppliers also may expect greater than normal competitiveness due to their access to higher quality, asymmetric information (Lin, 2001). Social capital has an intangible character compared to other forms of capital (e.g., financial) (Bourdieu, 1986; Coleman, 1988). Additionally, the literature both theoretically and empirically supports linkages between social capital and organizational knowledge and product innovation (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998), and has described social capital as a key enabler of innovation in science and
technology (Fountain, 1998). Thus, product and service innovation, the ultimate goal of strategic proactiveness, is central to supplier firms’ ability to compete, especially since this competition occurs in the consumer markets of their customers. Therefore:

**H₃.** The interaction between *strategic proactiveness* and *social capital* will be positively associated with the *supplier’s competitive advantage*.

Strategic proactiveness and social capital interactions may also have positive impacts on the performance of the customer firm. Proactive suppliers monitor a wide range of environmental conditions and events, in search of new product and service opportunities that generate customer demand (Lumpkin & Dess, 1996). In fact, Uzzi’s (1997) study of suppliers and buyers found that social capital from embedded relationships caused both firms to forgo short-term, market transactions for long-term relationships of mutual consideration and obligation, thereby making supplier resources available to the customer. Therefore, via social capital, new offerings become available to the customer firm (Uzzi, 1996, 1997; Granovetter, 2005). The increase in available market offerings tailored to the customer firm’s consumer base allows the customer firm to offer greater perceived service levels to end-users (Bruyneel, Dewitte, Vohs, & Warlop, 2006). Thus, customer firms can leverage strategic proactiveness–social capital interactions for competitive advantage. Formally stated:

**H₄.** The interaction between *strategic proactiveness* and *social capital* will be positively associated with *customer’s competitive advantage*.

**METHODOLOGY**

The unit of analysis for this study is the collective set of supplier business units or profit and loss centers of employees acting as “enterprise teams” (see Fig. 7). Organizations internally construct enterprise teams or business teams at the interface between the supplier and their preferred customers in order to implement the front-end of the front-back organizational structure (Galbraith, 2002, 2005). The enterprise teams included in the current study interact with one to four preferred customers and serve as a relational conduit between preferred customers and the supplier firm. The focal enterprise teams have a great deal of autonomy and are multifunctional with sales, marketing, production, finance, information technology, and logistics represented within the general skill set.
Sample

Given the difficulty of gathering dyadic data, we enlisted the assistance of a large global consumer products manufacturer that uses enterprise teams to serve its key customers. The manufacturer agreed to: (1) supply us with information regarding its enterprise teams, (2) provide us with access to enterprise team members and their direct (and indirect) team leaders, and (3) encourage its key customers to participate in the study. Enterprise teams typically function as stand-alone, modified profit centers, much like an SBU and operate as a mini-business (Macy, Arnett, & Wilcox, 2003; Arnett, Macy, & Wilcox, 2005; Macy, forthcoming). The manufacturer in this study has 44 enterprise teams in North America, each assigned to one or more key customers, which represent the largest retailers in North America. Since the manufacturer considers each enterprise team to be a separate business (i.e., a modified profit/loss center) for the organization, it gives considerable discretion concerning how it operates (i.e., the processes, procedures, and structure that it uses).

Four of the supplier enterprise teams elected not to participate in the project. Therefore, 40 usable responses (91%) were acquired from the supplier side of the dyad. Given that social capital is a key concept in this study, and that establishing validity of the social capital measure requires data from the customer, key customers corresponding to the 40 remaining enterprise teams were contacted and asked to participate. Of the 40 customers contacted, 75% agreed to participate in the study, resulting in 30 buyer-supplier pairs. Key respondents identified in each customer organization were responsible for coordinating their firm’s relationship with the supplier’s enterprise team. The titles of the customer-firm respondents include vice-president of merchandising, vice-president of purchasing, vice-president of procurement, head of category management, and vice-president of marketing. Following the pairing process, data related to sales growth for the 30 enterprise teams were obtained from the manufacturer as an objective performance measure.

The sizes of the enterprise teams vary directly with the size of key customers. The average enterprise team consists of 48 people, ranging from a minimum of 20 to a maximum of 108. The average enterprise team member has worked for the supplier for 7 years (sd = 1.54), is 39 years of age (sd = 3.57), and is paid $84,000 (sd = $11,000) annually. The supplier uses a three-tier system to rate the success of its enterprise teams as a whole (bottom, median, and exemplar). Of the enterprise teams included in the final sample, 9 were “bottom,” 11 were “median,” and 10 were “exemplar.”
The current study found no differences for constructs based on any enterprise team or individual characteristics. All customer interviews were one-on-one.

**Data Collection**

All data were gathered through structured interviews. Multiple respondents were interviewed from each of the supplier firm’s enterprise teams to remove common-method bias. Respondents included the business unit leader and multiple individual members. In addition to the two types of individual interviews collected, a group of members not interviewed individually was convened for each enterprise team. This group, interviewed collectively, agreed on the answer to each interview item.

**ITEM MEASUREMENT**

*Strategic proactiveness* (Fig. 1) was conceptualized as a higher-order construct consisting of two formative dimensions. The first dimension, *market proactiveness*, was tapped using the self typing paragraph approach in which a Prospector “pureness score” is computed with respect to the four Miles, Snow and Meyer (1978) archetypes as performed by Doty and Glick (1994) and Fox-Wofgramm, Boal, and Hunt (1998). This method was further validated by James and Hatten (1995). The second dimension, *operational proactiveness*, was measured using a summated scale containing five items as developed by Hyatt and Ruddy (1997). Each dimension was used as a formative indicator for the strategic proactiveness construct.

*Social capital* was conceptualized as a higher-order construct consisting of three formative dimensions (see Fig. 1). All of the social capital measures come from the structured interviews with 30 customer firms. Therefore, the customer firms are responding to questions about their level of organizational trust, commitment, and compatibility with their key supplier. The first dimension, *customer trust*, was computed using a single item. The second dimension, *customer commitment*, was measured using a summated scale containing five items as developed by Morgan and Hunt (1994). The third formative dimension, *customer organizational compatibility*, was measured using a summated scale containing five items as developed by Bucklin and Sengupta (1993) and Ruekert and Walker (1987).

Business outcomes included customer and supplier competitive advantage, as well as hard record data of the suppliers’ sales growth over time.
**Analysis and Results**

The analysis chosen for this study is Partial Least Squares (PLS) analysis as developed by Wold (1980). PLS offers a number of advantages for this study: (1) it can be used to estimate models that use both formative and reflective indicators; (2) it does not suffer from indeterminacy problems like other causal modeling techniques (e.g., covariance analysis techniques using EQS or LISREL); (3) it is a nonparametric technique and, therefore, does not assume normality of the data; and (4) it often allows researchers to work with more complex models than other causal modeling techniques. Each of these advantages apply in the case of the current study. In addition, PLS analysis accommodates small sample sizes. Chin (1998) suggests that PLS sample sizes should be at least equal to the larger of the following: (1) five times the scale with the largest number of formative indicators, or (2) five times the largest number of structural paths directed at any one
construct in the structural model (Chin, 1998). Following this rule of thumb, the minimum allowable sample size for this study is 30. (There are six items in interpreneurship construct.) Therefore, our sample size \((n = 30)\) is acceptable.

A final strength of PLS is the ability to detect and accurately estimate the strength of interaction effects. Chin et al. (1996) posit that PLS yields more accurate estimates of interaction effects by accounting for additional incremental measurement error. The results of the Monte Carlo simulation conducted by these authors show that multiple regression under conditions of measurement error consistently underestimates the true interaction effects. However, the authors found that PLS provided closer estimates of the true interaction effects. Rather than assuming equal weights for all indicators of a scale, the PLS algorithm allows each indicator to vary in how much it contributes to the composite score of the latent variable. Thus indicators with weaker relationships to the related construct are given lower weightings. In this sense, PLS is preferable to techniques such as regression that assume error-free measurement (Wold, 1982, 1985, 1989).

**Measurement Model**

The psychometric properties of the constructs and their measures are assessed using approaches developed by Arnett, Laverie, and Meiers (2003). In PLS analysis the measurement model is tested within the imposed structure of the hypothesized model (Barclay, 1991). Table 1 shows the means, standard deviations, and correlations among the variables. Table 2 shows the reliability and variance extracted for the reflective measures. All internal consistency measures for the reflectively measured constructs are above the .70 level set by Nunnally (1978). Therefore, the scales demonstrate internal reliability.

Table 3 contains the results of the measurement model and supports Hypothesis H1. Strategic proactiveness is being driven by the market proactiveness dimension \((\beta = .98, \ p < .01)\). The social capital construct is being driven largely by the organizational compatibility dimension \((\beta = .90, \ p < .01)\) with some significance with the trust measure \((\beta = .34, \ p < .10)\). The interpreneurship construct, which was modeled as the interaction between strategic proactiveness and social capital, has more consistent measurement results. All but one of the product indicators are significant at .05 level and most are significant at the .01 level. The interaction term displays strong measurement properties.
Table 1. Means, Standard Deviations, and Correlations.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Strategic Proactiveness</th>
<th>Operational Proactiveness</th>
<th>Trust</th>
<th>Commitment</th>
<th>Organizational Compatibility</th>
<th>Sales Growth</th>
<th>Supplier's Competitive Advantage</th>
<th>Buyer's Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market proactiveness</td>
<td>.51</td>
<td>.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational proactiveness</td>
<td>5.09</td>
<td>.56</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>5.6</td>
<td>.90</td>
<td>.08</td>
<td>-.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>5.13</td>
<td>.82</td>
<td>.23</td>
<td>-.06</td>
<td>.82**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational compatibility</td>
<td>4.22</td>
<td>1.39</td>
<td>.05</td>
<td>-.25</td>
<td>.67**</td>
<td>.60**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales growth</td>
<td>.05</td>
<td>.03</td>
<td>.36</td>
<td>.23</td>
<td>.22</td>
<td>.22</td>
<td>.39*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier's competitive advantage</td>
<td>4.87</td>
<td>.54</td>
<td>.40*</td>
<td>.09</td>
<td>.28</td>
<td>.33</td>
<td>.10</td>
<td>.50**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buyer's competitive advantage</td>
<td>4.91</td>
<td>.96</td>
<td>.28</td>
<td>.24</td>
<td>.10</td>
<td>.07</td>
<td>.08</td>
<td>.33</td>
<td>.33</td>
<td>.15</td>
</tr>
</tbody>
</table>

*Correlation is significant at 0.05.
**Correlation is significant at 0.01.
In addition to the commonly invoked $R^2$ statistic, a $Q^2$ statistic, which represents the Stone-Geisser test of predictive relevance (Geisser, 1975; Stone, 1974), is utilized to assess and compare the results of the structural

### Table 2. Reliability of Reflective Measures.

<table>
<thead>
<tr>
<th>Component</th>
<th>Standardized Reliability</th>
<th>Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial orientation components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic proactivenessa</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Operational proactiveness</td>
<td>.77</td>
<td>.78</td>
</tr>
<tr>
<td>Relational social capital components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>.70</td>
<td>.53</td>
</tr>
<tr>
<td>Trusta</td>
<td>N/A</td>
<td>.66</td>
</tr>
<tr>
<td>Organizational compatibility</td>
<td>.82</td>
<td>.74</td>
</tr>
<tr>
<td>Supplier competitive advantage</td>
<td>.78</td>
<td>.56</td>
</tr>
<tr>
<td>Customer competitive advantage</td>
<td>.70</td>
<td>.54</td>
</tr>
</tbody>
</table>

*aSingle indicant.

### Table 3. Properties of Measurement Model for Formative Measures.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Standardized Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic proactiveness</td>
<td></td>
</tr>
<tr>
<td>Market proactiveness</td>
<td>.98***</td>
</tr>
<tr>
<td>Operational proactiveness</td>
<td>.38</td>
</tr>
<tr>
<td>Social capital</td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>.34*</td>
</tr>
<tr>
<td>Organizational compatibility</td>
<td>.90***</td>
</tr>
<tr>
<td>Commitment</td>
<td>.19</td>
</tr>
<tr>
<td>Interpreneurship (strategic proactiveness × social capital)</td>
<td></td>
</tr>
<tr>
<td>Trust × operational proactiveness</td>
<td>.68***</td>
</tr>
<tr>
<td>Trust × market proactiveness</td>
<td>.63**</td>
</tr>
<tr>
<td>Organizational compatibility × operational proactiveness</td>
<td>.55***</td>
</tr>
<tr>
<td>Organizational compatibility × market proactiveness</td>
<td>.74***</td>
</tr>
<tr>
<td>Commitment × operational proactiveness</td>
<td>.32*</td>
</tr>
<tr>
<td>Commitment × market proactiveness</td>
<td>.60**</td>
</tr>
</tbody>
</table>

*a $p<0.10$.

** $p<.05$.

*** $p<.01$.

### Structural Model

In addition to the commonly invoked $R^2$ statistic, a $Q^2$ statistic, which represents the Stone-Geisser test of predictive relevance (Geisser, 1975; Stone, 1974), is utilized to assess and compare the results of the structural
model (Arnett et al., 2003). Rather than utilizing one sample to estimate the model parameters and another to assess the validity of the estimates, the $Q^2$ statistic is computed by a jackknifing procedure that repeatedly splits the data set at hand into an “estimation set” comprising $n-1$ cases and a “confirmation set” involving just one case (Stone, 1974). Thus, the $Q^2$ statistic can be interpreted as an $R^2$ value evaluated without loss of degrees of freedom (Wold, 1982) and indicates to what extent the cross-validation was successful for the analyzed data set. A negative $Q^2$ value indicates that the trivial prediction in terms of the sample mean of the outcome variable is superior to predictions derived from the tested model equation and generally indicates an outcome of considerable variation or instability of parameter estimates if individual cases are deleted. On the other hand, with positive $Q^2$ values, the tested model relation has more predicative relevance the higher the $Q^2$ values are (Wold, 1982). Table 4 contains the results of the structural model.

**RESULTS**

*Hypothesized Model (Model 1)*

The results reveal that 100% of the estimates of the structural paths ($\beta$) are significant. Supplier sales growth is related positively ($\beta = .48$, $R^2 = 36\%$, $Q^2 = .08$) to the interaction between strategic proactiveness and social capital, supporting H2. In addition, the interaction between strategic proactiveness and social capital is significantly, positively related to the

<table>
<thead>
<tr>
<th>Variables</th>
<th>Supplier</th>
<th>Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sales growth</td>
<td>Competitive advantage</td>
</tr>
<tr>
<td>$\beta$</td>
<td>$R^2$</td>
<td>$Q^2$</td>
</tr>
<tr>
<td>Strategic proactiveness $\times$ social capital</td>
<td>0.48**</td>
<td>0.36</td>
</tr>
</tbody>
</table>

* $p<.05$.
** $p<.01$.
supplier’s competitive advantage ($\beta = .98$, $R^2 = 30\%$, $Q^2 = .21$) and buyer’s competitive advantage ($\beta = .64$, $R^2 = 24\%$, $Q^2 = .14$), which provides support for H3 and H4.

The results are largely consistent with existing EO and alliance research. Both EO and social capital consistently possess strong relationships to organizational performance. However, existing research generally only includes objective or perceptual performance measures, whereas this study includes both. In addition to the supplier’s sales growth and competitive advantage, a measure of the customer/buyer’s competitive advantage was included as an organizational performance construct. Research has yet to examine if the level of EO in one organization has any relationship to the performance in another organization. These results indicate that the relationship between the interaction of strategic proactiveness and social capital is significantly positive for all three performance measures (supplier’s sales growth, supplier’s competitive advantage, and customer/buyer’s competitive advantage).

**Supplementary Analyses**

We performed additional statistical analyses due to the exploratory nature of the study by testing two other models. The hypothesized model (see Fig. 2) conceptualizes social capital and entrepreneurship as an interaction without any main effect. However, two other alternative, competing models could possibly exist, namely (a) one positioning social capital as a mediator (Model 2, Fig. 3) and (b) one suggesting a direct relationship with the dependent variables (Model 3, Fig. 4).

Competing models are especially appropriate for exploratory analysis, such as the study proposed herein, when research on a construct suggests differing relationships with other constructs. For example, the marketing literature tends to position relational constructs as mediators. Examples of relationally oriented mediators in empirical marketing studies include Morgan and Hunt’s (1994) key mediating variable model using trust and commitment as mediators; long-term orientation as a mediator in Kalwani and Narayandas (1995); trust and cooperation as mediators in Anderson and Narus (1990); and trust and cooperation as mediators in Smith and Barclay (1997). Therefore, Model 2 (see Fig. 3) treats social capital as a mediating variable.

In addition to a mediating model, an alternative competing model would be social capital having a direct relationship with performance variables (see Fig. 4). The management literature tends to use relational constructs (e.g., social capital, organizational trust) as having a direct effect on
organizational performance. Examples of relationally oriented constructs having direct effects include the use of social capital as a direct effect by Nahapiet and Ghoshal (1998) in the development of intellectual capital within organizations; organizational social capital as a driver of alliance formation by Chung, Singh, and Lee (2000); commitment, trust, joint problem solving, and information sharing between organizations having a direct effect on the success of an alliance by Monczka et al. (1998); having

Fig. 3. Competing Model with Social Capital as a Mediator (Model 2).

Fig. 4. Competing Model with Social Capital as a Direct Relationship (Model 3).
had a prior organizational relationship, similarity between organizational partners, organizational partner reputation, and shared decision making having a direct effect on alliance outcomes by Saxton (1997); and organizational trust having a direct effect on risk perception in strategic alliances by Das and Teng (2001, 1998).

The competing model approach provides an analytical technique to compare and test the three models that have some degree of theoretical support. This study argues that social capital and EO (proactiveness) are both sufficient and necessary conditions for the organizational units in this study. Therefore, a relationship, even a significant one, can exist between the independent constructs (firm-level entrepreneurship and social capital) and dependent constructs (firm performance) as prior research supports. However, the argument in this study is for organizations involved in alliances with their customers; the interaction between the strategic proactiveness and social capital will prove to have the strongest relationship with the organizational performance constructs, which is somewhat contrary to existing research in marketing and management.

Mediation Model (Model 2)

The mediation model positions social capital as a mediator between strategic proactiveness and organizational performance (see Table 5). All path estimates (Betas) are significantly positive. Additionally, this model accounts for 15% of variance in sales growth, 22% of the variance in supplier’s competitive advantage, and 15% of the variance in the buyer’s competitive advantage. The $Q^2$ statistics are all positive for the mediating

<table>
<thead>
<tr>
<th>Variables</th>
<th>Social Capital</th>
<th>Supplier</th>
<th>Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$R^2$</td>
<td>$Q^2$</td>
</tr>
<tr>
<td>Strategic proactiveness</td>
<td>.32</td>
<td>.10</td>
<td>-.07</td>
</tr>
<tr>
<td>Social capital</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$.  
** $p < .01$.  

Table 5. Results of PLS Analysis – Mediated Model.
model’s organizational performance constructs, as well. However, the $Q^2$ statistic for social capital is negative ($Q^2 = -.07$), which indicates the model lacks predictive relevance for the social capital construct.

**Direct Effects Model (Model 3)**

The direct effect model links strategic proactiveness and social capital directly to organizational performance (see Table 6). The direct effects model accounts for 20% of the variance in sales growth, 24% of supplier’s competitive advantage, and 19% of the buyer’s competitive advantage. The model lacks predictive relevance for supplier sales growth ($Q^2 = -.20$) and buyer’s competitive advantage ($Q^2 = -.04$). None of the six paths (Betas) in the direct effects model is significant.

These results provide support for the interaction-only model having the best performance of the three tested models. We made the argument that the interaction between social capital and strategic proactiveness would have a strong, positive relationship to the supplier’s sales growth (supporting H2), supplier’s competitive advantage (supporting H3), and the buyer’s competitive advantage (supporting H4). The findings ultimately supported all three of these hypotheses. Following the testing of the hypothesized interaction-only model, we tested two alternative models (i.e., mediating and direct effects models). While the models were essentially exploratory due to lack of existing theory, we expected the interaction-only model to have the strongest relationship to the performance measures. By comparing the $R^2$ and $Q^2$ statistics of the three models, it is clear that the direct effects and mediating models lack explanatory power when compared to the interaction-only model.

**Table 6.** Results of PLS Analysis – Direct Effects Model.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Supplier</th>
<th>Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sales growth</td>
<td>Competitive advantage</td>
</tr>
<tr>
<td></td>
<td>$\beta$</td>
<td>$R^2$</td>
</tr>
<tr>
<td>Strategic proactiveness</td>
<td>.38</td>
<td>.20</td>
</tr>
<tr>
<td>Social capital</td>
<td>.29</td>
<td>.21</td>
</tr>
</tbody>
</table>

* $p < .05$.
** $p < .01$. 
DISCUSSION

We defined the term “interpreneurship” as the combining or bundling of entrepreneurial resources with relational resources. The basic argument of this study is that macro-business, entrepreneurial factors (e.g., strategic proactiveness) interact with relational processes or factors (e.g., organizational trust, organizational commitment, and organizational compatibility) for firms trying to gain competitive advantage via strategic alliances with their preferred organizational customers. Support was found for the multiplicative effect of EO and relational social capital on organizational performance, by examining the effects of organizational social structure on the relationship between EO and organizational performance. As a result, small changes in either construct result in significant changes in performance, which supports the synergistic effects of resource combination.

The RBV literature has identified multiple sources of competitive advantage, including both the nature of the resource(s) and the management of resources. A common prescription is for firms to develop resources “in-house” based on the internal analysis of the firm because a firm’s heterogeneity is based on its endowment of resources (Barney, 1986; Dierickx & Cool, 1989). However, research that focuses on the management processes related to resources is significantly under-researched and suggests a theory of firm entrepreneurship. The various organizational processes of combining of resources, network relationships of resources, and accumulation of resources are all types of managerial processes that impact the ultimate value of resources (Dierickx & Cool, 1989; Barney, 1986; Teece, Pisano, & Shuen, 1997; Wenerfelt, 1984; Amit & Schoemaker, 1993; Black & Boal, 1994).

This chapter finds more support for conceptions of resource-based competitive advantage that focus on the relationships between resources (e.g., Black & Boal, 1994; Amit & Schoemaker, 1993) rather than the nature of resources. Most significant are the processes by which managers develop and combine resources. While entrepreneurial resources and relational resources meet the VIRO framework set forth by Barney (1991), they do not appear to have independent effects on the competitive advantage of an organization. What appears to be most important to creating a competitive advantage and increasing sales growth is the managerial processes, systems, and strategies of combining resources and/or capabilities, which represent the core concept of the interpreneurial activity recommended herein.

In addition to the process of combining resources, we found the effect that resources and capabilities have upon one another is important. Hunt (1997,
p. 437) defines resources as “tangible and intangible entities available to the firm that enable it to produce efficiently and/or effectively a market offering that has value to some market segment(s).” Thus, the “resource-advantage theory” concept explicated by Hunt (1997) expands the view of resources to include any entity that has an “enabling capacity.” An organization’s EO provides this enabling capacity. In a similar fashion, relationships with customers can provide an enabling capacity that is available to, rather than owned by, the supplier firm. By using measurements of the quality of network ties between organizations, rather than only the number of external ties, the study finds that the strategic relationships between organizations strongly relate to the performance of both organizations. However, the study finds that the quality of the close-knit relationships between organizations (i.e., relational social capital) is a necessary, but not sufficient, condition for both organizations’ competitive advantage. Again, we find that the process of managing resources and capabilities goes beyond simple ownership. Managerial processes that combine and extend existing stocks of resources and capabilities were found to be the strongest source of competitive advantage and financial performance.

Our research not only provides insight into the RBV literature, but also extends existing theory in the areas of knowledge and competitive advantage. As one researcher noted, “…so long as we assume markets are reasonably efficient … it follows that competitive advantage is more likely to arise from the intangible firm-specific knowledge which enables it to add value to the incoming factors of production in a relatively unique manner” (Spender, 1996, p. 46). For the supplier business units in our sample, being proactive was an insufficient condition to produce competitive and economic results. Competitive advantage for the buyer and supplier was the consequence of both proactive behavior and social capital. Previous social capital research has explored its role in producing organizational knowledge (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998). Proactiveness has to do with the creation of resources (Lumpkin & Dess, 2001). Our research suggests that the combination of social capital and proactiveness provides each alliance partner with a competitive advantage. The process of combining these factors results in socially complex, intangible knowledge resource.

Research in contingency theory has provided significant support for the notion that structure is contingent upon strategy. Recent research has argued that the process involves “structural adaptation to regain fit (Donaldson, 1987, p. 1)” when new strategies are implemented. Where there is misfit between the firm’s strategy and structure, a misfit penalty is
likely to exist for the organization (Gresov & Drazin, 1997). Additionally, theorists have suggested that environment adversity may hasten structural adjustment, because lack of exogenously created slack does not allow mismatch to continue (Chandler, 1962; Child, 1972; Williamson, 1970). This process of regaining fit has significant effects on the financial performance of firms (Payne, 2006). Consequently, there is strong evidence that changes in strategy require changes in organizational structure. In the concluding section we explore the practice of implementing strategies based on an interpreneurial capability.

IMPLEMENTING INTRAPRENEURSHIP: EVIDENCE FROM PRACTICE

“The powerful forces of globalization are fundamentally changing the nature and dimensions of strategy (Eisenhardt, 2002, p. 88).” Global organizations are facing massive amounts of instability, complexity, and change. Neoclassical economics has given way to Austrian and Schumpeterian economics that are more able to deal with disequilibrium, the inner workings of the firm, and entrepreneurship. We have argued for the combination of entrepreneurial and relational capabilities that result in a higher-order capability referred to as interpreneurship. In this section we examine firms that appear to have interpreneurial capabilities.

ABB

ABB is a manufacturing and service firm specializing in electrical products and services. ABB was formed from the merger of two companies in 1988 and resulted in 1,000 companies with 5,000 business teams as profit centers. ABB was originally characterized by autocratic leadership at the top of the organization. As ABB experienced mounted competitive pressure to become more efficient and entrepreneurial, it began to push decision making to lower business units in the organization and develop closer relationships with its customers. ABB’s sales grew from $17 billion to more than $30 billion in 4 years (1993–1997). In 1997 alone, sales grew 14%. This was accomplished by proactively entering many countries, especially Eastern Europe. ABB was then able to leverage its close customer relationships and provide services to these customers that entered countries behind ABB.
Consequently, ABB’s business strategy consisted of being a first mover geographically.

The interpreneurship concept provides a likely explanation for why the changes ABB implemented improved performance so dramatically. By combining entrepreneurial initiatives with a stronger reliance on social capital in decision making, the company was able to strengthen customer relationships “at the local level” which enhanced their ability to succeed as they entered heterogeneous markets. Although this proactive business model represents a process innovation rather than a product innovation, it created a unique competitive advantage for ABB and its key customers. By creating an entrepreneurial climate and developing mutual interdependencies with customers, ABB was able to be an early mover and to provide services to its customers as they entered new countries in which ABB was already present (Galbraith, 2005).

**Procter and Gamble (P&G)**

In the late 1980s, large retailers began to exercise power and demanded such things as a single interface and just-in-time supply. P&G made two critical changes to its structure (see 2006 P&G annual report, pp. 4–6). The first change was a change in their micro-structure (enterprise teams) in 1989. Before their redesign in 1998, P&G relied on selling teams consisting solely of sales people focused on category management (see Fig. 5). After their worldwide redesign, multifunctional enterprise teams were intentionally designed to consist of sales, market development, finance, product supply, logistics, and HR employees (see Fig. 6). These business teams were mirrored by its key customers. For example, if Wal-Mart experienced a logistics problem, the logistics person on the P&G enterprise team would be contacted. This resulted in a large customer having to deal with a single business unit, their respective enterprise team, rather than possibly having to deal with 2,380 organizations (17 SBUs × 70 product groups × 2 matrix organizations). This resolved a number of problems such as time to respond to customers, communication, coordination, interface, integration, power/ control, and matrix complexity.

P&G did another redesign in 1998. This second major change was in their macro-structure. P&G was organized in a matrix structure around 17 geographic SBUs and 70 Product groups from 1980 to 1998. As North American retailers (e.g., Wal-Mart, Target) began to exert more control and grow into global firms, P&G subsequently reorganized into a global
business units (GBUs) structure that is designed to sell a set of products on a
global basis. Currently P&G comprises six global product GBUs and one
market development organization, which has resulted in global pricing,
global sourcing, and global customer business development. In order to be
capable of responding to their largest customers (e.g., Wal-Mart, Target,
Kroger), enterprise teams were designed to manage all business with their
respective key customer (see Fig. 7).

These major changes in structure allowed P&G to leverage its key
customer relationships more fully and manage a customer’s business at the
enterprise team level rather than going to SBUs. The enterprise teams were given autonomy and made into and referred to as profit centers, which resulted in an increase in North American net outside sales dollar volume by 6% and case volume by 4%, while sales-related costs remained constant. P&G also increased customer commitment and satisfaction, also increasing product development. P&G’s interpreneurial capability has resulted in some retailers, such as Wal-Mart, to outsource the management of their product categories and aisles to P&G.

**CONCLUSION**

As contingency theory would predict, the firms chosen to illustrate the managerial practice of interpreneurship have unique structures that allow them to leverage entrepreneurial and relational factors. The research in this chapter has presented the argument that interpreneurship creates a competitive advantage by combining a firm’s entrepreneurial capability with its inter-organizational relationships. Our statistical results and anecdotal evidence from existing firms provides strong support for the interpreneurship capability. The forces of globalization will continue to drive change and require innovative business practices. One way in which firms can deal with competitive pressures is to leverage entrepreneurial capabilities through their inter-organizational relationships.

The entrepreneurship capabilities demonstrated through the above firm’s inter-organizational relationships can be best depicted by the current CEO (A.G. Lafety) of P&G in their 2006 Annual Report. He states:

> We get the full value of the Company's strengths with a unique organizational structure and supporting work systems. P&G is the only consumer products company with global business unit profit centers, a global market development organization, and global shared business services, all supported by innovative corporate functions …

The primary benefit of allowing business units to focus singularly on consumers, customers, and competitors in their individual categories is evident in the growth of
P&G's Skin Care, Oral Care, Feminine Care, and Home Care businesses. These four businesses have delivered 11% average sales growth over the past six years, adding nearly $1 billion per year in sales since the beginning of the decade. In the old structure [prior to 1998], and with past strategies, these businesses were not a priority. They did not get full attention from business leaders who had to keep core businesses growing while also supporting all the go-to-market and business services activities that were vertically integrated within the business units.

In the much more agile, flexible, and responsive current structure, these limitations have been stripped away and businesses such as Skin Care and Home Care have become strong global businesses in their own right, with the resources and focus necessary to grow. Their growth potential has been unleashed, and these businesses have emerged as disproportionate growth drivers – even as core businesses such as Fabric Care, Baby Care, and Hair Care have continued to grow ahead of their categories simultaneously.

Organizational structure can be a liability, particularly for large, diversified multinational companies. By linking structure so tightly with strategies and strengths, we have made organization design and supporting business systems critical enablers of sustainable growth.

This inter-organizational relationship is indeed a value-added capability (P&G 2006 Annual Report, p. 6).

ABB and P&G are just two among many firms that could attribute their success to an “interpreneurial” approach. IBM’s Insurance Research Center, which was created to bring researchers together with lead customers to develop applications for the insurance industry, provides another example. One result of this effort was to develop IBM’s insurance application architecture (IAA) that has been used with 40 different insurance and financial services companies. Again, this is an example of a firm that was enabled to capture new business by coupling its entrepreneurial abilities with key customer relationships to create a new capability. This new combination can be leveraged to achieve competitive advantage and venture growth. Interpreneurship, therefore, as a process that draws on both internal entrepreneurial skills and external strategic alliances, provides numerous promising avenues for future research.

**NOTES**

1. We use the term resources to refer to both resources and capabilities throughout this chapter, which is consistent with research addressing the RBV of the firm.
2. The ability to perceive and size new opportunities is the mechanism that corrects the market and brings it back toward equilibrium.
3. Our “market proactiveness” corresponds to Lumpkin and Dess’ (2001) “proactiveness”.
4. Referred to as the Construction of Cost Competitiveness for the 21st Century or “CCC21”.
5. From Doz and Hamel’s (1998) discussion in Chapter 2 of Alliance Advantage.
7. In PLS analysis, measurement paths for both reflective and formative scales are estimated. In contrast, in covariance structure analysis (using programs such as LISREL or AMOS), only the measurement paths for reflective scales are estimated.

REFERENCES


