PARTNERING ORIENTATION: A THEORETICAL EXPLICATION AND EMPIRICAL MEASUREMENT OF THE CONSTRUCT, ITS ANTECEDENTS, AND PERFORMANCE IMPLICATIONS

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By

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ABSTRACT

PARTNERING ORIENTATION:
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This dissertation investigates why certain firms are more successful at deriving competitive advantage through their alliances than others. The fundamental premise of the resource-based view of the firm, namely that differential firm performance is due to heterogeneity in firm capabilities, is extended to the transorganizational domain. Given that certain key strategic assets and capabilities may be transorganizational in nature, firms that can effectively augment their internal capabilities by accessing and integrating these externally-residing resources are likely to be advantaged. It is argued that herein lies an intangible firm capability.

The notion of *partnering orientation* (PO), conceptualized as a set of strategic behaviors that are associated with seeking of collaborative rents and dynamic enhancement of asset stocks, is introduced. PO is defined as organizational routines and processes that aim to proactively initiate resource augmenting linkages, manage these resource interfaces through relational governance mechanisms, leverage resources and capabilities across the portfolio of relationships, and creating a shared organizational know-how around collaborating experiences.

Four dimensions underlie a firm's PO, namely *proactive initiation, relational governance, alliance leveraging,* and *alliance learning.* While proactive initiation

preempts partners and their capabilities, it is a source of monopoly rents in imperfect strategic factor markets. Relational governance fosters cooperative behavior, while leveraging across multiple alliances enables synergy-creation between disparate resources and capabilities. Finally, creating organization-wide know-how from experiential learning creates strategic learning advantages.

The empirical results from the survey indicate support for the conceptualization of PO as a second order construct, and its hypothesized relationships with alliance, market, and financial performance. Also, top management commitment, the scope of the strategic planning process, and learning orientation emerge as drivers of PO. In addition, results indicate that heterogeneity and risk-taking propensity of the top management team are significantly related to partnering commitment, while structural variables, namely centralization, formalization, and integration influence the learning orientation of the firm.

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Dedicated with love and gratitude to Baba and Ma,
my wife Rupa,
our absolutely wonderful kids, Momo and Aeshna,
and the memory of my dear and beloved father-in-law Kaka.

Thank you all for your love and support. And for believing...

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CHAPTER 1

INTRODUCTION

The challenge of managing discontinuities resulting from a complex, interdependent, and turbulent global economy (Daft and Lewin 1993) has led to innovations in organizational forms and structures. The shift from "hierarchical capitalism" to "alliance capitalism" (Dunning 1995), and the syncretic competitive-cooperative imperative on firms (Lado, Boyd, and Hanlon 1997) reflect a recognition of the idea that some strategic assets and capabilities that may be key to competitive advantage, lie outside a firm's ownership and direct control. Being external to the firm, these strategic assets, or "the set of difficult to trade and imitate, scarce, appropriable and specialized *resources* and *capabilities* that bestow the firm's competitive advantage" (Amit and Schoemaker 1993, p. 36, italics in original), are termed as being transorganizational in nature (Achrol 1997).

This transorganizational competitive approach is accompanied by the emergence of an organizational form that scholars claim to be an "unique combination of strategy, structure, and management processes" (Miles and Snow 1986, p. 62). The proliferation of hybrid organizations with flexible and permeable boundaries (Borys and Jemison 1989) embedded within long-term relational exchange arrangements underscore the need to capture key shifts in firms' organizational processes and philosophical orientations from a theoretical perspective (Achrol 1997). Moreover, given the ubiquitous relevance of inter-firm partnering to the theory and practice of marketing, an organizational capability

to leverage alliances into improved competitive positioning is an issue worth investigating by marketing scholars (Webster 1992).

While industry and academia converge on the notion that partnerships are a key route to competitive advantage, recent research indicates that some firms consistently have higher success rates in their alliances than others (Harrigan 1988; Jones and Shill 1991; Sherman 1992). Researchers at Booz Allen & Hamilton report that some companies average substantially higher profitability and success rates in their alliances than others (Harbison and Pekar 1998), thus suggesting that some form of firm-level capability may be associated with partnering. In addition, the universal applicability of partnering along the entire value chain suggests that partnering may be a *meta-capability*, one that facilitates the development of a range of specific functional competencies and resources within a firm - be it R&D, product development, process engineering, global capability, or marketing. A fundamental set of questions thus arise: Why are certain firms more successful than others at deriving competitive advantage through their inter-firm alliances? What is the nature of partnering capability? How can we theoretically conceptualize and empirically measure it? What organizational processes constitute this capability? What are organizational enablers? And finally, how does partnering capability impact firm performance?

The notion of partnering capabilities is consistent with the assertions of strategy researchers working within the resource-based view (RBV) of the firm. Intangible competencies or invisible assets are becoming more relevant compared to traditional, tangible functional capabilities in production, R&D, finance, marketing, and logistics (Itami 1987; Hall 1992; Grant 1991; Amit and Schoemaker 1993). These intangible

strategic assets, related to reputation, learning, cross-functional integration, team-working, employee motivation, innovation, entrepreneurship, and intrapreneurship (see Dess, Gupta, Hennart, and Hill 1995), are based in socially complex behavior which "enable an organization to conceive, choose, and implement strategies because of the values, beliefs, and symbols, and interpersonal relationships possessed by individuals and groups" (Barney 1992, p. 44). Their causal ambiguity and resultant non-imitability render them as likely sources of sustained competitive advantage (Barney 1992). Given that partnering appears to involve socially complex behavioral processes, it seems plausible that one such overarching intangible strategic capability relates to how firms formulate and implement their partnering strategies.

How does one measure this capability? An organization has been conceptualized as a network of routines and processes (Nelson and Winter 1982). From a strategic choice perspective (Child 1972), firms can successfully undertake a partnership-based competitive approach through "purposeful enactment" (Van de Ven & Poole 1995). This enactment involves both intentions, and actions of key organizational players functioning in a dynamic generative process (Lumpkin and Dess 1996) that aims to create value through partnerships. Thus, it seems plausible that a strategic capability may be conceptualized in terms of organizational processes. A fruitful avenue of research is thus to identify, and examine key partnering related processes that enable a firm to create positional advantage in the market. This would enable the characterization of a strategic orientation that is focused on effectively leveraging alliances into improved competitive positioning. Being able to characterize such a firm orientation would also enable research

to progress toward building and testing a broader theory of partnership and investigate its relationship with performance.

In summary, this dissertation responds to numerous references made in both managerial and scholarly literature on the salience of partnering related capabilities, and investigates these issues within a broad and integrative theoretical framework. More specifically, the idea of a firm's *partnering orientation* (PO), conceptualized as a set of inter-related organizational routines and processes that reflect a firm's capabilities to access and integrate transorganizational strategic assets in its bid to improve its competitive positioning, is introduced.

PARTNERING CAPABILITY AND COMPETITIVE ADVANTAGE

In this section, the motivation for studying partnering related capabilities as a firm-level strategic asset is outlined. The rise of hybrid organizations reflects innovations in organization designs as firms struggle with discontinuities created by a volatile, interdependent, and information-intensive global economy (Daft and Lewin 1993). Inter-firm collaborations may be interpreted as such an innovation, one that presents firms with an alternate way to compete as they search for sources of sustainable competitive advantages. As eloquently captured by Ohmae (1989), "(G)lobalization mandates alliances, makes them absolutely essential to strategy" (p. 143). In a similar vein, Drucker (1995) suggests that the greatest change in the way business is being conducted is the accelerating growth of relationships that are based not on ownership, but on partnerships. The result has been a proliferation of various forms of partnerships, with domestic and international alliances growing by more than 25% annually (Bleeke and Ernst 1995). Simultaneously, there has occurred a virtual explosion of research on collaborations

(Ring 1996; Smith, Carroll & Ashford 1995). Smith et al. (1995) further predict that although cooperation has "long been recognized as crucial to the success of enterprises, there is evidence that its role will become even more important in the future" (p. 8).

Numerous cases illustrate the instrumentality of alliances in improving a firm's competitive position. Caterpillar's relationship with its dealers (Fites 1996), Corning's (Day 1995) and Toshiba's (Schendler 1993) proactive alliance-based corporate strategies, and the Japanese automobile manufacturers' relationships with their suppliers, are all part of the global partnering folklore.

Research suggests that not only is competitive advantage associated with partnering, but also that such gains may be sustainable. Thus, although it may be difficult to form a set of rules to systematically create and sustain competitive advantage based on organizational capabilities (Collis 1994), the argument that some firms "are much more successful at forming and sustaining alliances that contribute to their long-run competitive advantage" (Day 1995, p. 298), indicates that some form of capability or competency is associated with inter-firm collaborations. In other words, it is plausible that some firms are more adept at forming alliances with strong partners, developing and maintaining these relationships, and at weaving their corporate strategies around mutual strengths. Accordingly, these firms are able to generate higher value through their collaborations. Given the high degree of complexities surrounding partnering (Hamel, Doz, and Prahlad 1989), it is plausible that some firms may have developed a process of resource accumulation and deployment through certain behavioral and social processes that are critical to effective partnerships; processes that also satisfy the criteria of being rare, non-imitable, and non-substitutable (Barney and Zajac 1994; Barney 1991).

Partnering related capabilities have been identified as a core managerial concern. Conn and Yip (1997), in their survey of 35 CEOs from North American, European and Asia Pacific MNCs, report that more CEOs identy *developing partnering and alliance skills* as a critical challenge facing their organizations, than issues such as low-cost manufacturing, customer service, product-life-cycle management, etc. One CEO is also quoted as stating "(W)e have three interlinked capabilities: negotiating, developing contracts, and building relationships." In their seven-year longitudinal study of 50 strategic alliances, Slowinski, Seelig, and Hull (1996) observe the critical importance of 'partnering capability' for small firms. They report the case of a biotech firm with 130 employees and 13 alliances which views *partnering as its core competency* (p. 44). Dyer and Ouchi (1993), in their study of U.S. and Japanese automobile suppliers, conclude that U.S. firms need to develop partnering capabilities, or be at a competitive disadvantage in global markets. As will be noted later, a number of firms have also formed a separate alliance function with the specific mandate of developing an institutionalized and organization-wide alliance capability (Lambe and Spekman 1997).

The strategic importance of alliances has generated scholarly interest in partnering related skills and capabilities. Scholarship has emphasized the need to closely couple marketing with corporate strategy, and causally relate it to organizational effectiveness, so as to enhance marketing's contribution to the ensuing strategy dialogue regarding networks and alliances (Day 1992). The ubiquitous relevance of relationships to the theory and practice of marketing (Webster 1992; Hunt and Morgan 1995; Achrol 1997) has forefronted partnering-related capabilities as a core marketing issue. Doing so has prompted a reconceptualization of the field, with emphasis on skills that facilitate

relationship marketing in strategic network competition (Webster 1992) and which enhance a firm's ability to transcend into an ambidextrous and flexible transorganizational system, where the core managerial activity is one of boundary-spanning (Achrol 1991). Webster, noting the emergence of networks or "complex, multifaceted business structures which emerge due to multiple strategic alliances" (p. 8), asserts that a core competency of a network organization is its "ability to design, manage, and control strategic partnerships with customers, vendors, distributors, and others" (p. 9).

The idea of partnering capability is reflected through a variety of conceptualizations in the literature. For example, Hunt and Morgan (1995) identify *relational resources* as a key intangible, higher order capability that enables a firm to outperform competitors, while Webster (1992) notes that *relationship management skills* define the core competencies of some organizations. Recently, Gemunden and Ritter (1996), arguing that competencies, as they relate to networks, alliances, and interactions, have been largely neglected, present their conceptualization of *network competence* as "the knowledge and activities of a focal company to generate, develop, and manage technological networks in order to take advantage of interacting with external partners" (p. 46). Lambe and Spekman's (1996) *alliance competence,* and Simonin's (1997) *collaborative know-how,* are both recent efforts to capture experiential know-how as a determinant of alliance success.

More recently, management researchers have focused on the capability aspect of partnering. Madhok and Tallman (1998), using the term "collaboration technology" (p. 337), raise intriguing questions that mesh with the objectives of this research. They note

the need to investigate whether collaborating technology is a firm-specific capability in and of itself, how firms can acquire it, whether it is an *ex ante* or *ex post* phenomena, or both, and situations where it makes sense for firms to invest in value-seeking relational investments. Dyer and Singh (1998) refer to a firm's "relational capability" as its ability and willingness to partner, and identify the link between relational capability and generation of rents from alliances. However, they argue that relational capability is not a sufficient condition to realize relational rents, since these are generated through the joint, and idiosyncratic contributions of the partners. Gulati (1998) brings up the notion of firm's "cooperative capabilities" (p. 308), and argues:

> "Evidence suggests that there may be systematic differences in the cooperative capabilities that firms build up as they have more experience with alliances and that the extent of this learning may affect the relative success of those firms with alliances (Lyles 1998). This poses questions about what such capabilities are and what might be some systematic tactics firms use to internalize such capabilities. At least some of these capabilities include: identifying valuable alliance opportunities and good partners, using appropriate governance mechanisms, developing inter-firm knowledge sharing routines, making requisite relationship-specific asset investments, and initiating necessary changes to the partnership as it evolves while also managing partner expectations" (p. 308).

In summary, it is clear that while the issue of partnering capabilities has gained relevance in contemporary scholarship, rigorous theoretical development and empirical testing is awaited.

Domain of Strategic Partnerships

While a plethora of terminology exemplifies the alliance literature, Morgan and Hunt (1995) identify 10 distinct forms of inter and intra-organizational relationships that may be categorized into buyer, supplier, lateral, and internal partnerships. Varadarajan and Cunningham (1995) draw distinctions based on functional, industry, and geographic scope of strategic alliances. Thus, partnerships may be formed across different stages of

the value chain, across or within industries, and geographical borders. An important distinction is also been made between operational and strategic inter-firm cooperative relationships (Sheth and Parvatiyar 1992). The former refers to arrangements such as electronic data linkages (EDI) between firms that may be easily replicated by others and which are, thus, more of a cost associated with doing business, while the latter are instrumental in enhancing competitive position, and are more sustainable in nature.

In this dissertation, the word *inter-firm partnerships* is used in its broadest interpretation. Various types of interfirm partnerships have been identified: vertical or horizontal, strategic or operational, inter- or intra-industry, and international or domestic. Offering a new typology, Achrol (1997) suggests that four basic forms of networks exist: internal markets, vertical markets, intermarkets, and opportunity networks. However, the underlying motivation in each case is primarily to gain competitive advantage in the marketplace (Bleeke and Ernst 1991; Powell 1990). This is congruent with various conceptualizations in the literature where partnering is described as relatively enduring cooperative arrangements characterized by willing reciprocal interdependence between independent firms, where the intention is to jointly achieve goals linked to strategic objectives of the partnering firms through mechanisms that draw synergistically on an inter-linked pool of capabilities and resources (see Parkhe 1991; Varadarajan and Cunningham 1995). More broadly, Mohr and Spekman (1994) define partnerships as "purposive strategic relationships between independent firms who share compatible goals, strive for mutual benefit, and acknowledge a high level of mutual interdependence" (p. 135). Devon and Bleakely (1988) stress on the strategic aspect of such relationships, and note that such alliances take place in the "context of a company's

long term plans and seek to improve or dramatically change a company's competitive position" (p. 18). Arguing that *strategic objective* is one distinguishing feature that separates strategic alliances from other forms of interfirm cooperation, Webster (1992) asserts that such arrangements are an important marketing phenomena given the implications on a firm's competitive position.[1] Nevertheless, a broad conceptualization of inter-firm partnerships includes arrangements where two firms pool their resources and capabilities in the search for synergies that facilitate their adaptation to emerging opportunities, and repositioning within existing industrial frameworks (Borys and Jemison 1989).

Partnering Processes

This section argues the need to study partnering processes. A conceptual distinction between the act of partnering and related processes is developed, and the importance of studying alliance-related processes is argued.

The intellectual core of partnering is to seek dynamic synergies (Miles and Snow 1986) through the act of inter-linking independently owned and controlled resources and capabilities, in order to achieve some strategic objective. Pooling and inter-linking may

[1] It may however be difficult to separate the operational from the strategic. While strategic partnerships are conceptualized as being tied to long term goals and concerned with creating sustainable competitive advantage for the partners, operational relationships partnerships are noted to be more tactical in nature. It is argued that that even in operational relationships, different levels of gains can accrue depending upon the manner in which the relationships are formed, developed and maintained. Thus, while EDI linkages by themselves may not be sources of competitive advantage since competing firms can very easily buy and install similar technology, the manner in which the partnering firms manage to cull out cost and other advantages through these links may very well be different. Thus, although the competitors to American Hospital Supply may simulate their electronic linkages with hospitals, they may not be able to emulate the behavioral processes that accompany such linkages, and therefore be unable to garner the same level of competitive advantage. Similarly, although P&G's competitors have established similar electronic links with Wal-Mart, Lever Brothers and Colgate-Palmolive have not been able to forge relationships which bestow on them similar levels of advantage. In essence, therefore, it appears that in some cases firms may embed their operational links in complex innovative processes which may appear easily imitable by competitors, but may not be so, thus confusing the fine line between operational and strategic relationships.

occur in different modes, contexts, and scope: equity or non-equity modes, domestic or international, inter- or intra-industry, similar or adjacent stages in the value chain, relate to a specific functional area, or be cross-functional in scope, and may be limited to a single value chain activity, or encompass a number of activities.

While pooling and inter-linking resources and capabilities explain the act of partnering, the processes by which related activities are undertaken to actualize synergies and achieve strategic objectives, are critical. Distinguishing between strategy content and process (Bourgeois 1980) implies that 'what should be done' refers to the content aspect of a firm's strategy, and 'how it is accomplished' refers to the process aspect of strategy formulation and implementation (Jemison 1981, p. 602), through which the organization and its social system deals with content related decisions (Jemison 1981) . More specifically, organizational processes and activities that access, integrate, and deploy inter-linked resources, constitute partnering processes. Given the earlier discussion on the salience of developing partnering-related capabilities, this distinction between the act of partnering, and the processes used to actually access and manage the integration of complementary resources as firms try and generate value through alliances, is critical. While all firms may undertake the act of partnering, there may be significant differences in how they manage these resource-integration processes, thus plausibly providing a basis for understanding different levels of success. For example, Porter (1996) argues that the essence of strategy is in the activities, implying that competitive advantage grows out of an entire system of activities related to a particular strategy.

CONTRIBUTIONS TO MANAGEMENT PRACTICE

The managerial relevance of this study derives directly from contemporary corporate initiatives being witnessed. Field interviews with senior managers in a sample of Fortune 1000 and other technology-intensive firms indicate that a great deal of recent attention has focused on the imperative of developing alliance-related capabilities as an integral part of an organization's competitive repertoire. Developing an institutionalized partnering capability is rapidly emerging as a thrust area. For example, Eli Lilly considers its strategic collaborations to be the single most important source for 'real innovations,' and links its ability to be a good collaborator and a partner of choice as a key source of competitive advantage (keynote address by Randall Tobias, Chairman and CEO, Eli Lilly, 1998). A number of firms such as Kodak, Lucent, HP, Adobe, Cisco Systems, Xerox, FedEx, Eli Lilly, and Hallmark have already undertaken pioneering initiatives to create competency centers that will help foster partnering capability organization-wide.

Along with the emergence of these internal 'alliance organizations,' job titles such as VP-Alliances, Director-Strategic Alliances, and Alliance Manager are becoming common. This is symptomatic of systematic efforts to develop and implement strategies related to enhancing partnering capabilities and develop alliance-related best practices. Companies are thus making substantial investments in developing centers of partnering competency, and in re-organizing their internal processes to align their corporate strategies with partnering imperatives. In essence, these initiatives highlight the salience of this research in the practitioner domain.

The managerial relevance of this project lies in its deliverables. First, this research provides prescriptive insight into the processes that constitute partnering capability.

Second, a scale to measure a firm's partnering orientation is rigorously developed. This can be used as a managerial tool to conduct capability audits and help in organizational development. Third, the study identifies factors that foster/hinder this capability and suggests managerial choices. Finally, the study empirically tests the relationship between partnering capability and various performance metrics. In brief, this research provides managers with a comprehensive view of what management processes and activities constitute partnering orientation, how it may be attained, and its likely impact on performance.

CONTRIBUTIONS TO THEORY

This research is driven by the need to theoretically explain and predict differential firm ability to leverage partnerships into competitive advantage, and to link it with a set of antecedents and performance outcomes. Recent scholarship has emphasized the need to closely couple marketing with the strategy dialogue on relationship management and boundary spanning activities in strategic network competition (Webster 1992; Achrol 1997), and causally relate it to organizational effectiveness (Day 1992). In summary of earlier discussions, the issue of firm-level partnering capability has gained relevance in contemporary scholarship, as witnessed in the emergence of related terminology in the alliance literature.

Developing on Koza and Lewin's (1998) taxonomy, recent strategic alliance research includes studies on (a) inter-firm collaborations and networks as an organizing principle of economic exchange, (b) the choice of governance structures using primarily a transaction costs framework, (c) motivational and structural aspects of inter-firm

collaborations in international contexts, (d) governance mechanism issues, (e) performance predictors of alliances, and (f) guideline for better management of alliances. The marketing literature on inter-firm relationships, however, has mainly focused on two broad issues: one, the choice of appropriate governance structures (what are the conditions that determine whether a firm will vertically integrate or outsource a particular function); and two, governance mechanisms and incentive design issues. In the latter stream, research has focused on identifying advantageous relationship attributes such as trust and commitment, their structural, cultural and behavioral antecedents, and their effects on relationship outcomes. The unit of analysis has typically been a *specific relationship with a specific partner* (see Rindfleisch and Heide 1997 for a review), with emphasis on pre-alliance and formation issues, and less on aspects concerning skills and processes.

In terms of theoretical contribution, this dissertation, through a wide-ranging and integrative inquiry into the conceptual domain of partnering orientation, its antecedents, and implications on organizational effectiveness, expects to spur research on inter-firm relationships in a new direction.

The remainder of this dissertation is organized as follows. Chapter 2 explicates the concept of partnering orientation, identifies its different dimensions, and theoretically links them with partnering capability. Chapter 3 develops the theoretical model and discusses the hypotheses in detail. In Chapter 4, the constructs are operationalized and various methodological issues are discussed. In Chapters 5 and 6, the results are presented and the implications of the study discussed.

CHAPTER 2

A THEORETICAL EXPLICATION OF PARTNERING ORIENTATION

ECONOMIC RENTS AND ALLIANCES

Arguing that certain key strategic assets may lie outside a firm's boundaries, this section extends the basic tenets of the resource-based view of the firm into the inter-organizational domain. Drawing on extant literature, it is first argued that the attainment of competitive advantage may be critically dependent on the development of collaborative advantage. Second, a general argument is presented for alliances being a source of economic rents. A distinction is made between potential rents and realized rents (Madhok and Tallman (1998). Following this, specific alliance-related processes that generate collaborative rents are identified and discussed.

The RBV and Interfirm Collaborations

The industry-structure view in strategy, commonly associated with industrial organization economics and Porter (1980), argues that supernormal returns are primarily a function of the structural aspects of an industry. Complementing this view is the resource-based view of the firm (RBV) (Penrose 1959; Wernerfelt 1984). The RBV argues that differential firm performance is fundamentally due to heterogeneity and imperfect mobility of resource and capability profiles across firms (Barney 1991). Within the RBV, there are two perspectives: one static and the other dynamic (Schulze 1992 cf. Lado et al. 1997). Differing primarily in their explanations of how economic rents are generated and sustained, the static view emphasizes the sustainability of monopoly rents that accrue from unique firm resources in a state of equilibrium. Barney's (1991) criteria

of rare, inimitable, valuable, and non-substitutable are essential characteristics that these resources need to have if they are likely to be sources of sustained competitive advantage.

The dynamic view within the RBV argues that sustainable competitive advantage is more a function of resource flows rather than of resource stocks (Dierickx and Cool 1989). In other words, dynamic environments tend to dissipate the rent creating ability of most resources, and it is the manner in which a "Schumpeterian" firm accumulates its asset stocks, and mobilizes and deploys its strategic capabilities, that determine survival. The capabilities literature adopts a more dynamic perspective, and attributes competitive advantage to a firm's ability to continuously develop innovation capabilities (Collis 1994). In other words, firm performance depends on the dynamic enhancement of strategic assets, defined as "the set of difficult to trade and imitate, scarce, appropriable and specialized *Resources* and *Capabilities* that bestow the firm competitive advantage" (Amit and Schoemaker 1993, p. 36) (capitals and emphasis in original).

Key to competitive advantage is thus a firm's capability to create a sustained flow of strategic assets. Traditionally, the RBV has been inward looking, focusing on strategic assets owned, and controlled by a firm as sources of competitive advantage. As a result, as Dyer and Singh (1998) argue, focus has been primarily on those resources that are housed *within the firm* (emphasis in original). However, as evidenced by the worldwide proliferation of alliances and the shift to "alliance capitalism" (Dunning 1995), it is amply clear that now "(m)ore than ever, many of the skills and resources essential to a company's future prosperity lie outside the firm's boundaries, and outside management's direct control" (p. ix, Doz and Hamel 1998). Thus, given that some strategic assets may reside outside the firm and are transorganizational in nature (Achrol 1997), it appears that

firms which access and utilize these in unique ways may realize an advantage over firms that are unable or unwilling to do so (Dyer and Singh 1998). In other words, the creation of strategic assets through collaboration deserves more attention than it has been given (Lado, Boyd, and Hanlon 1997) since they generate economic rents, and are, thus, sources of competitive advantage.

Economic Rents and Interfirm Collaborations

The idea of collaborations as sources of economic rents has been noted by a number of scholars. Primarily developing on Peteraff's (1993) conceptualization and definition of quasi-rents, scholars have advanced various notions of rents that arise through collaborations. Dyer and Singh (1998) argue that idiosyncratic interfirm linkages are sources of relational rents, and that it is important to examine the interorganizational rent generating process. Lado, Boyd, and Hanlon (1997) propose a model of syncretic rent-seeking behavior incorporating both competitive and collaborative rent-seeking dimensions, and argue for the relevance of "composite quasi-rents" which arise as firms seek to co-produce and share value by fostering and maintaining reciprocal interdependencies (Thompson 1967). More recently, in a seminal theoretical work, Madhok and Tallman (1998) argue that alliances create value when they provide firms with an opportunity for "sustained earning of rents in situations where competitive advantage requires the synergistic combination of resources which a firm is unable to purchase through a market transaction or to develop internally in a timely and cost-effective manner" (p. 329). Identifying various kinds of economic rents that are generated through alliances, they note that from a resource-based perspective, the value of an alliance arises primarily from the unique collaboration-specific quasi-rents that are

created (1) "from the combination of both transaction-specific and the relevant firm-specific resources of both firms into a synergistic bundle that enables a level of accomplishment which the partners are unable to attain in the absence of the collaboration" (p. 329), and (2) indirectly through any incremental firm-specific quasi-rents that emanate from 'positive spillovers' resulting from the alliance and which when combined uniquely with other resources enables the firm to increase their rent-generating capacity outside the focal collaboration. In a similar vein, Khanna (1998) distinguishes between 'common benefits' and 'permanent private benefits' that arise from any dyadic alliance, making essentially a similar distinction as rents created in the context of a relationship (what Dyer and Singh (1998) term as relational rents), and rents that are created through dynamically enhancing asset stocks (Lado et al. 1997) that enable further rent creation in other domains of a firm's operations.

More specifically, regarding collaborative rents, Madhok and Tallman (1998) distinguish between the potential value attainable through an alliance and the realization of such value and argue that:

> "The former aspect has more to do with the choice of organizational form and refers to the theoretical synergies arising from the ideal combination of complementary resources and capabilities, while the latter aspect reflects the realities on the ground and has more to do with the effectiveness of the actual management of the alliance. The two aspects are related of course, in that value cannot be realized beyond its underlying potential" (p. 328)

Thus, while the potential value of an alliance arises from the theoretical or true synergistic potential attainable, the realized or captured value depends on the manner in which this inherent potential is actualized. While "internal systemic imperfections" (p. 328) in the relationship can create a discrepancy between the potential and the actualized value, management can, through relationship-building efforts, proactively intervene to

minimize the wasted potential. These *dark rents* (to adapt a phrase from telecommunications where 'dark fibre' refers to unutilized bandwidth or data carrying capacity of fiber-optic networks), or the gap between the synergistic potential attainable and the actualized potential, may be attributed largely to the quality of the relationship between the partnering firms. Considered in terms of a pareto-frontier, firms can push the frontier representing actualized rent closer to the potential frontier through relationally-oriented actions to increase 'relational rents' generated through the alliance (Dyer and Singh 1998). Their emphasis on minimizing the discrepancy reflects the importance of recognizing the embeddedness of a specific alliance in a larger organizational system, as well as a continually evolving relationship embedded in a largely non-reversible pattern of ongoing organizational decisions.

Madhok's and Tallman's (1998) framework is primarily in the context of an individual dyadic collaboration, and focuses primarily on relationship management issues with its focus on relational investments as mechanisms that reduce dark rents. Their logic is appealing, and their framework of analysis robust enough to be extended to the scenario where a firm has multiple alliances. Two other aspects are also incorporated into this analysis, namely actions that influence the potential rent, and the effect of dynamic gains over time as a firm learns from its experiences.

In the instance of a single dyadic alliance, rents generated are a function of the potential rent, and the presence or absence of relational imperfections which depress the actualized rent below the potential. Thus, even in this relatively simple case, it appears intuitive that a firm may be able to influence the value generated, or the rents actualized, by operating on two fronts: one, by forming an alliance with a partner with whom the

potential collaborative rents are high, and two, managing the relationship such that relational imperfections are minimized. For example, it has been argued that partners need to be compatible in order to actualize anticipated rents, and that selection processes need to safeguard against a mismatch of "the partner's ability and the partner's willingness and commitment" (p. 332). A firm can, thus, directly influence both the potential achievable in an alliance by *ex ante* collaborating with a partner with whom synergy is optimal, and *ex post* managing the relationship process to ease out potential pitfalls and relational imperfections that impede the joint value-creating process of intimately and synergistically combining tacit resources and capabilities (Noteboom 1996; Dyer 1997). These are thus collaborative rent-seeking behaviors, which are in a sense directly actionable by a firm's strategic behavior, and therefore not exogenous or given to a firm. Let us now consider the case where a firm has multiple alliances.

Two issues need to be considered when one moves the analysis from a single alliance to the level of multiple alliances. One, that there exists potential for synergies *across* alliances, thus increasing the portfolio rent potential beyond the mere sum total of the individual rents from each alliance. Two, and impacting on collaborative rents in a different direction, there also exists the likelihood of conflicts across alliances which depress the portfolio actualized rents below the portfolio potential by an amount that is greater than the sum total of the individual dark rents. In other words, the rent generated from multiple alliances would depend on (1) the potential rents from each alliance, (2) inter-alliance synergy that serves to increase the potential value of the portfolio beyond the sum total of individual alliances, (3) and relational imperfections that serve to reduce realized value below potential value at the level of each individual alliance, and at the

portfolio level. A firm's collaborative rent-creating processes may thus be conceptualized in terms of how it succeeds in (1) enhancing the sum of potential rents from its collaborations by pushing the *portfolio potential* rent frontiers outwards, and (2) decreasing the portfolio dark rents, or pushing the frontier of its *portfolio actualized* rents closer to the portfolio potential.

Adding a dynamic perspective, an organization can learn from its past experiences and improve relevant processes over time. In the context of collaborative-rent seeking behavior, firms may experientially learn from both internal and external sources to develop new processes and refine their existing processes, whereby they are able to simultaneously push out their potential rent frontiers, and minimize dark rents at both individual and portfolio levels.

Two key arguments are being made. First, the collaborative-rent generating process needs to be considered at multiple levels, namely at the level of individual alliances and at the portfolio level. Second, the collaborative-rent generating process needs to be considered in a dynamic context, where gains that accrue over time (as learning enhances the efficiency and effectiveness of a firm's current practices and processes) are incorporated. Thus, a firm impacts on both the value-creating potential, and value actualization, both from individual alliances, as well as its portfolio, through strategic actions. From a strategic choice perspective (Child 1972), firms can thus aim to increase collaborative rents through purposeful strategy and enactment.

CONCEPTUALIZING FIRM ORIENTATION

The notion of firm orientation has proved to be extremely popular and useful in the context of business research. Accordingly, we see concepts such as market orientation

(Kohli and Jaworski 1990; Narver and Slater 1990), entrepreneurial orientation (Miller and Friesen 1983), strategic orientation (Miles and Snow 1978, 1992; Day 1990), technological orientation (Gatignon and Xuereb 1997; Workman 1993), customer orientation (Deshpande, Farley, and Webster 1993), and competitor orientation (Narver and Slater 1990; Armstrong and Collopy 1996) as efforts to characterize firms along relevant cognitive, or behavioral dimensions, and progress toward broader theories linking strategy with firm performance. Useful from a taxonomic and heuristic viewpoint, and with strong managerial relevance, the value of theorizing firm orientations lies in being able to capture broad nuances of complex organizational phenomena within relatively simple and parsimonious concepts. As suggested by strategic management researchers, strategic decisions evolve from a set of organizational processes that take the form of patterns and modes that can be characterized and identified across organizations (Hart 1992). In essence then, firm orientations reflect strategic directions implemented by a firm in search of continuous superior performance (Narver and Slater 1990), and are captured in a firm's ability and will to undertake certain courses of actions over a period of time.

Webster's dictionary offers an appealing definition of orientation. One interpretation reads as "the act or process of setting in any determinate position to acquaint with the existing situation or environment by causing the axes of the molecules of to assume the same direction." Inherent in this definition are the concepts of internal and environmental alignment, process, and strategic choice. In essence, then, various types of firm orientations embody a similar issue: business philosophies translated into strategic action in response to environmental demands. The issue of internal and external

alignment brings in plurality in orientations. While all firms may not be able to develop the same orientation due to varying internal configurations even if they wished to, they may also not perceive equal value in any single strategic focus. Thus, firm orientations are likely to be products of their dominant philosophy and belief structures, their resource and process configurations, and their environment. What this implies is that along whichever strategic dimension defining a certain orientation, there is likely to be variance in the degree to which organizations embody a particular orientation (Kohli & Jaworski 1990).

Firm orientations have been conceptualized as an aspect of corporate culture, and as a set of behaviors and processes. For example, Kohli and Jaworski (1990) adopt a focus on "specific activities rather than philosophical notions," (p. 6) in their operationalization of marketing orientation. Conversely, Deshpande, Farley, and Webster (1993) focus on customer orientation as an aspect of corporate culture. The literature on entrepreneurial orientation (Lumpkin and Dess 1996) incorporates both aspects of organizational philosophy and behavior, in line with the notion that strategy-making encompasses a range of organizational activities, such as planning and decision making, as well as aspects of an organization's culture, shared value system, and corporate vision (Hart 1992; Jemison 1981).

However, as noted by Hurley and Hult (1998), while both perspectives (behavioral versus cultural interpretations of firm orientations) are valuable, recent research suggests that from a measurement perspective, treating firm orientation as a set of behaviors and processes rather than as an aspect of culture may have some benefit (Deshpande and Farley 1996). In fact, it seems plausible that organizational culture,

defined as a "set of shared assumptions and understandings about organization functioning" (Deshpande and Webster 1989, p. 4) that serves to unify organizational capability into a cohesive whole (Day 1994), may actually drive organizational processes and behaviors. As mentioned earlier, variance in the degrees to which firms embody a particular strategic orientation, may very well be due to differences in corporate culture. Barney (1986) argues that corporate culture, which is shaped over time and through experiences, finds expression in a set of core managerial values, that in turn creates variance in organizational processes and behaviors.

There is also an implicit notion embedded in the literature that firm orientations reflects firm capabilities. For example, Day (1994) interprets market orientation as representing superior skills in understanding and satisfying customers. Jaworski and Kohli (1993) and Slater (1997) suggest that market orientation may be viewed as innovative behavior. Li and Calantone (1998), adapting market orientation to the new product development process, refine their operationalization to focus specifically on the 'competencies' aspect. Similarly, in the strategic management literature, Lumpkin and Dess (1996) note a normative bias in that entrepreneurial orientation is considered a key ingredient for organizational success since it reflects a capability for innovative behavior.

In essence, firm orientations, when measured from a process and activities perspective, reflect firm capabilities across a specific strategic dimension[1]. As Li and Calantone (1998) suggest, capabilities are reflected in a series of processes. Day (1994)

[1] I use the term capability rather than competency. In contrast to Day's (1994) assertion that the difference is trivial, I believe that there is a fundamental difference between these terms which is rooted in the distinction between the static and the dynamic views of the resource based theory as elaborated earlier. While competencies refer to well-defined routines that are combined with firm-specific assets to enable distinctive functions to be carried out, capabilities refers to the mechanisms which enable the development

defines capabilities as complex bundles of skills and accumulated knowledge that are exercised through organizational processes, and suggests that "capabilities and organizational processes are closely intertwined, because it is the capability that enables the activities in a business process to be carried out" (p. 38). Further support for adopting a process and activities view is found in the strategy literature. Debating on 'What is Strategy?,' Porter (1996) notes that "activities ... are the basic units of competitive advantage" (p. 62). Arguing that "the essence of strategy is in the activities" (p. 64), Porter notes that competitive advantage grows out of an entire system of activities related to a particular strategy.

In light of the above discussion, this research adopts a process and activities view of orientation, and argue that a partnering culture is likely to drive organizational activities that fall under the rubric of partnering oriented behavior. Thus, the focus is on firm processes and activities employed to access and manage the integration of complementary resources as firms try and generate value through alliances. While all firms may undertake partnering, there is likely to be variance in how they manage these resource integration processes, thus plausibly providing a basis for understanding different levels of success firms achieve in creating value through their alliances.

CONCEPTUALIZING PARTNERING ORIENTATION

While the literature on typology of alliance related rents is growing, there has been less emphasis on examining the impact of strategic firm actions on the rent-creating process, and thus on linking alliance-related firm behavior to performance. For example, Dyer and Singh (1998) note the lack of literature that "*systematically examines the*

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of new competencies (Teece, Pasano, and Shuen 1991). Thus, capabilities seem to imply a higher-order

interorganizational rent generating process" (emphasis in original). This is a critical issue, since it is through examining rent-generating processes that insights may be gained into fundamental performance related questions. Further, strategy's *raison d'être* of the ongoing search for, and sustainability of, economic rents, implies that a key research task is to examine strategic behaviors that maximize rent-generation from any strategic course. Possibly through such an exercise, we would be able to gain insights into the fundamental strategic question of *why certain firms are better able to derive competitive advantage through their alliances than others.*

A broad conceptualization of inter-firm partnerships includes any structured arrangement that establishes cooperative exchange relationships between firms, undertaken in order to facilitate adaptation to emerging opportunities or repositioning within existing industrial frameworks (Borys and Jemison 1989; Dickson and Weaver 1997). Partnering, namely relatively enduring cooperative arrangements, equity-based or otherwise, involving interdependence and resource inter-linkages, having the express purpose of joint accomplishment of goals linked to the corporate mission of each firm, may occur in different modes, contexts, or scope. However, the core issue that lies at the heart of any partnering initiative is *resource and capability augmentation* through either formal, or informal, links with an organization that possesses the required strategic assets, and the *creation of value* from combining independently owned resource and capability pools. Central to partnering is thus accessing strategic capabilities and resources that lie outside a firm's boundaries, and integrating them with those that the firm itself already owns or controls, to create value. There is also an implicit expectation that the economic

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concept which subsumes competencies in a particular domain.

rents realized from the collaboration will exceed those from internal development or acquisition of the strategic asset (Madhok and Tallman 1998).

Incorporating the idea that some key strategic assets may lie outside a firm's boundaries into the traditional definition of rent-seeking behavior, *rent-seeking through partnering* refers to the search for transorganizational resources and capabilities that, when optimally accessed and integrated, enable an organization to develop, choose, and implement value-enhancing strategies and gain above-normal economic returns (Bowman 1974; Rumelt 1984; Lado et al. 1997). Partnering rent-seeking *behavior*, as used earlier, thus constitutes collaborative-rent creating organizational processes, and one may expect variance in the degree to which firms embody these processes and activities due to various reasons related to organizational culture, environmental demands, and sheer capabilities.

In line with the capabilities angle adopted in much of the literature on firm orientations, a firm's partnering orientation represents superior skills in creating value through inter-firm collaborations. Linking the notion of collaborative rents, a firm's partnering skills refers to a firm's engagement in activities that enhance rent generation from its collaborations. Thus, a more alliance-skilled firm would plausibly be more adept at enhancing the amount of rents it generates from its alliances, while a less capable firm would be less adept at generating collaborative rents. A firm's partnering orientation is thus conceptually defined as the degree to which it embodies various processes and activities that constitute collaborative rent-seeking behavior.

This raises a fundamental question. What are key strategic process dimensions of collaborative rent-seeking behavior? Based on executive interviews, and existing

literature, I identify four such process dimensions as sources of strategic advantage, and note them in Table 2.1.

Table 2.1: Processes as Sources of Collaborative Rents

Process Dimensions	Source of Strategic Advantage	Collaborative Rents
Proactive Initiation of resource and capability (R&C) augmenting relationships	First-mover advantages in imperfect strategic factor markets	*Monopoly rents* from pre-emptive alliance initiation
Relational Governance of resource interfaces	Cooperation, mutuality, and use of self-enforcing safeguards enable effective blending of R&C	*Higher actualized Collaborative rents* due to reduced systemic imperfections in relationship
Integrating partnerships into corporate planning process	Systemic or portfolio view enables coordination across multiple alliances	*Higher potential rents* through increased synergy; *higher actualized rents* due to minimized inter-alliance conflicts
Institutionalizing alliance memory	Increases organization-wide collaborative know-how (knowledge and insights)	*Learning rents* from more effective and efficient processes

It is argued, based on the notion that intangible firm capabilities lie within organizational processes (Barney and Zajac 1994), that partnering oriented behavior is characterized by a distinct set of alliance-related organizational routines, processes, and activities that relate to accessing transorganizational strategic assets, and effective management of these relationships so that the process of integrating them with its repertoire of resources and capabilities to create new value is facilitated. Fundamental to the effectiveness with which collaborative value is created, are four underlying sets of processes: First, identifying appropriate sources of the required capability along with

systematic and proactive initiatives of the firm to identify and inter-link with these resources and capabilities. Second, managing individual relationships so that the idiosyncratic interfirm inter-linkages become strategic assets in their own right, and a source of relational rents and competitive advantage. Third, leveraging across disparate resource pools represented by a firm's array of alliances, thus creating synergy while minimizing conflicts across alliances. Fourth, transforming localized alliance-related experiential learning into organization-wide collaborative know-how - a non-appropriable strategic asset that has implications for competitive advantage.

In brief, these dimensions relate to initiating partnering relationships with capable firms, managing these individual relationships in a manner which enables effective and efficient blending of the different resources and capabilities of the firms, having an overall alliance strategy that enables leveraging and value creation across a firm's portfolio of alliances, and institutionalizing organization-wide processes that enable the transformation of alliance-related experiential learning into a shared and accessible organizational memory. These four dimensions of PO, namely *proactive initiation, relational governance, portfolio leveraging, and alliance learning* cover four key aspects of partnering - initiating activities, relationship development and maintenance activities, seeking synergies across alliances, and learning.

I argue that these four sets of processes constitute a capability to leverage partnering into collaborative value generation and thereby competitive advantage. More specifically, I define partnering orientation as *"proactively initiating resource and capability augmenting linkages, managing these linkages through relational governance mechanisms, leveraging the entire portfolio of relationships, and creating a shared*

organizational memory around collaborating experiences." The subsequent sections discuss each of them in detail.

Proactive Initiation

This dimension captures an organization's enterprise in anticipating, pursuing, initiating, and responding to new partnering opportunities. The basic theoretical rationale underlying this dimension is that proactiveness in imperfect strategic factor markets for partners has implications for sustained competitive advantage. It is argued that firms vary in their capabilities to identify and preempt valuable strategic resources, and that proactive firms can, through being better-informed and entrepreneurial in their actions, enjoy a first-mover advantage by preempting resources in the strategic factor market for partners. The concept of proactiveness is first reviewed, drawing primarily on the entrepreneurship literature. Next, an argument is developed that the strategic factor market for partners is imperfect, which leads to early mover advantages for firms that are proactive in seeking out partnering opportunities, and initiating actions to lock in 'good and capable partners.' The resulting preemption of valuable and scarce resources in 'partner space,' or the limited group of potential collaborator firms that are at once compatible and also possess the required set of complementary strategic assets, may be a source of sustainable collaborative rents.

A salient construct in the entrepreneurship literature, ever since Schumpeter emphasized the importance of initiative in the entrepreneurial process, proactiveness is defined in the Webster's dictionary as "acting in anticipation of future problems, needs, or changes" (1991, p. 937) and in the context of organizations suggests a "forward-looking perspective that is accompanied by innovative or new-venturing activity"

(Lumpkin and Dess 1996). In research on personality traits, Bateman and Crant (1993) define prototypical proactive personalities as those who "identify opportunities and act on them; they show initiative, take action, and persevere until they bring about meaningful change. In contrast, people who are not proactive exhibit the opposite patterns: they fail to identify, let alone seize, opportunities to change things" (p. 43). Rooted in the interactionist perspective (Bandura 1977), the proactive approach considers the possibility that organizations or individuals create their environment through their "propensity to act" (Krueger 1993).

Consistent with Miller and Friesen's assertion that the proactiveness of a firm is answered by the response to "Does it shape the environment by introducing new products, technologies, administrative techniques, or does it merely react?" (1978, p. 923), Venkatraman (1989) suggests that proactiveness refers to processes aimed at anticipating and acting on future needs by "seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, strategically eliminating operations which are in the mature or declining stages of life cycle" (p. 949).

Lumpkin and Dess make two important distinctions from prior literature. They argue that a proactive firm need not always be the 'first' to engage in any product-market innovation, nor should proactiveness be confused with competitiveness aggressiveness. They describe a proactive firm as a "leader rather than a follower, because it has the will and foresight to seize new opportunities, even if it is not always the first to do so." (p. 147), noting that the idea of being first to market is narrowly construed and that later entrants may be as pioneering as first entrants and as likely to achieve success via

proactiveness. They further distinguish between reactiveness and passiveness, noting that reactivity or responsiveness is a critical aspect of competitive strategy wherein firms, in addition to taking the initiative to shape the environment to one's own advantage, are also required to be "adaptive to competitors' challenges" (Chen and Hambrick 1995, p. 457), while passivity on the other hand connotes "indifference or an inability to seize opportunities or lead in the marketplace" (Lumpkin and Dess 1996, p. 147). In essence, they argue that a proactive firm emphasizes initiating activities, and is capable at finding and exploiting new opportunities.

Fundamentally, proactiveness relates to an organization's enterprise in identifying market opportunities and acting on them in a concerted and systematic manner. Two aspects of organizational behavior are thus emphasized: one, scanning the environment as it relates to opportunity seeking (Venkatraman 1989), and two, initiating action and responding to perceived opportunity in the market place (Lumpkin and Dess 1996). Adopting this perspective to the context of partnering, proactiveness may be conceptualized in terms of organizational processes that aim to actively identify potentially valuable partnering opportunities, and initiating actions to enter into relationships with capable partners.

Why should proactiveness vis-à-vis partnering be associated with the creation of economic rents? According to Barney (1986), "Whenever the implementation of a strategy requires the acquisition of resources, a strategic factor market develops ... In the case of markets for companies, firms wishing to implement a strategy of product diversification may decide to do so by acquiring other firms. In this sense, because an acquired firm is the resource required to implement a firm's diversification strategy, the

market for companies is a strategic factor market. All strategies that require the acquisition of resources for implementation have strategic factor markets associated with them" (p. 1232). Barney (1986) subsequently argues that in reality, these strategic factor markets are likely to be imperfect largely due to different expectations firm have about the future value of a strategy. Accordingly, it will often be possible for some strategizing firms to obtain above normal returns from acquiring the resources necessary to implement a product-market strategy, and then implementing that strategy.

For a firm wishing to add a specific bundle of resources and capabilities through implementing a partnering strategy, its relevant strategic factor market is the 'market for partners.' This market is likely to be imperfect for various reasons. Fundamentally, the basic nature of the resources that mandate alliances creates imperfections. Their tacit nature precludes adequate bundling through market transactions (Teece and Pisano 1994; Kogut and Zander 1992). Thus, by their very nature, the nature of resources and capabilities that are usually sought through alliances are imperfect - being difficult to identify, evaluate, and exchange through arms-length transactions without loss in value, there is a strong likelihood of differences in firm expectations, thus leading to imperfections in the strategic factor market (Barney 1986). Moreover, there is likely to be a 'small numbers' problem in some industries and in some product-markets (Sarkar, Cavusgil, and Aulakh 1999).

Given the complex socio-technical processes involved in partnering, it is unlikely that (a) any single firm is going to present equivalent levels of value creating potential to others, and (b) all firms in the market for partners are going to present the same potential for generating collaborative rents to the focal firm. The complexity inherent in alliances

makes it a classic case of "learning by doing" (Williamson 1975), implying that there may be incomplete appreciation of rent creating processes that underlie partnering (Lippman and Rumelt 1982). The rarity of potential alliance partners with requisite levels of complementary resources and relational capability (Dyer and Singh 1998) exacerbate imperfections. In addition, the plurality of expectations and product-market strategies, and varying levels of perceived environmental uncertainty and expectations among firms (Barney 1986) is likely to further exacerbate imperfections. The growing complexity of technologies embedded in a single product, and the volatility in markets implies that firms are likely to have imperfect information, or at least asymmetric expectations and information. In such volatile market situations, imperfectly competitive markets occur due to some firms being better informed or having special insights as compared to competitors and also due to some firms having market power to create further imperfections in their favor. In such situations, firms with more accurate information and expectations concerning the future value of a resource can expect to perform better than firms with less accurate expectations (Barney 1986).

In essence, the strategic factor market for partners is likely to be imperfect. This creates the possibility of above normal returns for firms that are better informed than their competitors regarding potential partners, their activities, and the synergistic value creating possibilities through combining their distinctive pools of resources and capabilities. Thus, a firm which has a more accurate expectation of the value of forming a link with a potential partner firm is likely to be advantaged. Through entrepreneurial action and selective choice mechanisms, these firms can seek to preempt those partners who embody the highest collaborative rent generating potential.

Drawing parallels between the first-mover advantage literature and the resource-based view of the firm, Lieberman and Montgomery (1998) note that early movers are likely to preempt resources of various types, such as geographic space, technology space, and customer perceptual space, and thus adopt superior positions in these resource spaces. Given asymmetries in the market place, early movers can, through taking initiative, anticipating, and pursuing new opportunities, capture unusually high profits and get a head start on establishing a competitive advantage. This argument, extended to the domain of 'partner space' or the group of potential collaborator firms that possess required strategic assets, implies that proactive firms would be able to preempt the resource of significance in partner space, namely more capable and compatible partners. While sustainability would depend on the initial resources captured by a pioneering firm, plus the resources and capabilities subsequently developed relative to the quality of resources and capabilities held by later entrants, a first-mover advantage in partner space arising through proactive behavior is nevertheless a tenable concept.

On a similar note, Dyer and Singh (1998) note the importance of finding and locking in capable partners. Arguing that the creation of value through collaborations is contingent on a "firm's ability to find a partner with (1) complementary strategic assets, and (2) a relational capability (i.e. a firm's willingness and ability to partner)" (p. 672), they argue that the scarcity of potential collaborator firms may leave latecomers with sub-optimal partnering options. Further they note that:

> "Relational rents may be difficult to imitate because potential alliance partners with the necessary complementary resources and relational capability are rare. The key strategic implication of this isolating mechanism is that there are strong first mover advantages for those firms who develop a capability at quickly identifying and allying with partners that possess complementary strategic assets and/or a relational capability" (p. 672)

In the context of a specific collaboration being sought by a firm, the potential pareto-frontier is a function of the synergistic combine of the partnering firms strategic assets, and can be pushed outwards based on the *choice* of the partner firm. Put simply, in any specific product-market alliance being considered, two possible partner firms may present very different potential frontiers of value generation due to different levels of embodiment of required complementary strategic assets, be it market reputation, technological leadership, or financial resources. The actual value realized, ceteris paribus, would be higher if the potential is higher to begin with. In addition, collaborating with a more firm which is more capable at partnering is likely to result in less systemic imperfections. This in turn would enable better realization of the potential rents from the collaboration.

The preceding discussion of imperfect strategic factor markets and first-mover advantages carries the following implications for partnering. In the strategic factor market for partners, a preemptive strategy rooted in proactive behavior is likely to be a source of competitive advantage. Thus, firms that have developed capabilities which enable them to be (a) better informed and thus have special insights as compared to competitors regarding the potential of a strategic resource (in this case a potential partner), and (b) early movers who can initiate action that can 'lock up' capable partner firms before competitors, are likely to be strategically advantaged.

Supporting the preceding discussion are comments that emerged during a series of field interviews with senior executives with alliance responsibilities. These comments highlight the importance of developing proactive routines for initiating partnerships. As Dana Mitchell, V.P. Corporate Alliances, Adobe Systems, notes:

> "Having a *preemptive strategy towards alliance partners is absolutely critical.* The most successful companies in our business are aggressive companies that are pushing the envelope forward aggressively with their partners. They know where they want to take their business, and they recognize and acknowledge that they can't do it alone. They target certain companies that can help get them there faster. They go after them and move their business forward. The critical components are to have a planned outbound partnering strategy, and being amenable, open and responsive to outside requests to partner with you. Often times the biggest knock that you hear about companies is that people say "Oh boy! They are not a good partner. They are not good to partner with." And typically what they mean is that they are not responsive; they don't understand the value of what this other company is asking, and they are only able to look at things through the filter of their own business. So, *you need to be responsive, and most importantly you need to be proactive* when it comes to partnering."

In a similar vein, Pamela Klem, Manager, Corporate Strategic Alliances, Lucent Technologies, notes the importance of having a proactive outbound partnering strategy. She mentioned her company's shift in focus from a "partner-led strategy to a partnering-led strategy" and argued that during various deliberations that preceded the formation of the strategic alliances group at Lucent, there was a general consensus that they needed to be more proactive with respect to partnering.

> "That is actually one realization that we came to: that we needed to be more proactive. Like any large company, we are often approached by others with good ideas about partnering opportunities. One of our realizations or lessons learnt from looking at our current practices is that when we are approached by others, we start our analysis that goes more or less: "Wow! These guys have come to us with an idea that sounds cool. Is it a good idea, shall we do it with them?" We are trying to move from a "partner-led strategy to strategy-led partnering." We want to make sure that there is *a reasonable balance between partner-solicited or partner-initiated ideas, and our own initiated ideas. Part of what we are seeking to do is to increase the proportion of our partnering activities that are initiated by us.* We are not looking for this balance just for its own sake. We are looking for a balance because we believe that across businesses, the earlier we catch the fact that we have a capability gap, and then grapple with how we want to fill that capability gap through early intervention and through more explicit discussions of the options available, we would write better business. We are looking for balance because we believe there is a link between grappling with these choices early on and making good decisions."

An interview with Mark Chandler, Manager - Business Development, Hewlett Packard, was especially illuminating in terms of the proactive culture that HP has succeeded in creating organization-wide.

> "Initiation comes from whoever has a good idea. We have a culture of proactive initiation within the business units. Engineers, product marketing managers and R&D section managers are looking for, not only, how can we achieve this but, how can we get this new product introduced, how can we meet that new market need, how can we give more complete solutions to these customers? *We have this piece, who else has the other pieces*? They raise all this to management, start to put together a business scenario and plan for how would this look and how do we make it happen. They then raise it to the level of management that would be able to bring the appropriate resources together to make it work. That manager will see that it makes business sense and sign up, support it and sponsor it and then become a relationship leader or manager, with an alliance manager working below them to orchestrate the thing. Or, they will see that it does not quite work and it is time to look at the alternatives; look here and there and keep "stirring the pot." Great deal of creativity in the organization trying to find those new ways of doing things. Find a potential partner, develop a business plan, see if it works, and go after them."

Consequently, proactive initiation is defined as *the extent to which an organization actively seeks out new partnering opportunities.*

Relational Governance

Scholars have noted that the nature of a firm's external relationships have a profound impact on a firm's market positioning and competitive advantage (Ruekert, Walker, and Roering 1985; Porter 1985). Researchers in marketing have questioned the dominant paradigm of the discrete transaction and have posited that inter-firm exchanges take place in a context of continuity where relational constructs such as trust and commitment are key (Anderson and Narus 1990; Bucklin and Sengupta 1993; Cullen, Johnson, and Sakano 1995; Dwyer, Schurr, and Oh 1987; Gundlach, Achrol, and Mentzer 1995; Heide and John 1992; Madhok 1995; Moorman, Deshpande, and Zaltman 1993; Morgan and Hunt 1994). Efforts to develop hitherto neglected theories of cooperation

(Alderson 1965) have prompted researchers to propose that marketing should be viewed as an ongoing process of exchange that is "long-term in nature, lasting over long periods" (Sharma 1993, p. 2), rather than the neoclassic economic assumption of one-shot, discrete transactions that have a "distinct beginning, short duration, and sharp ending by performance" (Dwyer, Schurr, and Oh 1987, p. 13). Snehota (1993), citing a number of studies, concludes that there is substantial empirical evidence of selective and substantial firm ties, where the bulk of market exchange takes place within broad and continuous relationships and where single, discrete transactions occur only rarely. Hakansson's (1982) argument that markets display networked structures and therefore are a different form of organization from what is assumed in microeconomic and traditional organization theory, implies that both market processes and firm behavior need to examined from a radically different perspective (Snehota 1993, p. 31), where the organizing principle of interfirm exchange is the notion of continuity and analysis focused on the dynamics of the relational exchange between firms instead of the single transaction.

In management research, the compelling logic behind interfirm collaborations as modes through which firms gain access to technology, products, services, knowledge, and markets (Beamish and Banks 1987; Contractor and Lorange 1988; Harrigan 1987; Hennart 1988; Kogut 1988; Porter and Fuller 1986), has been confounded by empirical findings that highlight their inherently risky nature. Studies have subsequently concluded that the dynamics of interaction between partners is of paramount importance, and that relational aspects related to cooperative behavior are key to collaborative venture success (Beamish and Banks 1987; Buckley and Casson 1988). While cooperation seems to be a recurrent theme in the literature, it is also a tricky issue to unravel. Smith, Carroll and

Ashford (1995) note that the "difficulty in interpreting the theory and research on cooperation stems from the numerous definitions of cooperation scholars have offered without making much attempt to reference other usages of the term" (p. 10). Most interpretations of cooperation focus on the process by which individuals, groups, and organizations come together, interact, and form psychological relationships for mutual gain (Smith, Carroll and Ashford 1995), with Ring and Van de Ven (1994) noting that cooperative relationships are "socially contrived mechanisms for collective action, which are continually shaped and restructured by actions and symbolic interpretations of the parties involved" (p. 96).

The substantial literature on relationship management issues in recent years has prompted Heide (1994) to comment that "the design of interfirm relationships is becoming a strategic variable in its own right" (p. 71). The management of these relationships which form the firm's interface with other actors is therefore a core aspect of competitive strategy. However, as noted by Stump and Heide (1996), much of existing literature has viewed relationship management as a "problem of deploying control mechanisms to manage partner opportunism, with the overall goal of minimizing governance costs" (p. 431). Only recently has there been focus on an interfirm relationship not simply as a "governance structure of a hybrid nature but, more importantly, as a unique and productive resource for value creation and realization" (Madhok and Tallman 1998, p. 327). While "*idiosyncratic interfirm linkages* may be a source of relational rents and competitive advantage" (Dyer and Singh 1998, p. 661, emphasis in original) since firms may differ in their relational capability or relationship-building skills and process skills (Eisenhardt and Schoonhaven 1996). The premium on

the quality of relationships that a firm enjoys with its alliance partners is thus key to the advantages that may be achieved in the paradigm of collaborative advantage (Lado, Boyd and Wilson 1997) which fundamentally rests on the notion of cooperation fostered by reciprocal interdependencies.

Literature thus suggests that organizations can generate value through developing superior interfirm relationship management routines. Accordingly, this dimension relates to the firm's ability to manage its relationships in a manner that enables effective and efficient blending of heterogeneous and tacit resources and capabilities embedded in the partners in the search for value creation. The theoretical underpinning of this section is based on the fundamental distinction between discrete market transactions and the relational perspective of exchange. Based on the premise that economic transactions are socially embedded, and that complex integration of resources and capabilities requires a blurring of organizational boundaries and a spirit of cooperation between firms, this section argues that a fundamental aspect of partnering oriented behavior relates to the manner in which a firm develops and manages the relationship process with its allies.

As developed in an earlier section, the realized collaborative rents from an alliance depends on the effectiveness of the actual management of the alliance. Given that dark rents result from internal systemic imperfections in a relationship, collaborative rents can be increased through active relationship management. As Madhok and Tallman (1998) note "the production of a collective good is inextricably intertwined with the underlying dynamics of exchange" (p. 327). The genesis of inter-firm cooperation being that competitive advantage accrues to firms that can successfully transcend discrete, transaction-based exchange and develop long-term cooperative relationships, a

fundamental question relates to identifying processes that generate relational rents in partnership arrangements. Here, relational rent is defined as "a supernormal profit jointly generated in an exchange relationship that cannot be generated by either firm in isolation and can only be created through the joint idiosyncratic contributions of the specific contributions of the specific alliance partners" (Dyer and Singh, 1998, p. 662), a notion similar to Madhok and Tallman's (1998) collaboration specific quasi rents (CSQR).

A key issue relates to the fundamental characteristics of cooperative behavior in the interfirm context that confer on a relationship the attribute of being an idiosyncratic and valuable strategic asset of an organization. To unravel this issue, consider the basic distinction between market and collaborative exchange and where alliances create value that is idiosyncratic. As argued by Dyer and Singh (1998), alliances generate competitive advantage only as they move away from the attributes of market relationships towards becoming cooperative relationships. Arms-length market relationships are incapable of generating relational rents, as Dyer and Singh (1998) argue, because "*there is nothing idiosyncratic about the exchange relationship that enables the two parties to generate profits above and beyond what other buyer-seller combinations can generate*" (p. 662, emphasis in original). Madhok and Tallman (1998) assert that the realization of the synergistic potential is dependent on the 'closeness' in the cooperative relationship which facilitates intimate interaction and enables the firms to realize greater value through "more effective amalgamation of the relevant resources" (p. 331). Given that complementary strategic assets, usually in the form of tacit know-how, need to be combined to create new value through the relationship, relational rents are earned through "intensive and ongoing interactions and demands a considerable amount of time and

effort and a long-term perspective in order to build a compatible framework and create the intimate connection necessary to realize the true value offered by the relationship" (Madhok and Tallman 1998, p. 332). In essence, reciprocal dependencies necessitate 'mutual orientation' and cooperation in order to transcend safe-guarding orientated behavior to one focused on developing a relationship conducive to joint value creation.

To summarize, relational or collaborative rents are created as exchange dynamics moves the nature of interaction between the parties away from market-based transactions towards cooperative relational exchange. While entering into an alliance is a recognition of potential collaborative benefits, rents are generated through a dynamic process of interaction and value creation between the partners. The manner in which this process of collaborative rent generation is managed thus has implications on the value of the relationship. That is, the actualization of the potential rents depends on how the relationship is managed and whether the allies succeed in moving away from market-based exchange toward a mutually orientated, cooperative relationship through utilizing processes that align interests so that cooperation evolves naturally (Koza and Lewin 1998).

What systemic imperfections in relationships cause dark rents? Traditionally, the literature indicates that opportunism creates a fundamental safeguarding problem in relationships where partners have to make exchange specific investments (see Rindfleisch and Heide 1997). Opportunism is the assumption that given the opportunity, decision makers may unscrupulously seek to serve their self-interests, and that it is difficult to know a priori who is trustworthy and who is not (Barney 1994). A related problem is one of adaptation, when a firm whose managers are boundedly rational has difficulty

modifying contracts in response to environmental changes. Transaction costs analysis proposes that because of the threat of opportunistic behavior of partners, high levels of asset specificity increase the costs of safeguarding contractual agreements. Recent work in TCA (Williamson 1996) suggests that firms can safeguard their specific assets through a range of hybrid governance mechanisms which typically fall into two categories: unilateral and bilateral (Heide 1994). The former maintains a discrete separation between the exchange parties and enforces compliance through contractual authority which essentially "produce the effects of hierarchies" (Stinchcombe 1985, p. 165), while the latter fosters close ties between exchange partners and enforces agreements through appeals to common interests. The latter has been referred by Ring and Van de Ven (1992) as relational contracts which "tend to involve long-term investments that stem from groundwork laid by recurrent bargaining on the production and transfer of property rights among these legally equal and autonomous parties. The property, products, or services jointly developed and exchanged in these transactions entail highly specific investments, in ventures that cannot be fully specified or controlled by the parties in advance of their execution" (p. 487).

As noted by Dyer and Singh (1998), governance mechanisms (utilized as safeguards against opportunism) has implications not only on the cost and efficiency aspect emphasized by TCA, but also on the value-creating initiatives of alliance partners (Dyer 1997; Madhok 1997; Ring and Van de Ven 1992). They argue that 'effective governance' can generate relational rents through (1) lowering transaction costs or (2) providing incentives in value-creation initiatives, such as investing in relation-specific assets, sharing knowledge, or combining complementary strategic resources. In the first

case transactors achieve a advantage by incurring lower transaction costs than competitors to achieve a given level of investment in specialized assets. In the second case effective governance (e.g., trust) may allow transactors to make greater investments in specialized assets than competing transactors who refuse to make the relation-specific investments because of the high cost of safeguarding them. Similarly, alliance partners may be unwilling to share valuable, proprietary knowledge with trading partners if they are not credibly assured that this knowledge will not be readily shared with competitors ... Thus, effective governance mechanisms may generate rents by either lowering transaction costs or by providing incentives for partners to engage in value-creation initiatives" (p. 670).

Self-enforcing safeguards are more effective than third-party enforcement mechanisms at both minimizing transaction costs and maximizing value-creation initiatives due to lower contracting costs, lower monitoring costs, lower adaptation costs, lower re-contracting costs and for having superior incentives for value-creation activities such as sharing fine-grained tacit knowledge, exchanging resources that are difficult to price, or offering innovations or responsiveness that are not called for in the contract (Dyer and Singh 1998). Further, informal self-enforcing safeguards are more likely to generate relational rents than formal ones (collateral bonds or capital outlays) which are easily imitated by competitors. In a similar note, Madhok and Tallman (1998) note:

> "The scope to tap the underlying potential of an alliance relationship fully is greater when the relationship is characterized by a positive and mutual orientation than just by the avoiding of opportunism (Ring and Van de Ven 1992; Madhok 1995; Dyer 1996). In a relationship dominated by protection against opportunism, firms tend to be reluctant to make unilateral and voluntary commitment outside the terms of the contract, and tend to perceive a greater need to take costly and elaborate safeguards. This diminishes the level of value created and realized through the relationship (Hill 1990; Pearce 1997). In contrast, the development of a mutual

> orientation not only restrains the tendency toward opportunistic behavior, and hence the perceived need for safeguards, but also provides an opportunity to earn greater rents through a more effective blending of resources/capabilities (Nooteboom 1996; Dyer 1997)" (p. 331).

Systemic imperfections may thus arise due to fear of opportunism that constrains cooperative behavior. Additionally, relationships may suffer from inadequate investments in relational assets which lead to the formation of informal safeguards due to two reasons: one, organizations under-appreciate and underestimate the importance and value of such investments (Madhok and Tallman 1998); and two, organizations simply lack know-how and have limited capability to institutionalize practices that would, even in the absence of opportunistic threat, enable them to actually combine their disparate cultures, organization processes, competency bases, and tacit knowledge into a synergistic value-creating organism.

Fundamentally, whatever the underlying reason, whether it is a short-term view and a resultant unwillingness to develop an environment of reciprocity wherein self-enforcing safeguards can thrive, inherent fear of opportunistic behavior by partners, or simply lack of experience and capability in interface management and in designing and implementing interaction processes that act as relationship bonding mechanisms (Sarkar, Aulakh and Cavusgil 1998), the accomplishment of complex tasks that create rents in alliances is hampered by under-investment in relationally-oriented expenditures. More so because alliances evolve through stages (Ring and Van de Ven 1992), and relational-oriented investments serve to transform a formal, and contractual relationship – or a recurrent contractual relationship – to an informal, mutually oriented one – or a bilateral, relational contract.

An implicit underpinning through the above discussion is that these systemic imperfections in relationships can be managed; they are strategically malleable variables and impactable by strategic choices by organizations. Note that one is not advocating a single governance structure for all interfirm relationships. Rather, in line with existing research in sociology and law (Granovetter 1985; Macneil 1981), I am arguing that informal social controls need to supplant formal controls which by themselves are inadequate in facilitating complex exchange and are costly (Hill 1995). Thus, irrespective of governance structure employed, an organization's orientation and willingness to make relational investments reflects recognition of the need to reduce systemic relational imperfections, and a willingness to move toward cooperation, trust, and bonding. Further, institutionalization of such processes reflect an organization's relationship-building skills and process skills necessary to employ effective governance mechanisms.

Accordingly, **relational governance** is defined as the extent to which an organization engages in a *regular pattern of interfirm interactions with its alliance partners which facilitate the formation of informal self-enforcing safeguards in its relationships.*

Alliance Leveraging

As firms enter alliances with increasing frequency, new issues concerning the management of a firm's portfolio of alliances have arisen. Gulati (1998) notes the "fact that a firm may have entered a wide array of alliances also suggests that it has to simultaneously manage this portfolio and address conflicting demands from different alliance partners ... Developing such a portfolio perspective on alliances merits further consideration, especially since many firms are now situated in an array of alliances ... the

question of the capabilities firms may need to manage a multiplicity of alliances are important items for a future research agenda" (p. 308-309). In a similar vein, Varadarajan and Cunningham (1995) note that it is critical to adopt a "holistic view of the network, see(ing) the collective as a unit that can achieve competitive advantage ... (where) the whole network acts like a complex integrated firm spanning many markets" (p. 152).

Field interviews conducted as part of the study indicate that firms are struggling with ways in which they can keep track of multiple alliances across disparate business units and product divisions. The challenge is to provide a coordinating umbrella over multiple relationships, leverage across the portfolio, and minimize strategic conflicts as complex competitive-cooperative dynamics often pit divisional interests against each other. To illustrate the salience of this point, Charles Roussel, Partner, Anderson Consulting, emphasizes that:

> "The more sophisticated firms are thinking about decentralized executional responsibility and local management, but centralized governance that ensures all parts of the portfolio of alliances work together. And there are two jobs for that centralized governance function. One is to maximize leverage across the portfolio, which means that where there needs to be sharing, either of actual physical assets, or intellectual property, that's happening. The second goal of that central governance function is to minimize conflict. So, you could potentially have one therapeutic area within in a pharmaceutical company collaborating with a partner. Yet another therapeutic franchise is actually competing with that partner in a different market. That creates an interesting dynamic within a company. What's right for one division might not be right for another. And that has to be somehow reconciled at the corporate level."

On a similar note, Dana Mitchell, V.P. Corporate Alliances, Adobe Systems, notes that his group

> "identifies the alliances that are critical to the various departments and product groups through a systematic top-down and bottom-up planning process. Thereafter, where we add value is by *coordinating across these partnerships, trying to put an umbrella over all the relationships.* We take all the little pieces that the individual units said are important, and try and make sure that all those

> things happen. We also explore other incremental things that are either of a strategic or tactical nature that come out of our discussions and learning as we engage with this company. And that becomes a broader cross-functional arrangement where we approach the management of our portfolio of key alliance partners in a systemic manner."

This third dimension of partnering orientation thus relates to a firm's capability to manage multiple alliances in a systematic and strategic fashion. Managing multiple alliances requires organizational processes that aim to systematically and strategically integrate resources and capabilities that lie across a firm's spectrum of alliances, and which serve to enhance inter-alliance synergy while minimizing conflicts. Drawing on organization theory, and linking it with the RBV, I develop a theoretical rationale to treat the array of alliance linkages as an extended organization that needs effective and efficient coordination, much like diverse internal units of an organization itself. I argue that systemic coordination of an organization's portfolio of alliances creates synergistic opportunities to enhance collaborative rents, over and above what may be forthcoming from individual alliances. Using support from literature on organizational and social networks, it is noted that (1) complex tasks require integrating and leveraging across an organization's portfolio of inter-firm links, (2) diversity in the sources of innovation necessitates synergistic partnering, and (3) brokering knowledge flows across subgroups of firms create the opportunity for value generation. Madhok and Tallman's (1998) idea of potential and actualized collaborative rents is then extended into the context of an alliance portfolio, on the basis that there is a synergistic component of rents that arise from conceptualizing inter-alliance synergy. Finally, mechanisms that lead to the creation of synergy across alliances are noted, and the concept defined.

A core idea in organization theory is that the interdependence between units and activity clusters in organizations needs to be actively coordinated to bring about effectiveness and efficiency (March and Simon 1958). Fayol (1949) notes that coordination is one of the five critical elements or functions of management, and points out the necessity of harmonizing separate activities and departments of an organization into a cohesive whole (c.f. Smith, Carrol and Ashford 1995). Barnard (1938) conceptualized organizations primarily as systems of cooperative efforts and coordinated activities. He wrote that the purpose of organization was to create an impersonal system of coordination of human effort, and that the most common form of cooperation was speech and communication. This is echoed in Lawrence and Lorsch's (1969) definition of organizations as a system of specialized interrelated behaviors of people that needed to be integrated for effective performance. Similarly, Thompson (1967) considers coordination as a critical process of combining organizational parts to achieve the most effective or harmonious results for the organization as a whole. His action theory of organization emphasizes different types of interdependence within units in an organization, and relates them to different coordinating mechanisms through which high levels of cooperation could be achieved.

The literature on organizational integration, a term that encompasses both coordination and cooperation (Ettlie and Reza 1992), thus fundamentally concerns the interconnectedness and interdependency of sub-units in organizations, and the resultant imperative for human actors to design systems to satisfy organizational goals. Orton and Weick's (1990) dialectical model of coupling argues for multiple and complementary strategies of interdepartmental coordination as value adding activities. For example, the

literature stressing inter-functional coordination and close integration between R&D and marketing inherently argues for effective coordination.

The notion of coordinating across functions or activity clusters has a close parallel in the RBV, where different strategic assets within an organization need to be coordinated and integrated in order to create value. The RBV, which considers organizations as bundles of resources and capabilities (Peteraf 1993), emphasizes firm heterogeneity in both acquisition and *deployment* of resource and capabilities in the generation of economic rents (Oliver 1997). Take for instance the notion of capabilities which has been defined as "organizational abilities to deploy the firm's resources and to develop new ones" (Henderson and Cockburn 1994, p. 3). Embedded in firm routines (Barney 1992; Lado and Wilson 1994), capabilities are a product of the organization as an entire system, and incorporate the notions of coordinating and integrating diverse resource and competency centers to transform inputs into competitive advantage endowing outputs. For example, Amit and Schoemaker (1993), defining capabilities as a "firm's capacity to deploy resources, usually in combination, using organizational processes, to effect a desired end," emphasize the complex interaction required between the diverse pool of resources, tangible and intangible, that a firm possesses for value to be created.

Thus, similar to organization theory, the RBV places importance on the notion of coordination. Central to RBV is 'coordinating' across pools of distinctive resources and expertise. From this perspective, a firm thus may be conceived as systems of processes that coordinate, combine, and transform various tangible and intangible resources, or "stocks of available factors ... owned or controlled by the firm" (Amit and Schoemaker 1993), into final products or services. Competitive advantage thus arises from the resources acquired,

and from the coordinating processes that enable an effective blending of these resources that are owned and controlled by a firm.

Incorporating the transorganizational domain of distinctive strategic resources and capabilities required by firms to compete, coordination and combination of these transorganizational resources and capabilities is critical for their effective transformation into value generating products and services. In fact, generation of economic rents depends not only on organizational processes that coordinate internal strategic assets, but also on effective coordination and integration of both internal and external strategic assets as a systemic whole. Since alliances represent a focal organization's links with externally residing critical resources and capabilities, rent generation thus accrues from overall coordination of the entire system of linkages with external sources of resources and capabilities.

The network and constellation literature supports this line of argumentation, namely that there is value in conceptualizing alliances not as a series of discrete relationships but as a portfolio that requires systematic coordination. The emergence of constellations, or alliances with multiple partners (Gomes-Casseres 1994; Jones, Hesterly, Fladmoe-Lindquist, and Borgatti 1998; Lei, Hitt, and Goldhar 1996), in product-markets where "complex tasks require integrating many different specialists to complete a service, while customizing demands in-depth knowledge not only of client needs and preferences but also of partners work styles" (Jones et al. 1998, p. 396), necessitate coordination and aligning strategies and capabilities with partnering firms. Part of the larger movement towards modular organizations and reflecting an open systems approach to organization design, firms integrated into these networks become modular, and insertable components in a large

system of grouped value-adding activities (Lei, Hitt, and Goldhar 1996). The grouping of value-adding activities and complex interdependencies extending across multiple firms necessitates extensive, overt coordination among multiple firms constituting the network, with the system's effectiveness depending on each firm's internal organization and "response capability to leverage the entire network" (p. 515). As noted by Jones et al. (1998),

> "There must be some mechanism for integrating diverse specialists and transferring tacit knowledge among parties to create a seamless service experience for clients. The constellation's ability to deliver an integrated solution can provide a competitive advantage for them vis-à-vis other sets of professional service firms (Lipparini and Sobrero 1994). Second, constellation members need some means for safeguarding exchanges, resolving conflicts, and ensuring equity among parties in an effort to forestall moral hazard and adverse selection" (p. 399).

Powell, Koput and Smith-Doerr (1996) suggest that the locus of innovation occurs in a network of interorganizational relationships. Believing that knowledge creation is a process of social construction, they argue that "(S)ources of innovation do not reside exclusively inside firms; instead they are commonly found in the interstices between firms, universities, research laboratories, suppliers, and customers" (p. 118). The diversity in the sources of innovation and the wide range of organizations involved in a single breakthrough[2] creates an imperative for firms to develop a capability to manage multiple interdependencies across diverse collaborative behaviors.

> "Firms deepen their ability to collaborate not just by managing relations dyadically, but by instantiating and refining routines for synergistic partnering. To illustrate,

[2] They cite two notable discoveries in biotechnology to illustrate the diversity of sources of innovation and the wide rnge of different organizations involved in these breakthrough publications. One, the development of an animal model for Alzhemeimer's disease that appeared in a report in the journal Nature which was coauthored by 34 scientists affiliated with two new biotech companies, one established pharmaceutical firm, a leading research university, a federal research laboratory, and a nonprofit research institute. Two, a publication identifying a string candidate for the gene determining susceptibility to breast and ovarian cancer in Science which featured 45 coauthors drawn from a biotech firm, a U.S. medical school, a Canadian medical school, an established pharmaceutical company, and a government research laboratory.

> Richard DiMarchi, Vice President for Endocrine Research at Eli Lilly and Company, emphasizes that the biggest mistake his company could make in managing research alliances is to treat them as 'one-offs' – independent relationships pursued separately ... The development of cooperative routines goes simply beyond how to maintain a large number of ties. Firms must learn how to transfer knowledge *across* alliances (emphasis added) and locate themselves in those network positions that enable them to keep pace with the most promising scientific or technological developments" (p. 119).

Similarly, social network theory suggests that innovation is facilitated by a firm's strategic position in knowledge networks (Hargadon and Sutton 1997). Should a firm identify and occupy a 'structural hole' (Burt 1992), or a gap in the flow of information between subgroups in a large network, it is in a position to broker and arbitrage information across players. Hargadon and Sutton (1997) argue that Edison's laboratory could innovate routinely because it occupied such a structural hole between industries where there was and was not knowledge about the newly emerging electromagnetic technologies. Accordingly, they were in a position to act as "brokers who benefit(ed) by transferring resources from groups where they are plentiful to groups where they are dear" (p. 717). The social network literature thus emphasizes the structural position that a firm occupies in knowledge networks. It focuses on resource flows across group boundaries, and argues that 'brokering of knowledge' enable firms to benefit from disparities in the level and value of particular knowledge held by different groups. As argued by Hargadon and Sutton (1997)

> "Knowledge is imperfectly shared over time and across people, organizations and industries. Ideas from one group might solve the problems of another, but only if connections between existing solutions and problems can be made across the boundaries between them. When such connections are made, existing ideas often appear new and creative as they change form, combining with other ideas to meet the needs of different users. These new combinations are objectively new concepts or objects because they were built from existing but previously unconnected ideas" (p. 716).

The implications are more than simple arbitrage possibilities that arise through the implicit advantage of being interconnected with firms with diverse knowledge bases. The value of an organization's linkages with external players also lies in identifying the potential in combining disparate resources and capabilities that lie embedded in the tacit know-how of inter-linked firms, and thus creating new value and knowledge by adapting and recombining existing solutions into unique market opportunities. From the perspective of the RBV, a firm's inter-linkages with external strategic assets provides it with a opportunity to combine the resources and capabilities embedded in its array of relationships in new ways that enables a dynamic enhancement or a flow of strategic assets and new competencies.

The above discussion suggests that collaborative rents are enhanced through coordination processes that seek to leverage across the disparate clusters of transorganizational strategic assets embodied in a firm's network of linkages. I extend the CSQR framework of Madhok and Tallman (1998) from a specific alliance to a firm operating with multiple alliances across business units, functions, and geographies. In lieu of conceptualizing a potential and actualized rent frontier for a specific alliance, consider the potential and actualized rents forthcoming from an organization's array of alliances. Earlier arguments on leveraging across multiple alliances and implementing an overarching strategy which coordinates and provides a holistic 'umbrella' over diverse collaborations, indicate that there is a synergistic component of collaborative rents. In other words, the potential of collaborative rents that can accrue from a firm's portfolio of alliances, or the portfolio potential, is more than the mere sum total of the individual CSQRs. It involves a synergistic component created by the potential of leveraging

individual alliances across each other. Conceptualized another way, the portfolio potential comprises of potential rents from individual alliances, or the sum of the component parts, as well as the potential created through synergistic integration across the portfolio of collaborations. While individual CSQR frontiers represent the potential for collaborative value through combining the resources and capabilities of the partnering firms in a specific alliance, the portfolio CSQR frontier represents the additional possibility of being able to break through new market and technological frontiers through unique combinations of the systemic resources and capabilities that are linked through a web of inter-organizational relationships.

Simultaneously, conflicts may arise across network actors that increase the level of relational imperfections in the system beyond dyadic actors. For example, consider a situation where the relationship of business unit A and partner X is compromised by an alliance between business unit B and partner Y due to friction that exists between X and Y. The conflict that arises increases the systemic imperfections in the portfolio, this driving down the actualized portfolio rents beyond what is caused by the sum total of the imperfections of the individual relationships.

In other words, a source of portfolio CSQR lies in organizational processes that seek to provide a coordinating umbrella and a strategic underpinning to the gamut of key relationships of a firm. This strategic portfolio approach decries an ad-hoc, discrete and separated view of a firm's alliances. The literature thus emphasizes creating synergy across a firm's portfolio of relationships, as against adopting a separate and disintegrated view of each linkage. This evokes the imagery of a 'strategic center' firm that integrates multiple capabilities across internal and external organizational boundaries (Lorenzoni and Baden-

Fuller 1995) and guides an entire network of firms. However, the importance of managing a portfolio of alliances effectively is also applicable to organizations that may not be a strategic center of any network. In fact, most firms operating in different product markets find themselves occupying various structural positions in a number of different groups or constellations of firms.

The question arises as to what constitutes the domain of this organizational capability. It has been noted that a system view of alliances involves a sensitivity to co-aligning strategic intents across multiple alliances, and active transfer of knowledge across alliances in order to enhance system competencies (Lorenzoni and Baden-Fuller 1995; Dyer and Singh 1998). Thus, alliance leveraging implies a dynamic and 'inclusive' view of resource deployment, one that takes into account diverse resource bases of partners and the need to feed into each other. The preceding discussion indicates that adopting a systemic or holistic view of alliances is critical. This in turn implies that organizations that have developed process capabilities to coordinate activities and strategies across an array of inter-firm linkages, and a pattern of interaction that seeks on one hand to create synergy through a flow of knowledge across alliances, and on the other, to manage conflicts that arise from such complex interdependencies, are likely to be strategically advantaged. Consequently, alliance leveraging is defined as *the extent to which an organization engages in coordinating activities and strategies across its portfolio of alliances.*

Alliance Learning

Various scholars have argued the importance of knowledge, but as Simonin (1997) notes, few have focused on how companies can develop know-how. Tallman and

Shenker (1994) note that in many organizations, corporate perceptions and use of international joint ventures have become institutionalized and have resulted in the formation of both explicit and implicit organizational routines. As Simonin (1997) argues, it is this organization-wide collaborative know-how embedded in firm routines that determines how effectively new collaborations are entered and managed. More specifically, he argues that "a firm's propensity to transform collaborative experience into a form of competitive advantage will depend on its capacity to internalize and routinize lessons drawn from a variety of organizational and individual experiments ... (A) critical foundation for a learning organization is this ability to build from experience" (p. 1157).

Field interviews indicate a serious concern with institutionalizing learning from prior experiences. Charles Roussel, Partner, Anderson Consulting, emphasizes that a core aspect of a firm's partnering capability relates to:

> "A firm's ability to institutionalize the learnings that they develop from specific bilateral alliance situations in all parts of their value chain from research and development, all the way through marketing and co-promotion. It's the ability to leverage those learnings effectively in an organizational context; so you create a shared knowledge base that somehow exists in an electronic form within a firm that's accessible to other alliance practitioners. You develop training and skill building kind of materials that assists somebody who may be entering into his or her first alliance to do a better job than they otherwise might have done. So, it's the ability, first and foremost, to cultivate the learnings from an alliance and to leverage those across the firm"

Myron Kasseraba, Director – Corporate Alliances, Kodak, reflects that

> "Creating an organizational memory around alliance related experiences is absolutely critical. We did an audit of our company and from the 60-70% of our company that we covered, we found 156 people who spend a significant percent of their role as alliance managers. They are the people who are doing the learning by doing. But the process of managing the alliance is so consuming that they do not have the time to participate in a lot of organizational learning. Intellectually it is a great idea - create a great database and track all the information. These can be very valuable tools: have an internal network of practitioners that can be drawn

> on for staffing an alliance or just help out with advice on partnering is really important. "How did you do that? I have hit this stumbling block, what do I do about this?" kind of thing. But it is very difficult to do. You need to have a systematic program to do that. For example, here at Kodak, we have a Corporate Strategic Alliances Council, which I head."

There is thus a convergence in literature and observations from practitioners in suggesting that collaborative experience needs to be transformed into collaborative know-how. Developing on this notion, the fourth dimension of partnering orientation reflects an organizations efforts to create an institutionalized collaborative know-how, captured from field experiences and stored in its memory. This is a key aspect of a firm's capability to generate collaborative rents, and has implications for sustained competitive advantage. As elaborated by Simonin (1997), effective transformation of experiential learning into collaborative know-how is a valuable resource, one that satisfies criteria of being valuable, rare, imperfectly imitable, and imperfectly substitutable. I argue that an institutionalized partnering know-how is an intangible strategic asset that enables the generation of collaborative rents. In other words, partnering orientation embodies processes and activities that reflect efforts to create an organization-wide partnering capability.

I first draw a link between the RBV and organizational learning. I argue that a firm's theory in use impacts strategic choices and rent generation. Give that a firm's theory in use is impacted by its learning behavior, there is a direct connection between learning and rents, more so in the context of alliances which involve complex socio-technical collaborative behavior that are tacit knowledge based and develop mainly from experiential sense-making and learning.

Implicit in the RBV is the notion of the firm as a learning organism, or one "skilled at creating, acquiring and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights" (Garvin 1993, p. 80) as it adapts and upgrades its resources and capabilities to meet the needs of a changing environment. As Conner and Prahalad (1996) argue, "the literature makes increasingly clear, a knowledge-based view is the essence of the resource-based perspective. The central theme emerging in the strategy management resource-based literature is that privately held knowledge is a basic source of advantage in competition ... A resource-based view of the firm thus entails a knowledge-based perspective" (p. 477). Emphasis on the dynamic accumulation, mobilization and deployment of asset stocks (see Lado, Boyd, and Hanlon 1997) places an imperative on firms to continually acquire new skills, assets, and capabilities in order to sustain their competitive advantage. This view reiterates the importance of the "flow" of strategic assets over existing "stocks" as a basis for sustainable advantage (Dierickx and Cool 1989). Collis' (1994) argument that the circular pattern of reasoning inherent in the RBV results in the problem of infinite regress is related to this very issue. Collis argues that over time, the acquisition of meta-capabilities, or higher-order capabilities that facilitate the development and deployment of lower order capabilities, determines firm survival (p. 148).

In brief, the dynamic capability-based perspective of the RBV is deeply rooted in organizational learning: the ability of a firm to learn how to develop sophisticated new capabilities in time period t+1, one that supercedes the competitive advantage determining capability in time period t, is key to improved market positioning.

A strong theoretical link exists between learning and behavior, and thus between organizational learning and firms' strategic choices. Consider that organizations being cognitive enterprises (Deshpande and Webster 1989) act on the basis of their theory in use, or their implicit or explicit understanding of how things are done (Argyris and Schon 1978). As a firm learns from its sense-making processes, it, over time, adapts its routines and procedures to bring them in sync with a modified set of beliefs about cause-effect relationships. This process, whereby theories in use are modified as a firm interacts with its environment, implies that learning impacts firms' strategic choices. In other words, organizational learning ultimately manifests itself through internal and external actions that reflect the operationalization of changes in theory of use (Sinkula, Baker, and Noordewier 1997).

In the context of collaborative rent seeking behaviors, an institutionalized partnering related knowledge management system focusing on transforming collaborative related experiential learning into accessible organizational memory, is likely to influence the level of organization-wide knowledge and insights on how to maximize rents from collaborations. The inherent complexity and range of inter-related processes involved in collaborative rent seeking implies that similar to certain non-appropriable assets such as corporate reputations, research institution reputations, and a scholar's reputation for quality work, an organization's partnering routines or 'best practices' are developed and acquired via internal accumulation through the "cumulative result of adhering to a set of consistent policies over a period of time" (Dierickx and Cool 1989, p. 1506). This internal accumulation takes the form of organizational memory, or stored knowledge (Moorman and Miner 1997), in alliance related activities. Organizational memory, or "a

repository for the collective insights contained within policies, procedures, routines, and rules that can be retrieved when needed" (Day 1994), determines a firm's theory in use and thus its strategic actions in the domain of collaborations.

The link between organizational memory and the ability of a firm to create economic rents has been established in various domains such as new product development, and diversification. In the present context, consider Madhok and Tallman's (1998) arguments that "a collaboration may also potentially benefit a firm through an accretion to its FSQR (firm specific quasi rents) as a result of positive spillovers. For example, through the collaboration, the firm may gather new knowledge which it is able to combine uniquely with other resources resident in the firm in a value-adding manner so as to increase their rent-generating capacity outside the collaborative relationship. This is an indirect benefit of alliances which, in Khanna's (1998) terminology, would be considered as "permanent private benefits" (p. 329). Private benefits may accrue in various ways, one of which is through added insights into value generating alliance related processes that accrue through experience with a specific partner, that may then be utilized in other relationships. Thus, new knowledge that a firm gains through a specific collaboration on how to become 'better' at alliances is FSQR, in the sense that a firm can now utilize that knowledge in designing value enhancing processes in its other relationships.

A collaboration-related organizational memory, created through a conscious and strategic process of institutionalizing learning routines that seek to acquire, interpret, codify, and disseminate alliance related learning and experience, seems to reflect what Harbison and Pekar (1998) refer to "a rigorous and disciplined approach to building an

institutional alliance capability" (p. 128). Such systematic procedural learning efforts, whereby experiences are captured, interpreted, and transformed and codified into a shared organizational repository of procedural knowledge (Argyris and Schoen 1978), impact a firm's theory in use, or its understanding of "how things are done" and thus enables the adaptation of organizational norms, rules, policies, and procedures to new organizational realities (Sinkula 1994). Substantiating this is a statement from Mark Chandler, Manager – Business Development, Hewlett Packard, a pioneering firm at institutionalizing alliance capability:

> "About every two years, we go back and do a survey of our top ten to thirty alliances. We talk to the alliance managers and understand what the objectives were when this got started, how it is structured, how it is managed, what levels of our organization and partner organization are involved, how frequently they are reviewed, how they measure whether they are successful or not, how they evaluate how to continue or modify the alliance and where they see it going in the future. From that, we try and understand what has gone well and not so well. For the things that have gone well, there is a common pattern there of raising an amplifier on those characteristics as something that is essential for success. For the areas that have not gone well, delving in a little bit further to figure out what was or could have been an advance warning, and how could we have identified that a little earlier or restructured things differently to avoid it. Is that then a question we should make standard, or a new process check, or new tool we should add to the tool kit for others to use henceforth? And then we modify our existing processes, which are thus kept alive in a strategic alliance manual that reflects our new learning."

In other words, systematic learning related processes aimed at enhancing firm capabilities in 'how to create value through alliances' is an integral part of an organization's routine based capability to leverage alliances, as an organizational form, into improved competitive positioning. These systematic alliance related learning routines are part of the organization's strategic collaborative capability in that they enable the firm to increase its effectiveness at transorganizational strategic asset acquisition,

integration, and deployment in the search for sustainable competitive advantage. Firm specific collaborative rents can thus accrue from experiential learning. As a firm becomes more adept at various aspects of their 'collaborating technology,' through developing its expertise through new knowledge culled out from its experiential learning, it can deploy this evolved set of routines and processes across its portfolio of current and future relationships.

In addition, an organization can also make use of other stakeholders' experiences, study industry benchmarks, and consult with subject specialists to understand the dynamics and evolve a tailor-made model that will enable it to move up the learning curve. For example, Pamela Klem, Manager, Corporate Strategic Alliances, Lucent Technologies, mentioned her company's efforts to learn from others:

> "We started with just trying to learn about it. We've done a fair amount of talking to other companies and talking to potential partners about how they establish and carry on this function. There are a variety of models that seem to work. There is no one clear model that is coming to us as the best way or the only way to develop or manage this capability. But we certainly have spent a fair amount of time trying to talk to other people who do it about how they do it. Then we've done some consulting, and benchmarking. We also do an internal assessment of trying to glean lessons learned, which I guess is the best way to capture capabilities from experiences we have had within our organization. HP is one of the companies that we have partnered with in the past and who have one of the better articulated, longer standing models of how to do this. They are definitely one of the companies that we have talked to extensively and tried to take what we can from them. It is a little bit different because they are organized differently. They have these three business groups and on their computer organization, they operate with a fairly large degree of central coordination and have been for some time, but we definitely look at them as a model. We are trying to learn from our experiences by interviewing and talking to people in the business groups who are actually in the implementation phase. There is a tremendous amount of research and knowledge about the up-front strategies and even the needs identification. There is a lot written about that internally and externally. Where the data gets really sketchy, and few and far between, is what actually happens in the implementation. What I have found in talking to my colleagues (who are in the relatively few non-equity partnering ventures of any kind of business magnitude that we have actually gotten to full stream implementation and we really know how the relationship is

> playing out) is that this is where the most critical lessons lie. Everything up to that is academic. From the interviews, we are putting them to paper. Then there are a couple of forms which we share across business groups. We have also put them on the web site, internal to the firewall, to anyone interested. We are trying to get the word out that there is a resource to go to. The people who we have interviewed, we ask them to make themselves available for follow-up discussions."

The importance of organization initiatives to reach out and acquire experiential learning is highlighted by the comments of Charles Roussel, Partner, Anderson Consulting, who mentions that "there is a huge, huge turn-over in alliance champions. That's where the competency lies, but very little of this is extracted from people that actually do the alliances. There is very little codification of this, so every alliance does it differently, and we're learning to do it every time. It is just not a good way." Myron Kasseraba, Director Corporate Alliances, Kodak, underscores the importance and the challenges of tapping into the resident expertise in organizations. He mentions that "(P)ractically, it is very difficult to do. I run the Corporate Strategic Alliances Council, which includes the focal people dealing with alliances. People who are really good at alliances are not showing up at these meetings. People who are good at alliances like to do alliances, not manage the doing of alliances. It has been a huge problem for me personally. I have been a deal maker and it is very frustrating for me to be a teacher of deal making or creating an architecture for good alliances and partnering." Bruce Gitlin, Director Corporate Alliances, Xerox, underscores the point. According to him, "(E)veryone in a management level position is involved with outside companies. So to some degree everyone considers themselves competent to deal with third parties and manage alliances that result from those dealings. That is a perception that is not always true. We try very hard to identify the people who are most competent and use them as

subject matter experts who will share information, experiences and best practices with others. We try to identify the people who seem to do this well and allow others to use them as a reference."

Guy DiCicco, Director Globalization, Corning Inc., stresses the importance of internal subject experts, and both informal and formal modes of dissemination of experiential learning.

> Joint ventures and alliances have always been such big part in our lives and our performance that people always talk about them. A little bit like the way villages communicate key learnings and so forth. It happens at Corning much more informally. We don't have classes for instance where people go and say, okay, we are the JV management. But on the other hand, we have a Commercial Excellence Council of business leaders. From time to time, we have featured speaker and then a panel on alliances where everybody in the commercial community, at all levels, are invited in. Participants are managers who have been involved in joint ventures and alliances over the years. They take a lot of Q & A from the audience. So you had new comers, people with less than two or three years service, who were hearing this sort of thing. Most of what we do on a formal basis is usually done through a once-a-year gathering of the commercial community. We have Quality Milestone events in which various business units are brought in to talk about the things that they've done to really reflect total quality principles and practices. And occasionally, one business unit would talk about one of its joint venture affiliates. Again, this is another opportunity to talk about the learnings and the practices, and the policies and the credos of how you do it well. And then at various management meetings whenever there's performance issues around the JV, good or bad, it's not unusual to hear one of our top leaders talking about a past experience with a partner, saying "Well, here's where one of our key values from the past is gonna take, get us through this tough time" sort of thing. This tends to sink in. I would say from my own personal experience that a bulk of what I've learned is from my experiences about how it all happened, and some from others experiences that have been translated into organizational does and don'ts and is finally in our memory."

Consequently, **alliance learning** is defined as *the extent to which an organization engages in acquiring, analyzing, and disseminating experiential alliance-related learning throughout the organization.*

In summary, it is argued that partnering orientation constitutes organizational processes in the domains of proactive initiation of alliances, relationship management, coordinated strategies across the portfolio, and experiential learning. In methodological terms, I argue that partnering orientation is a second-order construct that is based on the above four first-order facets.

CHAPTER 3

CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESES

This chapter develops a nomological framework for the study. The key antecedents and outcomes of partnering orientation are identified and discussed. Constructs are defined and rationale behind specific hypotheses developed. The rationale is developed on the basis of the theoretical argumentation of the preceding chapter, existing literature, and in-depth field interviews with senior executives with alliance responsibilities. Figure 3.1 displays the model.

ANTECEDENTS TO PARTNERING ORIENTATION

The first part of the framework identifies factors that are theoretically associated with a partnering orientation, and develops a theoretical model of antecedents. Two main sets of factors are considered: organizational and environmental. The former represents variables that are malleable through strategic choice, while the latter variable relates to managerial perceptions of environmental uncertainty. Within the former, variables related to top management team, structural, cultural and process characteristics of the organization are considered. While top management team factors relate to the characteristics of the dominant coalition of the organization (Hambrick and Mason 1984), the rest are in line with Hurley and Hult's (1998) framework, in which they define cultural characteristics as behaviors that are valued and promoted in an organization, structural properties as objective aspects of an organization that cannot be deduced from

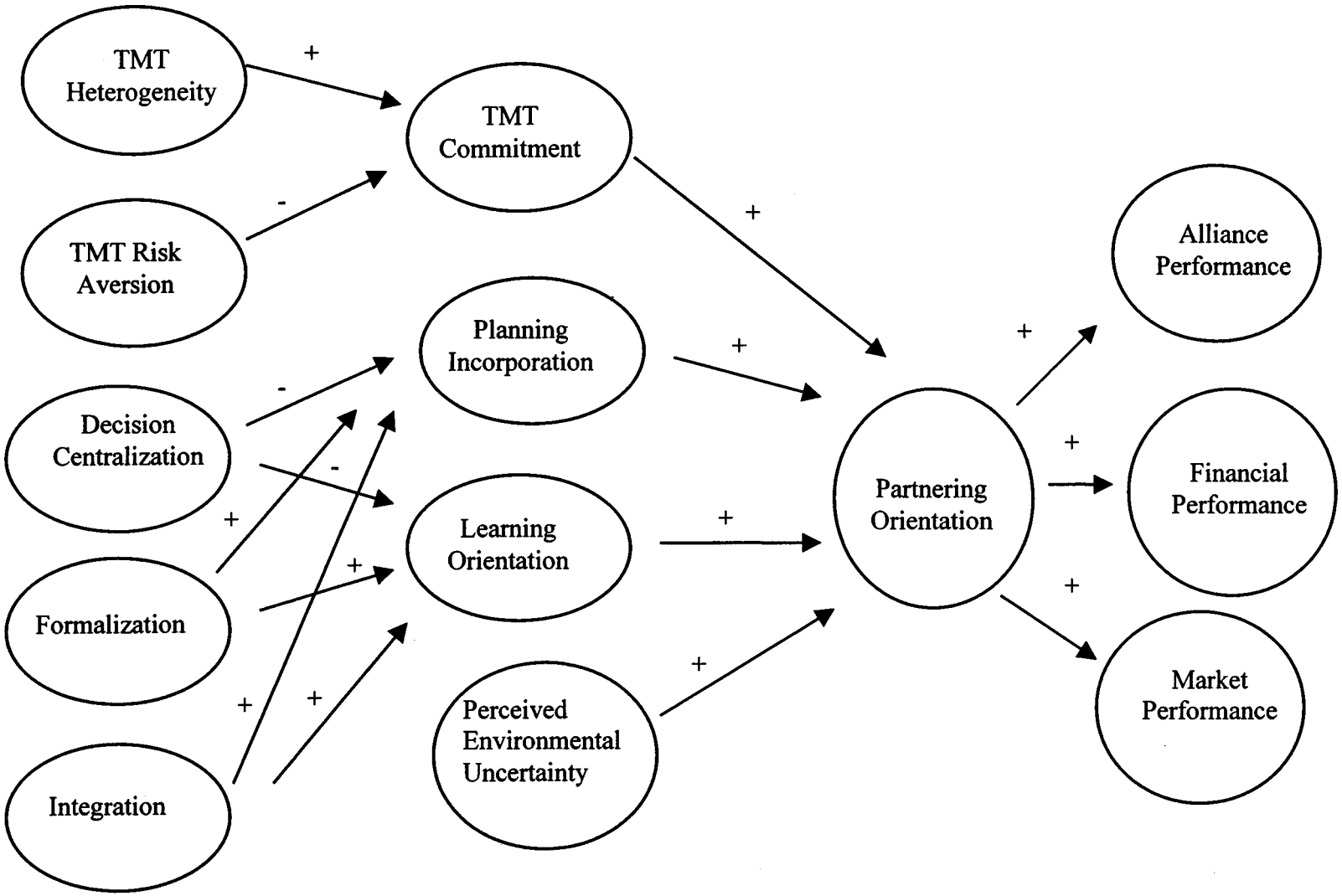

Figure 3.1: Proposed Model

or reduced to properties of organization members, and process characteristics as combinations of tasks or activities that an organization emphasizes as being key instrumental factors that lead to desired outputs.

More specifically, top management team characteristics examined are heterogeneity, risk aversion, and commitment; the structural variables are decision-making centralization, formalization, and integration; the cultural variable is the organization's emphasis on learning or 'learning orientation'; while the process variable relates to the extent to which alliances are incorporated into strategic planning. A single variable of perceived environmental uncertainty, covering the domains of technological dynamism, market volatility and competitive hostility, is considered in the model.

It is argued that three key factors drive partnering orientation, namely top management commitment to partnering, the incorporation of alliances into the strategic planning process, and an organization's learning orientation. Each of these key drivers is in turn influenced by a set of antecedents. TMT commitment is associated with TMT heterogeneity and risk taking propensity, while strategic planning and learning orientation are facilitated by structural factors.

Top Management Team Factors

The emerging view from recent strategy research suggests that leaders and top management teams (TMT) "matter greatly" (Finkelstein and Hambrick 1990, p. 500), and have substantial impact on organizational outcomes (Romanelli and Tushman 1988). Although initial studies of executive leadership have focused on the impact of individual CEOs or general managers (Gupta and Govindrajan 1984), recent work, driven by the theoretical constructs of the dominant coalition (Cyert and March 1963) and upper

echelon theory (Hambrick and Mason 1984), have focused on top management teams. Drawing on strategic choice theory (Child 1972), the basic premise of this literature is that top managers affect organizational outcomes primarily through the decisions or strategic choices that they are empowered to make for the organization. Since strategic choices, such as selecting new product-markets to enter, are fraught with uncertainty (March and Simon 1958), Hambrick and Mason (1984) argue that due to the complexity and ambiguity surrounding strategic decision-making, managers make decisions that are consistent with their cognitive bases, which are partly a function of their personal values and experiences. The centrality of behavioral factors (Boeker 1997) as determinants of organization's strategic choices in upper echelon theory has spurred research that has linked TMTs to organizational innovation (Bantel and Jackson 1989), strategy (Finkelstein and Hambrick 1990; Boeker 1997), strategic change (Wiersama and Bantel 1992; Geletkanycz 1997), and performance (Michel and Hambrick 1992).

It has thus been argued that not only are the basic values and beliefs of a CEO a key force in shaping an organization (Hambrick and Mason 1988), but that the TMT actually imprints their values into the design of an organization (Geletkanycz 1997). Lewin and Stephens (1994) argue that CEO attitudes are a major source of variation in organizational design, a macro-property of an organization - an encompassing construct that incorporates process and is thus broader than the traditional construct of organization structure. They draw on Daft and Lewin's (1990) formal definition of organization design as "encompassing the organization's formal architecture ... , culture, decision-making norms, ethics, structure of employment relationship ..., and strategy" (p. 187).

A link between partnering oriented behavior and TMT characteristics may be drawn from the research linking TMT and strategic change. Substantial research is founded on the premise that to remain viable, organizations must adapt to changes in their environment, and that the task of bringing about this alignment between the firm and its environment rests with senior management. Thus, as Geletkanycz (1997) argues, it is presumed that as the firm's strategic leaders, the TMT monitors the external environment for developments of relevance to the organization, and initiates changes to its strategic policies as needed. Addressing the issue of how organizations make decisions about which businesses to compete in, Boeker (1997) notes the tension between organization theorists and strategy researchers. While the former primarily adopt an inertial view and argue that organizations are constrained in their ability to adapt (Hannan and Freeman 1989), strategy researchers emphasize the role that managers play in monitoring environmental changes, and modifying organizational strategy to better match environmental contingencies (Child 1972). However, theoretical and empirical research shows that decisions to initiate strategic changes which are related to changes in the overall set of products and markets the organization competes in, are the responsibility of the TMT, and that the characteristics of the TMT plays a central role in prompting major changes in strategy.

Research has argued and substantiated the strategic role of partnering and its links with competitive strategy. This strategic role of partnering is emphasized to be a mode through which new technologies and products can be developed, new markets accessed, and organizational capabilities and competencies enhanced and acquired. Scholars have argued that the boundaryless and the networked organization as an artifact of the age of

alliance capitalism (Dunning 1995), and as an innovation in organizational form and structure that has resulted from strategic choices that managers have made to bring their organizations in sync with environmental contingencies, and the challenge of managing discontinuities resulting from a complex, interdependent, and turbulent global economy (Daft and Lewin 1993). Miles and Snow (1986) further argue that the search for new competitive approaches is producing "a new organizational form – a unique combination of strategy, structure, and management processes that we refer to as the dynamic network" (p. 62). In essence, alliances, or the competitive-cooperative syncretic approach, represents a major innovation in organization design. Further, partnering is a complex and costly phenomena. Along with various potential benefits, are risks of information and autonomy loss, organizational disruption, and adjustment difficulties, with the large number of failed alliances standing testimony to its pitfalls. It is thus argued that the decision to adopt alliances as a competitive strategy, and to institutionalize partnering oriented behavioral processes in an organization, is a fundamental strategic choice facing an organization. Partnering orientation may thus be impacted by its top managers.

Literature and field interviews indicate that a relational logic (Jones et al. 1998) emanating from the top management team (TMT) diffuses through an organization, and results in a cognitive and behavioral commitment to partnering. Drawing on cognitive strategy literature, it is argued that the relational logic that prevails among members of a TMT gels into an organization-wide logic that governs decision rules which transform resources into action, and influences an organization's routine operating procedures with respect to partnering.

The basic concept that underlies the work of much cognitive research is that strategists' cognitions determine the 'real-world' decision-making of managers (Simon 1976). Rumelt and Ortony (1977) define strategic schemata as the cognitive representations of attributes and the relationships between that constitute common-sense social theories. Neisser (1976) conceptualizes them as active cognitive structures that frame problems and orient information search. Relating schematas to embedded knowledge, Sims and Gioia (1986) argue that schemas are mental structures that serve to organize knowledge in some systematic way, which then guides information processing and decision-making in firms. Prahlad and Bettis (1986) suggest that managers carve "beliefs, theories, and propositions" (p. 489) which over time gel into an organization-wide 'dominant logic' that governs the decision rules firms use to transform resources into action. Similar to Drucker's (1994) theory of the business, dominant logic exists both in terms of knowledge structure and elicited responses, being based on unique insights which become embedded into an organization's routine operating procedure. Being socially complex phenomena (Barney 1992), they are non-tradable and non-imitable sources of competitive advantage. Fiol (1991), arguing that these cognitive dimensions of a firm's competency can be leveraged by managing the links between abstract cultural values and its behavioral expressions, asserts that for organizational culture to act as a competitive resource, it is important to understand how these implicit *'beliefs, theories, and propositions' which emerge in the form of organizational logics govern the processes by which firms transform resources into action outcomes'.*

In essence, cognitive strategists suggest that organizational schematas transform into embedded 'logics' that are unique to firms, and which impact firms' world-views,

their beliefs and values, and their behaviors. Linking these theoretical streams to the partnering context, I believe that managers, over time, develop a world-view that influences their perceptions and actions related to partnering issues. The more these collective beliefs, values and behavioral routines influence them to value collaborations and develop a long-term vision for relationships, the more relational is this logic. Thus, firms where the TMT have a relational logic are endowed with a belief structure and an experiential knowledge base that influences them to value seeking strategic solutions through reciprocal interdependence in long-term alliances. In short, it is argued that a TMT's relational logic results in proactive seeking of strategic solutions through partnerships, greater stress on relationalism rather than opportunistic behavior, and integration of alliances into core strategies.

Partnering Commitment: As architects of an organization's design, the TMT plays a critical role in fostering a partnering orientation through the organization. The active role of TMT members in championing alliances repeatedly came up in field interviews. Senior management championing, which offers a key signal to both internal and external stakeholders (Lawless and Price 1993), seems to be critical for an organization to develop a commitment to partnering. This is substantiated by the following comments from senior executives that were interviewed:

> "Prior to George Fisher coming on board, we were a company that approached partnerships very hesitantly. If we weren't in a position of control, we would only very infrequently get into bilateral and equal arrangements. Our idea of partnering had been to control someone who we could not acquire. Even when we got into multi-vendor arrangements, it was with the attitude that we had to be on top. And George, coming out from the high-tech telecom industry, really brought in a different attitude towards the use of partnering. He brought in some people from outside, from companies such as Apple and such, where partnering was a normal way of doing business. The cultural element here was against partnering, but the CEO and some of the key managers created an environment that encouraged

partnering. The role of top management is very critical especially in multi-business unit alliances. There is no way I can make any of the deals happen if there isn't a high level of involvement by senior management, because very frequently you are trying to influence behavior of multiple organizational silos within the company. If you don't have a clear escalation path, or clear indication of support from senior management, in large companies the natural tendency is for parochial behavior. I often joke with Dan Carp, our president, that what we need is a bat rack of Louisville Sluggers with his signature on them. When someone comes in with a major initiative he really believes in, he needs to be able to hand over one of those bats they can carry around with them into meetings and say "No, no, no!!! Dan really does believes this is important!" That is probably the biggest challenge in large and diversified multi-business unit companies. Anybody can claim that George Fisher thinks it is important. But how do I know that the CEO really thinks this is important? The only way is to get senior management engaged with a proactive review process so that you know that quarterly, (or whatever the time period is, weekly, quarterly etc.) at some point of time, the CEO and TMT are going to sit down and review the progress this partnership has made towards the objectives. You need to create this environment of accountability to top management.
Post George Fisher, one is encouraged to seek partnering alternatives. You are much more likely, in an executive review session, to be asked "Well, have you looked at doing this with a partner?" Right now, just from a financial standpoint, you probably don't want to walk in and ask GF for $100 mn to go build a semiconductor plant. He's going to say ""What are you? An idiot! There are 500 people out there with semiconductor manufacturing capability. Why build it yourself?" So, at least there's a change in the orientation; whereas in the old days, the CEO probably would have said "Well, do you have a business case?" And somebody could have fabricated a business case and justified it on the basis of being able to utilize the capacity. Quite frankly, that's what we have done in the past." (Myron Kasseraba, Director – Corporate Alliances, Kodak)

"Market signaling, that is the ability to articulate the culture that the firm is amenable to alliances is critical and certainly a function of top leadership support. Take Sydney Torail, the CEO of Eli Lilly. Torail has made some very significant public statements. He did so at a forum in New York last year and when we met with him has said very clearly that the future of Eli Lilly is predicated on setting up successful partnerships. So, he's been very public in those statements. That conveys a certain dynamic within the organization. So we look for that. Public statements and then internal efforts to reaffirm that it's important." (Charles Roussel, Partner, Anderson Consulting)

"Ultimately the support of top management is critical. Without their support, partnering will not be successful, for people are not inclined to do it for any number of reasons. It is always someone else's job. It is nice but is usually ancillary. Ultimately for partnering to be effective, it has to be championed and sponsored from the top down. For example, consider relationships where we are

> trying to develop credibility with our partners, and we are trying to develop a more strategic relationship based on some initiatives that are clearly going to be extremely beneficial for both companies. In the interim, we need to engage in more tactical things, and some cooperative things that are not home-runs, but that will further cross-organizational learning and help us develop relationships and prove that we can work together. In doing those kinds of things, cross functionally, individual groups that are asked to deliver on pieces of it are generally disinterested because they don't see it as a huge win for them. The huge win is going to come a few years from now, when all these little things are successful. We need to keep our toe in the water, and bide our time to continue more strategic discussions and work towards something big to fall out of it down the road. But we need to put ourselves in a position to have those discussions, and to reach some conclusions. To do that you have to ask a lot of people to do things that generally seem to be at odds with them really moving their ball forward in the tactical timeframe, say 6 months. And they probably would not do it without senior management championing this and saying "For the benefit of the relationship you need to do this. I know if you just look at it in and of itself, you are probably going to say why am I doing it, but you have to look at it in the larger context so we are going to do it." (Dana Mitchell, Director Corporate Alliances, Adobe Systems).

Consequently, **TMT partnering commitment** is defined as *the extent to which senior managers emphasize the importance of partnering, and dedicate their time and resources to partnering activities.* Thus,

Hypothesis 1:
TMT partnering commitment is positively associated with PO.

TMT Heterogeneity: Heterogeneity is a central construct in the TMT literature. Scholars have been particularly interested in the effects of the team's heterogeneity, or the variation in team members' characteristics, as a theoretical fulcrum for research on groups and TMT (Jackson 1992; Hambrick, Cho and Chen 1996). As noted by Smith, Smith, Olian, Sims, O'Bannon, and Scully (1994), demography is one of the three main concepts that have been studied in this literature. Based on Hambrick and Mason's (1984) contention that a manager's personal experiences and values can be inferred from observable demographic characteristics, and that studying these observable

characteristics overcomes the difficult problem of gaining access to executives to measure psychological or group dynamic variables, scholars have empirically linked TMT demographics to organizational outcomes (Eisenhardt and Schoonhaven 1990; Michel and Hambrick 1992). In a recent study on the effects of TMT heterogeneity on competitive moves, Hambrick, Cho and Chen (1996) echo Hambrick and Mason's (1984) concern, and note the difficulty of obtaining direct psychological measures of top management heterogeneity. They argue that in "line with almost all prior research on TMT heterogeneity, we rely on demographic conceptions of the group, according to which the executives' functional backgrounds, educational experience, and firm tenures serve as proxies for their perspectives, belief systems, and networks and affiliations" (p. 663). Milliken and Martins (1996) in their review of diversity in organizational groups, note some further sources of heterogeneity: age, ethnicity, gender, occupational and industry experience. In this study, rather than rely on demographic measures of heterogeneity, I define TMT heterogeneity as *the extent of perceived diversity or variation in the top management team's views, perspectives, and affiliations.*

How does TMT heterogeneity impact collaborative rent seeking behavior? The TMT is the aggregate informational and decision making entity through which fundamental strategic choices that shape the organization's alignment with the environment are made. In the context of partnering orientated behavior, these moves depend on the team's scanning of the environment for partnering opportunities; initiating action towards partners; designing and institutionalizing organizational processes that signal relationally-oriented investments which help develop self-enforcing informal

governance mechanisms; managing knowledge flows and conflicts across alliances; and gearing up the organization as a learning entity.

Hambrick, Cho and Chen (1996) note that although investigations conducted on the effects of heterogeneity in TMT have led to contradictory conclusions, there is a common underpinning to them: that on one hand diversity enhances the breadth of perspective, cognitive resources, and overall problem-solving capacity of the group, while on the other, there are potentially complex implications that serve to detract from positive effects on desired organizational outcomes. However, it is in the creative, unstructured tasks that TMT heterogeneity is expected to have its most positive effects. A diverse team has broader cognitive resources, encompasses a wider field of vision, and more extensive external contacts, than does a homogeneous team (Jackson 1992). This translates into a greater variety of perspectives being brought to bear on decisions, and thereby, increases the likelihood of creative and innovative solutions to problems. The added need for communication and information from diverse sources both within and without the organization is likely to be facilitated when members of the TMT are embedded into diverse social networks. With multifaceted backgrounds and orientations, heterogeneous TMTs can observe more opportunities, threats, and overall stimuli on several fronts and thus have a broader potential repertoire for actions (Hambrick, Cho and Chen 1996). For example, it has been found that TMT heterogeneity in educational curriculum facilitates organizational adaptation and change in diversification strategies (Wieresama and Bantel 1992), while overall, research suggests that more functionally diverse teams may be better linked into external networks, allowing them greater access to information (Milliken and Martins 1996).

On the other hand, TMT heterogeneity may result in internal conflict and strains. While diversity enhances group-level cognitive outcomes such as quality of ideas, behavioral and social integration may suffer, necessitating the use of bureaucratic control mechanisms which has an effect of slowing down decision making and impeding firm performance in volatile industries (Smith et al. 1994). Thus, heterogeneous TMTs are likely to suffer from larger process losses than less diverse teams (Milliken and Martins 1996).

However, as Hambrick, Cho and Chen (1996) argue, the action propensity of an organization is likely to be overall positively impacted by heterogeneity, with the enhanced access to wide-ranging stimuli and a broader potential repertoire of actions that its ability to conceive and launch competitive actions on many fronts should outweigh the dampening effects of internal strains. In the context of partnering, the ability to undertake proactive steps to initiate linkages with firms that possess desired and required strategic assets and thus preempt competitors from these resource spaces, is foremost a function of being able to identify, and generate partnering opportunities. In hyper-competitive environments where the grains of competitive structure shift endlessly and rapidly, cohesiveness in the TMT team may be of secondary importance. In line with Hambrick, Cho and Chen's (1996) rationale, we also posit that "compared with homogeneous teams which have relatively restricted redundant scanning and action-design capabilities, the heterogeneous team can be expected to engage in quantitatively more actions" (p. 665).

However, as mentioned earlier, researchers have generally agreed that diversity in a team is negatively related to social integration and communication, and in general lower levels of cohesiveness (see Smith et al. 1994). How is this likely to impact on processes

that aim to develop long-term, mutually orientated relationships with other firms that may have very diverse cultures from the focal firm? I argue that there are two reasons why more diverse teams are also likely to engage in relationally oriented actions with their partners. First, homogeneous groups are likely to suffer from groupthink, where efforts to preserve group unity, at the expense of critical appraisal will lead to a reactive organization (Janis 1972). Second, as diversity in the workplace increases along with interdependence, members of the team are per force made to realize the importance of being culturally sensitive, of having to constantly renegotiate with their colleagues, and of having to make sense of each others different world views and sense making styles (Weick, 1995). The high levels of interdependence that may be expected among members of a TMT implies that they need to consciously develop a cooperative and mutually oriented relationship among each other. Learning to integrate 'interdependence' into the TMT context implies that over time it is likely to evolve into an organizational 'theory in use' (Roth 1995), one that would facilitate the appreciation of relational-investments in general.

Diversity is also likely to result in a better awareness and appreciation of the value of leveraging across disparately residing resources and capabilities. As against a homogeneous team, diverse teams are more likely to be occupying structural holes in knowledge network due to their social embeddedness in heterogeneous social and professional groups. Accordingly, the ability of a firm to broker information across their network of associations is enhanced through diversity. During a strategy planning session, members of a TMT that are aware and embedded into multiple knowledge networks are more likely to envision the potential of leveraging knowledge and

capabilities across multiple alliances, as well as be more sensitive to any conflicts that may arise, than a homogeneous team that has essentially a limited number of viewpoints. In other words, diversity is likely to enhance a systemic view of a firm's array of alliances, and facilitate knowledge flows across multiple partners. Similarly, I argue that diverse teams, which suffer less from a group think mentality, are also likely to be more appreciative of enhancing learning activities. While TMT heterogeneity may not directly impact on PO, it's theoretical links with TMT commitment to alliances exist. Thus,

Hypothesis 2:
Greater the degree of TMT heterogeneity, greater will be its commitment to partnering.

TMT Risk Aversion: Risk taking propensity (RTP) (Sitkin and Pablo 1992) refers to an individual's or organization's attitude toward risk across situations. Although risk has various meanings depending on the context it is used in, Miller and Friesen (1978) define risk taking as "the degree to which managers are willing to make large and risky resource commitments – i.e. those which have a reasonable chance of costly failure" (p. 923). Lumpkin and Dess (1996) accordingly describe risk taking in terms of making large resource commitments in the interest of obtaining high returns by seizing opportunities in the marketplace. Distinguishing between risk perceptions, risk preferences, and risk propensity, Sitkin and Pablo (1992) define risk propensity as a mediator between risk preferences and risk behavior, arguing that "the general desire to avoid or pursue risks (i.e. risk preferences) does not determine specific risk behaviors, but rather it affects the general likelihood of a person's behaving in more or less risky ways (i.e. risk propensity)" (p. 15).

Lumpkin and Dess (1996) further note that there may be inconsistencies between an individual's risk propensity and that at the level of the firm and note that further work needs to be done in effectively operationalizing firm-level risk taking. However, I adapt Miller's (1983) scale which measures risk taking at the firm level by asking managers about the firm's top managers' proclivity to engage in risky projects and their preferences for bold versus cautious acts to achieve firm objectives. Venkatraman (1989) uses a similar approach, asking managers the extent to which they followed tried-and-tested paths or tended to support only projects in which the expected returns were certain. Jaworski and Kohli (1993) tap into managers' dispositions toward innovative actions in the face of risk and uncertainty.

As Pfeffer and Salancik (1978) and Thompson (1967) have noted, given a nondeterministic world, the greater the external dependencies facing an organization, the greater the uncertainty confronting it. March and Shapiro (1987) note that attitude towards risk is a crucial variable in managerial decision-making. This construct attempts to capture the extent to which the organization tends to eschew rigid, categorical thinking, resistance to change, and a preferred option of reducing "complex issues to more tractable forms, to deal with a minimum of information from the environment" (Lewin and Stephens 1994, p. 196). High RTP is associated with experimentation, trying a variety of approaches, seeking of diverse opinions, and comfort with long-term planning horizons. RTP has long been considered to be linked with innovation and in general entrepreneurial behavior (see Lumpkin and Dess 1996). Two issues relate RTP to a firm's strategic choice to engage in systematic collaborative rent seeking, the first in

terms of responding to uncertainties in the environment and attempting to control or manage it, and the second, in terms of the dynamics involved in collaborations.

How is RTP of top management likely to impact a firm's commitment to alliances? I argue that RTP and its association with innovation and creativity, is likely to enhance strategic emphasis on solution seeking through partnering. First, it has been argued that a top management more tolerant and encouraging of risk taking is likely to create an organization-wide culture that values innovation (Amabile et al. 1996). Psychological research on creativity has demonstrated that people are more likely to produce unusual, and useful ideas if they perceive an implicit license to do so. Expectations of censure and highly critical evaluations undermines creativity, while supportive evaluations act to enhance the intrinsically motivated state in managers that is most conducive to creativity (Amabile et al. 1996). Second, partnering is, as argued earlier, an organizational innovation and an evolving alternative to vertical and market-based organization of economic activity. Further, the complexities in partnering are higher as the focal firm does not control all elements of the developmental process through formal, administrative mechanisms. In general the 'high pay-off, high risk' scenario that arises in complex interdependencies necessitates managers who are

> "Managers who are willing to make bets. Consensus-driven management styles or cultures in large organizations makes partnering very difficult. The only way to do it is to bring in people from the outside who are empowered to make decisions. It is very rarely that you find someone who has grown up in a consensus driven culture who wakes up one day and says 'OK! I am gonna be decisive. I am going to drive activities.' The organizational culture of risk taking has a bearing on how the partnering culture develops in the organization" (Myron Kassaraba, Director – Corporate Alliances, Kodak).

The entrepreneurial aspect of RTP is likely to influence proactive alliance formation. One, managers are more likely to generate innovative ideas of solving

strategic needs through partnering when they are intrinsically motivated to do so; and two, they are likely to 'take the risk' of initiating the alliance. Managers in such organizational environments are also likely to be more willing to make 'relational investments' (Madhok and Tallman 1998), a critical determinant of whether the relationship becomes a idiosyncratic source of rents. In other words, managers will be more willing to take small risks to enable the relationship become stronger, and in uncertain and changing times, believe they have the latitude to be flexible and deviate from the written norm. Further, it is argued that strategic coordination is likely to be fostered through RTP. This involves coordinating across a number of players, sharing knowledge, and creating value in the process. An organization averse to risk is likely to treat its knowledge as proprietary, and be threatened by the notion of sharing. On the other hand, an organization with higher propensity to take risks is likely to be more experimentative and risk sharing knowledge and creating more interdependencies in the hope of larger gains all around.

Hypothesis 3:
Greater the risk aversion in the TMT, lower will be its partnering commitment.

Organization Culture and Process Factors

Learning Orientation

Argyris and Schon (1978) note that "organizational learning occurs when members of the organization act as learning agents for the organization, responding to changes in the internal and external environments of the organization by detecting and correcting errors in organizational theory in use, and embedding the results of their inquiry in private images and shared maps or organization" (p. 306). Galer and Van der

Heijden (1992) talk about "a culture amenable to learning" (p. 11) as a prerequisite to an organization improving its understanding of the environment over time. Hult and Ferrell (1997) argue for the salience of an organization's learning orientation, defining it as "the set of fundamental axioms or truths that the organization holds regarding the value it places on learning" (p. 101). They assert, based on past research, that developing an organization's capacity to work within the environment of a high degree of learning orientation requires both learning new skills and implementing an institutional climate that helps bring these skills into regular practice.

Sinkula, Baker and Noordewier (1997) define learning orientation as a "set of values that influence the propensity of the firm to create and use knowledge" (p. 309), which in turn influences the degree to which an organization is satisfied with its theory in use and the degree to which proactive learning occurs. They conceptualize learning orientation as a second-order factor manifested through three first order dimensions, namely commitment to learning, open-mindedness, and shared vision. While the first two components influence the intensity of the motivation to learn, the third refers to the cohesiveness within the organizational members.

According to Hackman and Wageman (1995), a desire for continuous improvement is "supported by a thorough and on-going learning orientation, including substantial investments in training and the widespread use of statistical and interpersonal techniques designed to promote individual and team learning. This orientation extends beyond the organization's boundaries, as is seen in programs to teach quality practices to suppliers and in benchmarking visits to capture the best of other organizations' ideas and innovation" (p. 337).

Fundamentally, learning orientation involves both cognitive and behavioral aspects. It is reflected through an organizational belief in the value of learning, the necessity of questioning established theories in use, being open to ideas and innovation from source outside an organization's domain, and in developing new competencies. Simultaneously, the behavioral aspect is reflected through actively investing in activities that lead to organizational learning both at individual and collective levels, such as training, use of statistical techniques, and benchmarking. I define learning orientation as *the extent to which an organization values proactive learning among its employees and encourages the incorporation of fresh ideas that emerge from this learning process.*

It is argued that learning orientation impacts an organization's willingness to search proactively for alliances, relational governance, engage in strategic coordination of its array of alliances, and invest in alliance related knowledge management systems. Much of alliance literature has linked alliances to learning opportunities. A greater orientation to learn implies that the organization is cognizant of the value of interacting with multiple sources of complementary competencies and accordingly attempt to interlink proactively with these external sources of knowledge. In other words, an organization which has managed to overcome the difficult 'not invented here' syndrome is likely to value knowhow from external sources. Second, given that market modes fail to transfer tacit and embedded knowledge, and that "relational contracts, either in individual strategic alliances or broader interfirm networks, are an intermediate solution" (p. 383), relational governance mechanisms are likely to be associated with learning orientation. Moreover the emphasis on the external integration and flow of knowledge

from its collaborators, and the creation of a shared know-how internal to the organization implies association with the third and fourth dimensions of partnering orientation.

Hypothesis 4:
Greater the organizational emphasis on learning, greater will be its partnering orientation.

Planning Incorporation

One of the primary ways that firms respond to new strategic issues is to integrate those issues into their formal strategic planning process (Ansoff and McDonnell 1990). For example, Shell Oil Corporation routinely includes global business parameters in their strategic planning process; Merck routinely incorporates information about new biotechnology developments into their planning process; while General Motors has integrated environmental issues into its strategic planning process (see Judge and Douglas 1998).

In the context of partnerships, the importance assigned to them from a strategic perspective is reflected in whether the firm considers them as core, rather than peripheral, to its overall strategy, and thus whether they are explicitly incorporated in the strategic planning process. By making alliances a "cornerstone of (their) corporate strategy" (Varadarajan and Cunningham 1995), firms are likely to drive partnering oriented behavior through the organization.

Planning incorporation is defined as *the extent to which an organization incorporates issues related to alliances into the strategic planning process.* The concept goes beyond mere compliance and reactive behavior, and includes activities that also measure the proactiveness of the organization with respect to this issue.

> "The way alliance strategy fits into the overall planning process is important. There are places where the alliance agenda takes input from strategic and

operational plans and there are places where it puts in content. There is a 200,000 ft. view of where we want to be, and what are the places in the market we want to play in. That's a strategy call which is based on where you see the growth, the profitability, and the opportunity. That happens first and inputs into how you start to think about partners. Then is the analysis of 'if that is the space on the chessboard where we want to be, who else is likely to be there'. They will either be our competitors, they could be acquisition targets or they could be potential partners. That is the input we provide to the planning process. Given our capability gaps, the basic 'build versus buy versus partner' is again a higher level strategy question which serves as a feedback to alliances. Then the people working on alliances have to figure out, given our decisions as to where we want to build or buy versus partner, what we want to accomplish through partnering and who we may seek to do that with. Then there is a bottoms-up corporate reality check to ensure that when we wish to do multiple things with the same partner, whether there are conflicts or internally inconsistencies, or an asymmetric wish-list. Looking at the sum of the parts and ensuring that it still makes sense is not just an alliance function, but a corporate reality check that needs to happen. And then there are identification of partners that gets back to the alliance agenda. What concrete things are you going to do and how are you going to ensure that you stay on the strategy point. There are places where we should be taking the lead from what otherwise is happening in the development of the overall plan, and there are places where we should be definitely be feeding back into. A critical goal is to ensure that the choice of 'build versus buy versus partner' is made explicit and that the conversations with partners happen at roughly the same time and context as filling capability gaps through acquisitions. Otherwise there is a tendency I think for partnering as an option to fill a capability gap to be overshadowed by acquisitions." (Pam Klem, Alliance Manager, Lucent).

It may be argued that firms may be able to create competitive advantages by incorporating alliances into their strategic planning systems better than other firms. The likely impact of planning incorporation is that there is likely to be a coherent alliance strategy, and consistent development of alliance capabilities within the firm. Planning incorporation is thus likely to be a significant driver of collaborative rent seeking behavior in an organization.

Thus,

Hypothesis 5:
Incorporating alliances into the strategic planning process will be positively associated with partnering orientation.

Organization Structure Factors

Much of strategy and organization literature have argued that the organizational context, more specifically, historically developed organizational structures constrain strategic choice (Child 1972; Ginsberg 1988). Fredrickson (1986) notes recent consensus that structure can have a profound impact on strategy through its direct effect on the process whereby decisions are made. For example, research supports the idea that structure influences managerial perceptions of environments, and thus on strategic choices (Sutcliffe 1994). Following Chandler's (1962) seminal work on the development of America's dominant industrial organizations, although there has been widespread acceptance of the 'structure follows strategy' proposition, a substantial body of literature suggests that once a structure is in place, it will influence the strategy decision process and therefore strategy. Arguing that dominant structure, or the structure that best describes the whole organization, influences strategy, Fredrickson states:

> "To understand why it is logical for the strategic decision process to be affected by structure, one must understand the relationship between decision making and structure. March and Simon (1958) get to the heart of this relationship by arguing that an organization's structure imposes boundaries of rationality that accommodate members' cognitive limitations. By delimiting responsibilities and communication channels, structure allows organizations to achieve organizationally rational outcomes in spite of their members' cognitive limitations (Simon 1976). It also helps management to control and facilitate the processing of information. This link is apparent in Bower's comment that "when management chooses a particular organization form, it is providing not only a framework for current operations but also the channels along which strategic information will flow..." (p. 281).

Accordingly, it is argued that structure impacts on PO through facilitating processes and cultures. Organization structure refers to an organization's internal pattern of relationships, authority, and communication (Thompson 1967). While structure has been characterized along a variety of dimensions, namely centralization, formalization,

complexity, integration, and specialization, organization structure has been studied in a variety of contexts, including JIT (Germain, Droge and Daugherty 1994), marketing exchange relationships (Mooman, Deshpande and Zaltman 1993), manufacturing (Miller and Droge 1986), strategic decision making (Sutcliffe 1994), conflict (Barclay 1991), global strategy implementation (Roth, Schweiger and Morrison 1991), new product development (Olson, Walker and Ruekert 1995) among others.

Three of these facets have been consistently identified as major dimensions of structure, namely centralization (or the reverse – decentralization), formalization, and integration (Germain, Droge and Daugherty 1994; Mintzberg 1979).

Decision-making Centralization: While centralization refers to the locus of decision-making authority in the firm (Miller and Droge 1986), Fredrickson (1986) describes it as "the degree to which the right to make decisions and evaluate activities is concentrated" (Fredrickson 1986, p. 282). The reverse notion, decentralization, is defined as the delegation of decision-making and the extent of participation by organizational members in decision-making (Aiken and Hage 1968; Jaworski and Kohli 1993; Moorman and Deshpande, and Zaltman 1993). According to Miller (1987), decentralization "divides decision-making tasks into more manageable bits, reducing cognitive limitations and allowing more planned and analytical approaches" (p. 12).

The systems-structural perspective of management suggests that centralization improves effectiveness and efficiency because it gives the decision maker the ability to plan, coordinate, and control all activities (Rukert, Walker, and Roering 1985). Thus, when interdependencies exist between sub-unit activities, system sub-optimization may occur with complete decentralization and "decisionmaking must be pushed up the

hierarchy where there is more complete understanding of the various units or activities" (Roth, Schweiger and Morrison 1991, p. 378-379). Thus, as Govindrajan (1986) argues, in some domains of decision-making, corporate oversight may be necessary to provide effective coordination and joint problem solving (Govindrajan 1986). On the other hand, centralization often undermines organizational performance by limiting the creativity, innovativeness, and adaptability of an organization (Hrebeniak and Joyce 1984; Miller 1993). The loss of individual decision making autonomy has been shown to decrease employee satisfaction and motivation, resulting in lower commitment to the implementation of corporate strategies. More fundamentally, however, when managers are removed from the organizational planning and control processes, they have less knowledge of the details and purposes of organizational strategies. With decentralization, managerial latitude of action increases (Finkelstein and Hambrick 1990), as does autonomy defined as "independent action of an individual or team in bringing forth an idea or vision and carrying it through to completion" (Lumpkin and Dess 1996). Thus, centralization may complicate the process of achieving organizational strategies, and impede organizational adaptability.

Although this theoretical tension between centralization and performance has been partly resolved by the contingency argument (Ouchi and Van de Ven 1980; Burns and Stalker 1961), the work on conceptualization and operationalization of centralization seems predominantly uni-dimensional. An important and notable exception is Germain, Droge and Daugherty (1994). Citing Carter (1984) and Mintzberg (1979), they argue that "(N)ot all domains of decision making in an organization are necessarily centralized or decentralized equally" (p. 473). Accordingly, in their study on JIT selling, they select two

dimensions of centralization, namely operations decentralization, and scheduling decentralization, arguing that the distinction of how things are done and when things are done is of particular relevance in the context of JIT.

Centralization is conceptualized in the domains of day-to-day operating decisions and overall corporate planning. Operating centralization refers *to degree of hierarchical authority in the organization in operating decisions*, while planning centralization refers *to the degree of hierarchical authority in planning*. Operational decentralization is compatible with planning vested in a "corporate center" which is charged with the mandate of coordinating between high levels of reciprocal interdependencies (Jones and Hill 1988) as illustrated by MNCs with autonomous and decentralized units, yet with thriving strategic planning functions at corporate office. Empowered managers are compatible with centralized planning structures , where an active corporate office facilitates strategic action by coordinating across diverse interests of the organization. Also, while product-market decisions may be decentralized in order to facilitate adaptation to effervescent market needs, an overarching corporate plan cutting across diverse units and product markets seems to be practical only at higher levels in the hierarchy.

How does operating and planning centralization influence partnering orientated behavior? It is argued that they influence PO through facilitating the integration of alliances into the corporate planning process, and fostering an organization wide emphasis on learning.

Entrepreneurial actions are fostered when managers are empowered to make decisions. As noted by Sutcliffe (1994), in highly centralized organizations, lower-level

members are not involved in important decision-making and may be unaware of the organization wide implications of certain environmental information, as a result of which they may ignore or fail to recognize signals that may represent key strategic opportunities. Second, even if they do recognize the signal, they may not bring it up to TMT attention in a timely manner and in an unattenuated form. Further, group think and cognitive limitations of a centralized decision making team may result in ignoring or disregarding market signals.

The following comments from field interviews are significant:

> "The initiation of alliances comes from whoever has a good idea. We have a culture of proactive initiation within the business units. Engineers, product marketing managers and R&D section managers all looking for how can we achieve this, how can we get this new product introduced, how can we meet that new market need, how can we give the customers more complete solutions to these customers? *We have this piece, who else has the other pieces?"* (Mark Chandler, Manager – Business Development, Hewlett Packard)

> "There's an initiation step in our process. And the initiator can come from anywhere. It could be executive sponsored, it could be product marketing, it could be one of the product teams, it could be strategy, who knows...." (Bob Johnson, Manager PSG Alliances, Xerox)

> "Alliances are initiated everywhere and anywhere. It is not a top-down model and completely democratized. They can come from anywhere." Myron Kasseraba, Director – Corporate Alliances, Kodak.

In essence, it appears that manager empowerment fosters sensitivity to the need to be aware of partnering opportunities and threats in the market place, which in turn is enabled through a consistent and coherent strategic planning process that consciously integrates alliance related issues into its deliberations.

The relationship between centralized planning and integration of alliances into the planning process is however not so clear. While this may raise the level of organization-wide sensitivity to alliances by incorporating collaboration related issues into the master

plan, it may also detract from managerial involvement in strategy setting. However, I hypothesize a positive relationship here given that this may be one avenue through which TMT emphasis is also communicated.

In addition, manager empowerment is likely to motivate managers to learn. Given that much of the learning occurs from informal sources, it may be argued that a manager's motivation to be acquire knowledge may be a function of the latitude in decision-making and the felt need for improvement.

The above discussion suggest that:

Hypothesis 6:
Greater the centralization in decision-making, lower will be the extent to which alliances are incorporated into the strategic planning process.

Hypothesis 7:
Greater the centralization in planning, greater will be the extent to which alliances are incorporated into the strategic planning process.

Hypothesis 8:
Greater the centralization in decision-making, lower will be the organization's learning orientation.

Formalization: Formalization specifies the extent to which an organization uses explicitly articulated rules and procedures to prescribe behaviors, authority relations, communications, norms and sanctions, and procedures (Hage and Aiken 1969; Sutcliffe 1994), including the flexibility that managers have when handling a certain task (Deshpande 1982). Mintzberg (1979) notes that firms that are formalized in their "operating core" are likely to be more formalized at all levels. An essential feature of Weber's bureaucratic ideal type, formalization prescribes allowable and nonallowable behaviors through the use of rules and procedures (Pfeffer 1978). Accordingly,

Frederickson (1986) notes that formalization directly affects organization members by defining acceptable task performance and criteria for decision-making.

There are two conflicting views on how formalization impacts organizational effectiveness. On one hand, formalization creates consensus and shared values since it reduces role ambiguity and alienation, and enhances predictability of outcomes in interdependent relationships (Aiken and Hage 1968). Formalization, viewed as a technical aspect of bureaucracy, contributes to organizational efficiency. On the other hand, formalization has the effect of limiting decision making discretion. Prescribed behavior may become so institutionalized that it dominates the managerial values of the organization, and new decisions reflect marginal departures from current ones (Quinn 1980). Further, it has been argued that formalization limits innovation, since employees in formalized settings have reduced motivation to contribute to the complex and non-routine tasks that constitute innovation (Burns and Stalker 1961). Fredrickson (1986) argues that formalization increases the likelihood that the strategic process will be motivated by reactive, crisis related behavior as opposed to proactive, opportunity seeking behavior. Cyert and March (1963) describe how decision stimuli may be ignored if they fall outside some specified range that is monitored by standard operating procedures. Wally and Baum (1994) summarize by stating that formalization may drive out creative behavior and thus discourage the pursuit of opportunities.

However, there is evidence that formalized processes that capture lessons of prior experience and help scientists with more routine parts of their jobs actually *facilitate innovation* (Bandura 1977; Craig 1995). Adler and Borys (1996) address this conflict, arguing that "(S)omething is missing from these accounts: Surely employees' attitudes to

formalization depend on the attributes of the type of formalization with which they are confronted" (p. 66). Distinguishing between 'bad' and 'good' rules, they argue that there are two types of formalization, namely the enabling and coercive types, they argue:

> "Formal procedures do not have to be designed to make the work process foolproof. They can be designed to enable employees to deal more effectively with its inevitable contingencies. In what we call the enabling type of formalization, procedures provide organizational memory that captures lessons captured from experience (Levitt and March 1988; Walsh and Ungson 1991). Formalization codifies best-practice routines so as to stabilize and diffuse new organizational capabilities (Nelson and Winter 1982). The idea of an enabling type of formalization is consistent with Blau's (1955) finding that 'good' procedures and those seen as valuable resources that help professionals meet clients' needs. By contrast, in what we call the coercive type of formalization, procedures fit Watson's (1985) characterization: They are a substitute for, rather than a complement to commitment. Instead of providing committed employees with access to accumulated organizational learning and best-practice templates, coercive procedures are designed to force reluctant compliance and to extract recalcitrant effort." (p. 69)

The theoretical dichotomy between the need for formal procedures on one hand, and the creativity stifling, dissatisfaction enhancing aspect of formalization has led to conflicting empirical findings in the literature (see Menon, Bharadwaj and Howell 1996). A possible reason may be that most of these studies have focused on the *degree* to which an organization explicitly specifies the procedures and systems to accomplish tasks, without addressing the *type* of formalized procedures being used. In this study, formalization is conceptualized in the enabling mode, defined as *the extent to which an organization uses formalized procedures to facilitate innovative decision-making.*

The enabling logic, in contrast to coercive formalization, generates procedures that facilitate responses to real work contingencies, and fosters a philosophy of collaborative learning through identifying and proposing improvements in existing procedures. Further, as against lists of flat assertions of duties, enabling procedures

provide users with visibility into the processes they regulate by explicating the rationale. In such cases, the manual becomes a working tool and a resource (Adler and Borys 1996, p. 72). "That's not your job" is replaced by procedures designed to provide an understanding of where a specific job fits into the whole (p. 73). Also, as against the philosophy of 'the employee implementing and the supervisors authorizing any deviation,' the enabling form assumes that deviations are not only risks, but learning opportunities.

Further, it has been argued that procedural emphasis on compliance and monitoring deviation encourages organizational inertia, funnels decision-making processes into routine, rule-like behavior patterns that detract from adaptive responsiveness, and overall impede executives' ability to choose flexibly from the repertoire of actions when faced with a need to adapt. Bounded rationality, and the exigencies of shifts in the environment will result in sub-optimal planning, as formal procedures fail to account for each and every eventuality and scenario.

Reverse logic suggests that enabling procedures are likely to foster responsive and on-going planning processes. Within the planning literature, the primary configurational feature of the strategic planning process is the degree to which the strategic planning process is integrated with different functional requirements from a general management perspective. Given that alliances are often multi-functional in nature, organizational templates designed to facilitate complex decision-making is likely to be associated with a strategic planning process that breaks through 'functional silos' and integrates alliance issues from multiple dimensions into the planning process.

Thus,

Hypothesis 9:
Greater the enabling formalization, greater will be the learning orientation.

Hypothesis 10:
Greater the enabling formalization, greater will be the extent to which alliances are incorporated into the strategic planning process.

Integration: Integrating mechanisms are used to develop collaborative efforts among organizational subunits (Lawrence and Lorsch 1967). While functional structures produce efficiencies within each specialty, they also give rise to the need for cross-functional interaction and coordination (Astley and Zajac 1991). To facilitate such coordination, organizations rely on "lateral linkage devices or structural coordination mechanisms to connect relatively autonomous functional units" (Olson, Walker and Ruekert 1995, p. 49). Germain, Droge and Daugherty (1994) define integration as "lateral links that coordinate differentiated subunits, reduce conflict and duplication, foster mutual adjustment, and coalesce subunits toward meeting overall organizational objectives" (p. 472). Such integrative devices seek to "encourage rationality in decision-making by precipitating contacts among decision-makers that may motivate systematic attempts to develop, scrutinize, and reconcile divergent perspectives" (Miller 1987, p. 11). Olson, Walker and Ruekert (1995) review various forms of integration mechanisms, and form a continuum from bureaucratic control to organic and participative structures. I define **integration** as the *extent to which the decision-making in the organization is characterized by the use of lateral linkage devices such as cross-functional committees, temporary task forces, liaison personnel, and design teams in which different departments, functions or divisions get together in the decision-making process.*

Fundamentally, teamwork becomes more necessary in the organization as it employs more complex integrating devices. As the organization moves towards a more organic structure, individuals are more likely to move away from a functional orientation and reduce barriers between individuals and groups (Olson, Walker, and Ruekert 1995). This has two implications: one, that the organization will have an embedded knowledge base of being able to work across diversity; and two, that parochial behavior is reduced, while cross-functional synergy seeking and identification with the organization rather than specific functions, is encouraged. The resultant organicity is likely to lead to an overall enhancement of partnering related processes through enhancing appreciation of cooperative behavior. Better integration across diverse knowledge bases, and social networks will heighten the ability to see inter-linkages between parts and increase the variety of knowledge networks that managers will be exposed to. Finally, the diffusion and integration of knowledge from experiential learning will increase as the organization breaks out from its departmental and functional silos.

Hypothesis 11:
Greater the use of integrating mechanisms, greater will be the learning orientation.

Hypothesis 12:
Greater the use of integrating mechanisms, greater will be extent to which alliances are incorporated into the strategic planning process.

Environment

Perceived Environmental Uncertainty

The resource dependency theory of Pfeffer and Salancik (1978) argues that organizations structure their external relationships in response to the uncertainty resulting from dependence on elements of the environment. A considerable stream of research

drawing on transaction cost theory emphasizes the influence of uncertainty on decisions concerning the scope of the firm, specifically the decision to vertically integrate (e.g. Williamson 1975).

The concept of environmental uncertainty, long viewed as a central concept in organization theory and strategy, has been identified as a key variable in explaining organizational behavior (March and Simon 1958). Thompson (1967) suggests that the primary task of an organization is to cope with the uncertain contingencies of the environment. Environmental uncertainty has been referred to "unanticipated changes in circumstances surrounding an exchange" (Noordewier, John and Nevin 1990, p. 82) and as the perceived inability of an organization's key managers to accurately assess the external environment of the organization or the future changes that might occur in that environment (Milliken 1987).

Boyd, Dess and Rasheed (1993) note that the conceptualization of the environment is characterized by relatively low consensus, and that two of the most common approaches to conceptualizing environment – archival and perceptual – differ at both theoretical and measurement levels. Boyd and Fulk (1996) argue that the correlations between these two conceptualizations are weak because objective measures characterize "external constraints imposed on a firm, while perceptual measures are more appropriate for studying managerial behavior and decision-making" (p. 3). Similarly, and consistent with Miles and Snow's work (1978), Milliken (1987) emphasizes that environment uncertainty is perceptual in nature, and not a strictly objective state. As stated by Achrol and Sterns (1988), "(E)nvironments are neither certain nor uncertain in themselves, but are simply perceived differently by different organizations" (p. 37).

Further, researchers have increasingly called into question the unidimensional conceptualization and operationalization of perceived environmental uncertainty (PEU) (Milliken 1987; Buchko 1994; Sutcliffe and Zaheer 1998)). Milliken (1987) suggests that uncertainty is multidimensional and develops a typology of uncertainty dimensions, namely state, effect, and response uncertainty, based on ignorance about three stages of a cause-effect chain. Sutcliffe and Zaheer (1998) develop on Williamson's work and develops a typology of three forms of uncertainty based on the environment sectoral source of uncertainty, namely primary, competitive and supplier uncertainty. In the marketing literature, studies that have examined the effect of uncertainty on the structural properties of distribution channels have studied the effects of volume, behavioral, and technological uncertainty. In essence, there is significant variation in conceptualization of the types of uncertainty poised by different facets of the environment. In the market orientation literature, for example, uncertainty is conceived as emanating from customers, technology, competitors, and the general economy (Kohli and Jaworski 1990).

As Sutcliffe (1994) notes, organizational environments have been characterized in terms of their components, which include customers, competitors, technology and suppliers, and their attributes, such as instability, munificence, and complexity; and also in terms of market power, entry barriers, changes in demand and product characteristics. I adopt the component view and consider PEU as a single construct which covers the domains of perceived uncertainty in technology, customer demand, and competitive landscape. I define PEU as the *degree of dynamism and unpredictability in the technological, demand, and competitive environments of an organization.*

Market turbulence is conceptualized as the uncertainty arising from changes in the composition of customers, their preferences, and associated marketing practices (Menon, Jaworski, and Kohli 1997). Technological uncertainty is conceptualized in terms of changes in underlying technologies of products and rate of obsolescence. Competitive uncertainty relates to the uncertainty arising from the actions of potential and actual competitors, and derives from moves or signals by economic actors in current or future competition with the focal firm which may be noisy and difficult to grasp precisely (Sutcliffe and Zaheer 1998). I define competitive uncertainty as arising from unpredictability in competitor actions and the rate at which new competitors enter the market. General business uncertainty refers to the overall environmental munificence and is defined as the availability of resources and extent to which an environment supports sustained stability or growth (Sutcliffe 1994).

How is PEU likely to impact on a firm's collaborative rent seeking behavior? Germain, Droge, and Dougherty (1994) note that strategy research has included uncertainty as a predictor of strategy, structure, or both. Child (1972) has argued that changes in ways of conducting business are unlikely to be considered in placid environments. In keeping with resource dependency theory, strategic initiatives such as partnering are more likely as uncertainty increases, as firms attempt to increase coordination in general to reduce or buffer the effects of environmental shifts. Thus, as Dickson and Weaver (1997) posited, and empirically substantiated, PEU is generally associated with greater alliance use.

Perceived market dynamism carries two implications: One, that continued reliance on the established customer base is less relevant compared to moving proactively

into new, emerging markets and segments; and two, relying on current products is risky, thus necessitating innovation and new product development. Consider the following executive comments:

> "Our customer segments are changing very, very quickly in our industry and related sectors. Even more quickly than the technology. Whereas as recent as five years ago, in our foreign network equipment business we had a couple of customers in every market except the US where we had about 20 customers who bought network equipment. Now the whole concept of who is the service provider has been turned inside out. As the customer world changes, we have to be much more adaptive than adaptable as our cycle time has very much shortened" (Pamela Klem, Manager- Corporate Strategic Alliances, Lucent Technologies).

> "To provide a complete product offering or service to our customers whose demands are rapidly changing, we need alliances. For technology, product, market access, to improve our performance either in the manufacturing or distribution of products, offerings or services" (Bruce Gitlin, Director - Corporate Alliances, Xerox).

> "Digital products are a huge growth opportunity for us. Digital products are generally sold as a complete solution as opposed to just a product, given the nature of the marketing environment. That certainly is our intent and our emphasis. Given that, we need to partner with companies that can help us provide the entire solution. As we move to more revenue from our digital side, we find much more partnering activity. And that's because customers, it gets back to the customers, what they're looking for is the total solution as opposed to a product. And to provide the solution, we have to look internally at what capability we have, and usually find that we have to go outside. And when we go outside, that's where the partnering begins." (Bob Johnson, Manager PSG Alliances, Xerox)

As the above indicates, the changing profile and needs of customers force a company to look outside for partner resources and competencies. Partnerships offer a quick route to entry into new markets and segments, and into complementary products that enable the creation of a 'solution' as opposed to a single standing product. Catering to changing needs create the need for relationships that are at once intense, to allow for intimate interactions, and flexible, to allow for changes initiated by customers. Moreover, the need to work across a range of alliances and coordinate efforts is higher when the

focus is customer satisfaction in changing times. In line with Harrigan (1988), we posit that market dynamism is likely to lead to a high alliance propensity, relational behavior and seeking of multiple synergies.

Volatility in the technological environment has been noted to be a primary motivation for alliances (Hagedoorn 1993; Singh 1997). Rapid change in technology, increasing complexity and interdependence of multiple sources of competencies, high development costs, and the need to establish dominant standards are all factors that promote alliance formation. Consider the following statement:

> "One reason why partnering capabilities is important is that our industry is changing very rapidly technologically. That drives a need to have the technologies that the market is starting to require. It also drives the need for nimbleness and much shorter technological cycle-times. Also, you need to hedge technological bets. You need to be able to pursue multiple technological paths simultaneously because nobody knows which of several ways the network future is going to play out or how quickly. All of these drive the need to explore different types of business models and different alternatives to filling technological needs than the old 'Do we build it, or do we buy it?' model from where we were coming from just a few years ago." (Pamela Klem, Manager - Corporate Strategic Alliances, Lucent Technologies).

The inability to predict competitors' present or future actions, combined with entry of new firms into the competitive foray is likely to be associated with heightened competitive intensity. Uncertainty over competitive structure and actions has been associated with formation of cartel like behavior, and the creation of strategic groups where firms collude to raise entry barriers to potential entrants and insulate themselves from adverse effects of competitive actions of maverick firms. The strategic groups literature thus suggests that alliance formation is likely to be higher when firms perceive turbulence in market structures. Also, collusion like behavior implies a commonality of interests, which facilitates mutuality and cooperation among the networks that form.

Thus, it is posited that competitive uncertainty is likely to lead to greater partnering orientation.

In summary, it is argued that greater levels of perceived environmental uncertainty is likely to be associated with greater partnering rent seeking behavior. Thus,

Hypothesis 13:
Greater the perceived environmental uncertainty, greater will be partnering orientation.

OUTCOMES OF PARTNERING ORIENTATION

A central question in strategy is to understand the performance implications of management processes, decisions, and actions at the level of the firm. The importance of partnering as a route to competitive advantage has been widely acknowledged in the strategy literature (see Chapter 2). In fact, there seems to be a normative bias toward the inherent value of partnering, as the preceding literature review on collaborative rents suggests. However, the empirical link between a partnering oriented strategy and firm performance is largely untested.

How does one conceptualize performance? In investigating the PO-performance link it is important to recognize the multidimensional nature of the performance construct (Chakravarthy 1986; Venkatraman and Ramanujam 1986; Gupta and Govindrajan 1984). That is, partnering processes may, at times, lead to favorable outcomes on one performance dimension and unfavorable outcomes on a different performance dimension. For example, costs and returns may be skewed toward different periods of a relationship. While some returns may occur shortly after the alliance is initiated, synergistic quasi-rents may not be effectively and efficiently generated until "key actors learn how to

interact and to apply their know-how mutually, tacit understandings are in place, the combination of strategic and complementary capabilities are complete, and a unique output reaches the market place" (Madhok and Tallman 1998, p. 335). Thus, expenditures may be high in the early stages of a relationship, and given that realization of synergistic potential is lengthy and laborious, rents as opposed to costs are biased towards later periods. In essence, the requisite resource commitment may detract from short-run profitability. Accordingly, research that considers only a single dimension or a "narrow range of the performance construct (e.g., multiple indicators of profitability) may result in misleading descriptive and normative theory building" (Lumpkin and Dess 1996).

Accordingly, multiple performance measures need to be included. Venkatraman and Ramanujam (1986) propose three general levels of firm performance: 1. *Financial performance:* accounting based measures such as ROA, ROS and ROE, being indicators that tap current profitability; 2. *Business performance*: market-based measures such as market share, sales growth, diversification, and product development. This has two aspects according to Hart and Banbury (1994), namely indicators related to sales growth and market share in existing businesses (growth/share), and those indicators related to the future positioning of the firm (e.g., new product development, diversification into new businesses); and 3. *Organizational effectiveness*: stake-holder measures such as employee satisfaction, quality, and social responsibility. The two dimensions here relate to quality (e.g., product quality, employee satisfaction, and overall quality) and those indicators related to social responsiveness (e.g., environmental and community).

In addition to the multi-dimensional conceptualization of performance, it is important to control for one key issue. Research has shown industry effects on financial

performance to be significant (Rumelt 1991; Schmalensee 1985). This is particularly important and needs to be controlled if the sample of firms surveyed is from multiple industries. Judge and Douglas (1998) argue that by using a set of well-established perceptual measures of financial performance and asking each respondent to rate their organization's performance relative to other firms in their industry, industry effects can be controlled. This relative measure of performance is a necessary proxy for the evaluation of competitive advantage in resource-based research (Powell 1995).

In the context of examining the PO-performance link, it may be important to further ascertain alliance specific performance issues. For example, Judge and Quinn (1998) examine environmental performance in addition to financial performance while examining the performance implications of incorporating environmental issues into the strategic planning process. In line with the assertions of Venkatraman and Ramanujam (1986), and Chakravarthy (1986), the key external stakeholders I consider are the firm's partners or potential partners. Accordingly, alliance performance, along with financial and market based measures of performance are included.

Regarding conceptualization of alliance performance, reputation as a 'good and capable partner' seems to be important, as Randall Tobias, Chairman & CEO, Eli Lilly (1998) asserts, " (T)he ability to be a good collaborator, a partner of choice, is rapidly becoming a key source of competitive advantage." Thus image and reputation as a *potential partner firm* is key as this may determine the nature of the links that will form the option set of a focal firm. Further, the nature of the links that a firm has compared to its competitors, the strength of the relationships, and the ability to manage crisis and conflicts with partners are important indicators. I thus conceptualize alliance performance

in terms of a firm's reputation as a partner, the profile of partners, the strength of its key relationships, and its ability to manage crisis and conflicts with its partners.

A positive association between partnering orientation and the three performance variables is expected. Partnering oriented firms are likely to be more adept at creating competitive advantage by harnessing external resources and integrating them with the firm's own capabilities to create new value. From a resource based view, an argument can be made that partnering orientation is likely to be associated with better firm performance. The following interviewee comment highlights this link between both performance and PO.

> "Market leadership. That's where partnering will impact. Companies that are good at partnering are more likely to be the dominant players in their respective industries. Across the board, and irrespective of the scope of the alliances. If it is primarily a production driven business and you are very good at manufacturing alliances, you are probably going to be the leader in your industry. If it is a distribution driven business, then if you are good at doing marketing alliances, than you will probably will be the leader in your industry. If you take the annual Business Week rankings of companies by industry, and then overlay a partnering competency ranking on those companies, I would say there would be convergence. I would say that those companies that are delivering greater levels of share-holder value are good at partnering." (Myron Kassaraba, Kodak).

In brief, based on the above and extensive earlier discussions in Chapter 2, I posit a positive relationship between PO and financial performance, market performance, and alliance performance.

Hypothesis 14:
Partnering orientation is positively associated with alliance performance.

Hypothesis 15:
Partnering orientation is positively associated with market performance.

Hypothesis 16:
Partnering orientation is positively associated with financial performance.

In summary, this chapter develops the theoretical model that will be subsequently tested empirically. The model relates to the research questions motivating this dissertation, through proposing relationships between PO and performance, and between various organization and environmental drivers of PO.

CHAPTER 4

RESEARCH METHODOLOGY

This chapter describes the methodology employed to test the hypotheses developed earlier. First, I discuss the questionnaire development process and the operationalization of the constructs. Second, the research design, including sampling procedures and data collection, is overviewed. The chapter concludes with a discussion of data analysis techniques and procedures.

QUESTIONNAIRE AND MEASURES

To adequately test the proposed hypothesis, a structured questionnaire was developed in several stages. First, a comprehensive review of the literature was performed. Second, from the review, valid multiple item scale items were borrowed and adapted. In those instances where no previously developed scales existed, measures were developed using a framework proposed by DeVellis (1991). Constructs were defined, an item pool generated, and the format of measurement decided. The initial item pool was reviewed by a number of experts in academia and industry, subsequent to which items were evaluated once more and modified where necessary. The scale length was optimized, subsequent to which the draft questionnaire was administered to a panel of executives, and their concerns noted through follow-up discussions. The discussions focused on ambiguous items, instrument length, and format. Once again, items were either modified or deleted based on this feedback. Finally, the questionnaire was finalized. For all relevant perceptual measures, a five-point Likert scale was employed, typically anchored by 1 - Strongly Disagree and 5 – Strongly Agree.

The scales used to measure each construct are presented below.

Partnering Orientation

Proactive Initiation: defined as the extent to which an organization actively engages in seeking partnering opportunities, and responding to them. The components of this construct relate to partnering-related intelligence acquisition and analysis, and initiating action to partnering opportunities. The operationalization of this construct is as follows:

Please rate the extent to which you agree or disagree with the following items.

		Strongly Disagree				Strongly Agree
1.	We actively monitor our environment to identify partnering opportunities	1	2	3	4	5
2.	We are alert to market developments that create potential alliance opportunities	1	2	3	4	5
3.	We strive to preempt our competition by entering into alliances with key firms before they can	1	2	3	4	5
4.	We are responsive when approached with a proposal to form an alliance	1	2	3	4	5
5.	We often take the initiative in approaching firms with alliance proposals	1	2	3	4	5
6.	Compared to our competitors, we are far more **proactive and responsive** in finding and 'going after' strategic partnerships	1	2	3	4	5
7.	We routinely gather information about prospective partners from various forums (e.g. trade shows, industry conventions, databases, publications, internet etc.)*	1	2	3	4	5

Relational Governance: defined as a pattern of inter-firm interactions that facilitates the development of informal self-enforcing safeguards in the relationship. The scale used here was adapted from Heide and John's (1992) scales of relational social norms, and Gundlach, Achrol and Mentzer (1995). The specific components are solidarity, trust, flexibility, mutuality, shared problem solving and information exchange.

Please rate your extent of agreement or disagreement with each of the following items.

		Strongly Disagree				Strongly Agree
1.	Staying together during adversity/challenge is very important in our relationships	1	2	3	4	5
2.	We endeavor to build relationships based on mutual trust and commitment	1	2	3	4	5

3.	We strive to be flexible and accommodate partners when problems/needs arise	1	2	3	4	5
4.	We work out conflict resolution approaches early in our relationships	1	2	3	4	5
5.	We emphasize commitment to improvements that benefit the relationship as a whole, and not only individual parties	1	2	3	4	5
6.	When disagreements arise in our alliances, we usually reassess facts to try and reach a mutually satisfactory compromise*	1	2	3	4	5
7.	Information exchange with partners takes place frequently and informally, and not only according to pre-specified agreements*	1	2	3	4	5

Alliance Leveraging: defined as the extent to which an organization coordinates across its portfolio of alliances. The components of this construct as detailed earlier is coordinated planning of activities, strategies, knowledge transfer, and inter-functional synergy seeking across the organization's portfolio of alliances.

Please rate the extent to which you agree or disagree with the following items.

		Strongly Disagree				Strongly Agree
1.	We consider our alliances as a portfolio that requires overall coordination, and not as independent, one-off arrangements	1	2	3	4	5
2.	Our activities *across* different alliances are well coordinated	1	2	3	4	5
3.	We systematically coordinate our strategies *across* different alliances	1	2	3	4	5
4.	We have processes to systematically transfer knowledge *across* alliance partners	1	2	3	4	5
5.	Managers from different departments meet periodically to examine how we can create synergies *across* our alliances	1	2	3	4	5
6.	We treat our alliances as independent relationships, and rarely coordinate activities and strategies across our alliances*	1	2	3	4	5
7.	Our corporate office helps coordinate across our operating units' key alliances*	1	2	3	4	5

Alliance Learning: defined as the extent to which an organization acquires, analyzes, and disseminates experiential alliance learning through the organization.

Please rate your extent of agreement or disagreement with each of the following items.

		Strongly Disagree				Strongly Agree
1.	We conduct periodic reviews of our alliances to understand what we are doing right and where we are going wrong	1	2	3	4	5
2.	We periodically collect and analyze field experiences from our alliances	1	2	3	4	5
3.	We modify our alliance related procedures as we learn from experience	1	2	3	4	5
4.	We diligently transfer know-how on alliance "do's" and "don'ts" to key managers	1	2	3	4	5

5.	We have databases of alliance-related information for managers to access when necessary (e.g., web page, electronic database, seminar material, manual etc.)*	1	2	3	4	5
6.	A good deal of informal 'hall talk' keeps alive lessons learned from our alliance experiences*	1	2	3	4	5

Organization Process and Culture

Planning Incorporation: defined as the degree to which alliance related issues are incorporated into the strategic planning process of an organization. The concept goes beyond relationship management issues and focuses on activities that indicate the degree to which alliances find a representation in the organization's strategy making process. The scale is adapted and contextualized from Judge and Douglas (1998) and Johnson (1998).

Please rate your extent of agreement or disagreement with each of the following items.

		Strongly Disagree				Strongly Agree
1.	Alliances are explicitly considered in our strategic planning process	1	2	3	4	5
2.	Executives who manage our alliances participate actively in our strategic planning process	1	2	3	4	5
3.	Our partnering strategy is driven by our overall strategic planning process	1	2	3	4	5
4.	Alliances are an important component of our corporate strategy	1	2	3	4	5
5.	We seek inputs from our alliances while setting our organizational goals and developing our business plans	1	2	3	4	5

Learning Orientation: defined as the extent to the extent to which an organization values proactive learning among its employees and encourages the incorporation of fresh ideas that emerge from this learning process. The scale is adapted from Sinkula, Baker and Noordewier (1997), and Hult and Ferrell (1997).

Please indicate the extent to which you agree or disagree with each of the following items.

		Strongly Disagree				Strongly Agree
1.	Managers basically agree that our ability to learn is key to remaining competitive	1	2	3	4	5
2.	The sense around here is that employee learning is an investment, not an expense	1	2	3	4	5
3.	Learning in this organization is viewed as key to organizational survival	1	2	3	4	5

4.	This organization strongly encourages the incorporation of fresh ideas and knowledge into the workplace	1	2	3	4	5
5.	We rarely question our own biases about the way we interpret market information*	1	2	3	4	5
6.	Through periodic benchmarking, we incorporate industry best practices into our organization processes*	1	2	3	4	5
7.	This organization strongly encourages the incorporation of fresh ideas and knowledge into the workplace	1	2	3	4	5

Top Management Team

TMT Heterogeneity: defined as the extent of diversity in the top management team's views, perspectives, and affiliations. The scale was conceptualized from secondary-data based measures of heterogeneity in the literature (Eisenhardt and Schoonhaven 1990; Michel and Hambrick 1992).

Please indicate the extent to which you agree or disagree with each of the following items.

		Strongly Disagree				Strongly Agree
1.	Our TMT is well represented by both 'conservatives' and 'liberals'	1	2	3	4	5
2.	Our TMT consists of members with very different viewpoints and perspectives	1	2	3	4	5
3.	Our TMT members have very diverse professional affiliations and contacts	1	2	3	4	5
4.	Our TMT is so diverse that during deliberations, someone is bound to play "devil's advocate" and question the group consensus	1	2	3	4	5

TMT Partnering Commitment: defined as the extent to senior managers emphasize the importance of partnering, and dedicate their time and resources to partnering activities. Some of the items were adapted from other managerial commitment scales in the literature (Jaworski and Kohli 1993).

Please indicate the extent to which you agree or disagree with each of the following items.

		Strongly Disagree				Strongly Agree
1.	Top managers often articulate that alliances are critical to our sustained growth	1	2	3	4	5
2.	Top managers have been known to personally 'champion alliances' themselves	1	2	3	4	5
3.	Top managers provide personal and visible support for new alliance initiatives	1	2	3	4	5

4.	In their public statements (e.g. to customers, suppliers, distributors, investors), our top managers highlight our strategic emphasis on alliances	1	2	3	4	5
5.	Our top managers often emphasize how important it is for us to be perceived as a good collaborator and as a 'partner of choice' for other firms	1	2	3	4	5

TMT Risk Aversion: defined as the extent to which managers are averse to make large and risky resource commitments – i.e. those which have a reasonable chance of failure. The scale is adapted from Miller (1983) and Jaworski and Kohli (1993).

Please indicate the extent to which you agree or disagree with each of the following items.

		Strongly Disagree				Strongly Agree
1.	Our top managers have an inclination for high-risk, high-return projects (RC)	1	2	3	4	5
2.	Our top managers typically adopt a cautious 'wait-and-see' attitude	1	2	3	4	5
3.	Our top managers generally like to 'play it safe' when faced with challenges	1	2	3	4	5
4.	Our top managers only like implementing plans which they are certain will work	1	2	3	4	5

Organization Structure

Decision Centralization: defined as to degree of hierarchical authority in the organization in operating decisions. The scale was adapted from Jaworski and Kohli (1993) and Aiken and Hage (1968).

Please indicate the extent to which you agree or disagree with each of the following items.

		Strongly Disagree				Strongly Agree
1.	Except for minor decisions, very little action can be taken in this organization without supervisor approval	1	2	3	4	5
2.	Even small matters have to be referred to someone higher up for a final answer	1	2	3	4	5
3.	A person who wants to make his/her own decisions would be quickly discouraged	1	2	3	4	5
4.	People here are allowed to make their own decisions about problems that come up in their jobs (RC)*	1	2	3	4	5

Planning Centralization: defined as the degree of hierarchical authority in planning. A new scale was developed for this study. The components relate to the degree to which corporate or a centralized office has authority to set overall strategic guidelines.

Please indicate the extent to which you agree or disagree with each of the following items.

		Strongly Disagree				Strongly Agree
1.	Strategic planning usually takes place at the corporate level, not so much at the individual business level	1	2	3	4	5
2.	Managers in various divisions/functions have to work within overall parameters and directions set by our corporate plan	1	2	3	4	5
3.	Strategic planning here is a centralized corporate responsibility, whereas most operating decisions are left to the individual business units	1	2	3	4	5
4.	Our corporate office plays a powerful role in setting an overall organizational strategy across various departments and divisions	1	2	3	4	5
5.	We periodically use corporate-wide task forces to produce strategic initiatives*	1	2	3	4	5

Formalization: defined as the extent to which an organization uses formalized procedures to facilitate innovative decision-making. A new scale was developed based on the conceptualization of Adler and Borys (1996). The items focused an assessing the degree to which rules and procedures embodied pervious learning and best practices, and how they facilitated decision-making rather than discrete circumvention.

Please rate your extent of agreement or disagreement with each of the following statements :

		Strongly Agree				Strongly Disagree
1.	Our systems and procedures embody our accumulated learning and best-practices	1	2	3	4	5
2.	Our systems and procedures empower and help employee decision-making	1	2	3	4	5
3.	Our procedures are designed to encourage creative decision-making	1	2	3	4	5
4.	Our procedures are primarily viewed as hurdles to be circumvented discretely (RC)*	1	2	3	4	5

Integration: defined as the extent to which decision-making in the organization is characterized by the use of lateral linkage devices such as cross-functional committees, temporary task forces, liaison personnel, and design teams in which different departments, functions or divisions get together in the decision-making process. The scale is adapted from Germain, Droge, and Daugherty (1994).

To what extent are the following used to assure compatibility among decisions in one area (e.g., marketing) with those in other areas (e.g., product design)?

		Rarely Used				Frequently Used
1.	Interdepartmental committees (set up to allow departments to engage in joint decision-making)	1	2	3	4	5
2.	Task forces (groups helping interdepartmental collaboration on projects)	1	2	3	4	5
3.	Liaison personnel (who coordinate the efforts of several departments for the purposes of a project)	1	2	3	4	5
4.	Design centers (consisting of functional specialists who work on an ongoing basis on multiple developmental projects over time)	1	2	3	4	5

Environment

Perceived Environmental Uncertainty: the degree of dynamism and unpredictability in the technological, demand, and competitive environments of an organization. The scale is adapted from Germain, Droge, and Daugherty (1994), and Jaworski and Kohli (1993)

Please indicate the extent to which you agree or disagree with each of the following items.

		Strongly Disagree				Strongly Agree
1.	The rate of product/service obsolescence in this industry is very high	1	2	3	4	5
2.	Our production and service technologies change often and in major ways (e.g., advanced electronic components)	1	2	3	4	5
3.	Our customers tend to look for new products all the time	1	2	3	4	5
4.	Our new customers have product-related needs that are very different from those of our existing customers	1	2	3	4	5
5.	We have to regularly change our marketing practices to keep up with competition	1	2	3	4	5
6.	It is extremely difficult to predict our competitive landscape in the near future	1	2	3	4	5

Performance:

As elaborated earlier in Chapter 3, I adapt Gupta and Govindrajan's (1984) scale to measure financial and market performance. In addition, a new scale for alliance performance was developed. Financial performance relates to the success of the business' programs in relation to the resources employed in implementing them. Market

performance is the success of a business' products and programs in existing businesses, and in those related to the future positioning of the firm. Both these were measured in relation to the focal firm's competitors. Alliance performance relates to the achievement of organizational objectives concerning the firm's alliances. The operationalizations of the three performance dimensions are noted below:

Alliance Performance:

Please rate your organization's performance relative to following alliance-related objectives:

		Very Unsatisfactory				Very Satisfactory
1.	Your organization's reputation in the market as a 'partner of choice'	1	2	3	4	5
2.	The competitive strength of your alliance network	1	2	3	4	5
3.	Strength of your relationships with key alliance partners	1	2	3	4	5
4.	Ability to manage crisis and conflicts with your alliance partners	1	2	3	4	5
5.	Learning new competencies from your partners*	1	2	3	4	5
6.	Frequency of third party arbitrators intervening in your alliances*	1	2	3	4	5

Financial Performance:

Please rate your organization's performance, relative to your competitors, on each of the following dimensions:

		Much Worse				Much Better
1.	Profitability	1	2	3	4	5
2.	Return On Investment	1	2	3	4	5
3.	Cash Flow from Operations	1	2	3	4	5
4.	Cost Control	1	2	3	4	5

Market Performance:

Please rate your organization's performance, relative to your competitors, on each of the following dimensions:

		Much Worse				Much Better
1.	Sales Growth	1	2	3	4	5
2.	Market Share	1	2	3	4	5
3.	Market Development	1	2	3	4	5
4.	Product Development	1	2	3	4	5

Context:

The following questions, appearing at the beginning of the questionnaire, were developed to obtain descriptive profiles:

1. Position or Title: _____
2. How many years have you been working in this organization? _____
3. Please describe your organization's major product/product line. _____
4. 4 digit SIC code (if known) _____
5. Please indicate your organization's:
   Sales volume last year? $ _____ No. of people employed _____
6. What is your market position in your core product(s)?
   __ Market leader (No. 1) __ No. 2 __No. 3 __ No. 4 and below

SAMPLING FRAME

The sampling frame for the survey was drawn from the CorpTech Directory of Technology Companies. A range of industries, both manufacturing and services, was covered in the sample frame. A total of 1800 firms, with annual sales over $25 million were randomly chosen from the following primary SIC codes:

SIC 28 - Chemicals and allied products

SIC 35 - Industrial and machinery equipment

SIC 36 - Electronic and other electric equipment

SIC 38 – Instruments and related products

SIC 73 – Computer and data processing

SIC 87 – Engineering and management services

DATA COLLECTION

Data collection was conducted in two stages. Stage 1 involved in-depth telephone and on-site interviews. The respondents were all senior managers with alliance

responsibilities. Altogether, 25 such interviews, lasting an average of one hour each, were conducted following a semi-structured format. All interviews were tape recorded, and later transcribed, and studied. The transcripts were then sent to the executives for clarifications, where required, and approval. Companies that participated in this initial exploratory research were approached through two sources. One, references from the Institute for the Study of Business Markets, Pennsylvania State University, were obtained and sent to their member organizations. Follow-ups were made through multiple telephone calls to obtain contact details of a key and knowledgeable respondent in each firm. Two, searches on Lexis/Nexis, and Proquest were conducted with keywords such as 'alliance managers', and 'Director Alliances.' Executives identified as holding such positions in different trade publications constituted a second route to identifying key informants. Three, the Conference Board provided contacts of some practitioners who presented and conducted sessions at the their 1997 Seminar on Strategic Alliances.

These identified executives were contacted, informed about the study, and requested for an interview. A brief summary of the research project, and the interview protocol was faxed to them in advance. Subsequently, permission was taken to tape record the conversation, and the interview conducted.

In phase one of stage two (the survey), the CEOs/Presidents of the companies identified through the Corptech database were approached. A cover letter accompanied by a research summary sheet explaining the study objectives and the deliverables, a response form and a return envelope were mailed to 1800 companies. Other than a request for participation in the study, the CEOs were asked to provide the names and contact details of two executives who we could subsequently contact with the survey

instrument. It was also mentioned that while they may be housed in any functional area or department in the organization, they should be senior level managers, and knowledgeable about the company's strategic alliances and alliance related procedures and activities. An option was also given for the CEO to identify himself/herself as a key respondent. Participating firms were promised an executive summary report of the study. This was done in two waves, with the second wave of mailings following the first by three weeks.

In phase two, the identified executives were mailed the survey, along with a cover letter, and a business reply envelope. In cases where the executive had been recommended by the CEO, the cover letter emphasized that (1) they had been nominated by their Chief Executive as the appropriate contact for the study, and that (2) their CEO had expressed interest in the results of the study. E-mail follow-ups, where possible, were used extensively. Follow-ups with others took place along traditional lines, namely telephone calls and second round follow-up mailing two weeks after the first mailing.

DATA ANALYSIS

A multi-step approach to data analysis is being adopted in this research. First, potential non-response bias will be evaluated by comparing early and late respondents in terms of their annual sales and number of employees. Second, the descriptive statistics are to be calculated and potential non-normality problems diagnosed. Third, the measurement model will be tested systematically. Following an examination of the inter-item correlation in exploratory factor analysis, and preliminary purification, the measures will be subjected to a series of confirmatory factor analysis. On the core construct, partnering orientation, a first-order CFA with four covarying factors will be conducted and the results examined for model fit, convergent, discriminant and nomological

validity. Should the results be acceptable, a second-order CFA will be modeled and tested. Here, the four first-order facets will load on the higher-order factor of partnering orientation. Separate CFAs on the three performance constructs, and the antecedents will be conducted prior to running a full measurement model with the final set of purified scale items. Subsequently, following Anderson and Gerbing's (1982) two-stage procedure, the structural model will be tested. Here, to account for sample size issues, should the second-order factor model for PO be convincing enough, the average of summated scales for the four first order dimensions will be modeled as manifest variables loading on the latent PO construct. This is in line with recent developments in data parceling.

CHAPTER 5

ANALYSES AND FINDINGS

This chapter details the various steps undertaken to analyze the data. First, potential non-response bias is assessed by comparing responding and non-responding firms on the basis of sales and number of employees. In addition, early and late responses were compared along the same dimensions. Second, measurement issues are examined. More specifically, data quality is assessed, followed by tests of construct reliability and validity. Subsequent to establishing confidence in the measurement model, the structural relationships proposed earlier were tested through path analysis.

RESPONSE RATE AND NONRESPONSE BIAS

As noted earlier, 1800 letters were mailed to CEOs requesting their participation, and contact details of other senior, and knowledgeable executives in their respective companies who could be contacted with the survey instrument. Of these, 37 returned undeliverable, while 110 companies responded that for various reasons they were unwilling to participate in this study. That brought the effective sampling frame down to 1653. Of these, 293 firms agreed to participate and provided the names and contact details requested. The effective response rate in the first round was thus 17.73%.

Mailings were made to the identified executives in these 293 firms. After accounting for respondent refusal, and employee mobility, the final sampling frame consisted of 276 companies. Various reasons were cited for refusing to participate, such as lack of familiarity, changed portfolio, change of CEO, lack of time or interest, and special company exigencies that mandated conformance to a 'silent period.'

Altogether, a total of 184 companies responded, of which two were unusable due to substantial missing data. The final response rate, defined as the number of usable responses received from the final sampling frame after accounting for refusals and employee mobility, was thus 65.9% (182/276). Also, from 19 companies, multiple usable responses were received. In these cases, the response of the more senior executive was included in the study.

To assess non-response bias, the responses were divided into two groups based on the date in which they were received. The two groups of early and late responders were then compared on their sales volume and number of employees (Armstrong and Overton 1977). The results are displayed in Table 5.1. Based on average annual sales and numer of employees, there is no significant difference between these two groups.

Table 5.1: Non-Response Bias

Variable of Comparison	Early Response Mean (in millions of $) (n)	Late Response Mean (in millions of $) (n)	2-tail Significance Level
Sales	1317.41 (99)	4166.47 (77)	.301
Employees	7758.6	61112.65	.711

SAMPLE CHARACTERISTICS

A profile of the respondents is presented below in Table 5.2. as evident from the table, the respondents were mostly senior level executives, with Vice Presidents and above accounting for 95.5% of the respondents.

Table 5.2: Sample Characteristics

Characteristic	Specifics	Cases	Percent
Respondent Title	Chairman/CEO/President	31	17.3
	Exec. Vice President, Vice President, Sr. Vice President	97	54.2
	Director	43	24
	Manager	8	4.5
Years in company	1-5 years	72	39.8
	<5-10 years	30	16.6
	<10-15 years	27	14.9
	<15-20 years	22	12.2
	>20 years	30	16.6

MEASUREMENT MODELS

To assess data quality, the means, standard deviations, kurtosis, and skewness of each item were examined. All variables fall within the expected range. The largest kurtosis value of 1.19 is well below the recommended level of 2.00, a point beyond which nonnormality becomes a concern. Skewness of all items is acceptable, with only two items having an absolute value greater than one.

Subsequent to checking data quality, extensive and systematic tests were undertaken to refine and validate the scales. Following Churchill (1979) and Gerbing and Anderson (1988), the item-to-total correlation for each of the items in the proposed scales were examined, and those with low correlations were eliminated if they tapped no

additional domain of interest. Initial reliabilities were assessed through computation of Cronbach's alpha. Through exploratory factor analysis on subsets of theoretically related constructs (Moorman et al. 1992), factor loadings were assessed. On this basis, a few items were discarded if they exhibited cross-loadings >.3, or if they did not load on a relevant factor.

To overcome the inherent limitations of the exploratory factor analysis (EFA) approach (see Ahire, Golhar & Waller 1996 for a discussion), confirmatory factor analysis (CFA) was used to refine and validate the scales. Mulaik (1972) notes that EFA often falters when faced with interpretability issues. Lack of a priori knowledge about the dynamics of construct covariation often means that the interpretations given to the factors may be nothing more than tautological transformations of the names of the original variables. In contrast, CFA embeds the underlying logic regarding the number of factors, the nature of their mutual relationships, and the magnitude of those relationships into factor constraints (Kim & Mueller 1961).

Accordingly, the psychometric properties of the proposed constructs were evaluated through a series of CFAs, subsequent to which reliabilities for the final scales were computed. More specifically, four sets of measurement models were developed and tested using maximum likelihood estimation method in EQS 7a:

1). Partnering Orientation: The theorized second-order structure of this key construct was tested in two parts. First, proactive initiation, relationalism, alliance leveraging and alliance learning were modeled as four covarying first-order factors with appropriate items as manifest indicators. Following an iterative process of achieving satisfactory model fit and assessment of convergent, discriminant and nomological

validity, partnering orientation was modeled as a second-order construct, with the first-order facets as its underlying dimensions.

2). Performance: The performance constructs were tested in a separate CFA. Although initially four performance constructs were hypothesized, namely alliance performance, financial performance, market performance, and stakeholder performance, through the initial process of scale purification it became clear that the stakeholder performance construct was problematic. In an EFA, items were cross-loading on the other performance dimensions, and no clear factor was emerging related to the proposed items of stakeholder performance. This, in retrospect, is not at all surprising, since employee satisfaction can be theoretically linked to financial performance, and customer reutation with market performance. In effect, the initial EFA tests indicated that three clear factors were emerging, those related to financial, market and alliance performance, with stakeholder items cross-loading on these factors. The stakeholder performance items were accordingly dropped from further analysis, as was a couple of alliance performance items. Accordingly, twelve retained items (four for each construct) were included and modeled in a CFA that tested for the convergent, discriminant and nomological validities of three covarying performance constructs: alliance performance, financial performance, and market performance.

3). Antecedent constructs: The nine antecedent constructs, namely top management diversity, risk-aversion propensity, partnering commitment, formalization, operational decision centralization, planning centralization, integrating mechanisms, environmental uncertainty, and learning orientation, were modeled together in one CFA as covarying factors. Items that survived the earlier purification procedure were modeled

to load on the appropriate factors. Model fit and construct validities were subsequently evaluated.

4). Full CFA: Subsequent to testing the measurement model in parts, and measurement purification that ensued during this exercise, all exogenous and endogenous first-order constructs and their manifest indicators were modeled in one comprehensive CFA as covarying factors. The covariance matrix was used as input and model fits and convergent validity examined.

Having outlined the overall sequence of procedures used to establish confidence in the measurement model, the detailed results of each CFA are now discussed.

CFA for Partnering Orientation (PO)

The PO construct was conceptualized as a second order factor model, with four first order factors (Figure 5.1). Initially, a first order CFA with four factors was developed and validated, followed by a second order CFA.

First Order CFA

Multivariate normality of the data indicated acceptable levels as indicated by the relatively small normalized Mardia's estimate of 7.7 (Mardia 1970; Byrne 1994). Model iterations required freeing four error correlations based on the multivariate LM Test results. These were theoretically tenable, being between items of the same constructs. Model iteration was stopped at this stage to avoid criticisms of 'overfitting.' Table 5.3A displays the fit indices of the EQS confirmatory factor analysis. The strong global fit measures (BBNNFI: .963, CFI: .969 and IFI: .97) together with a RMSEA value of .037 indicate very good fit.

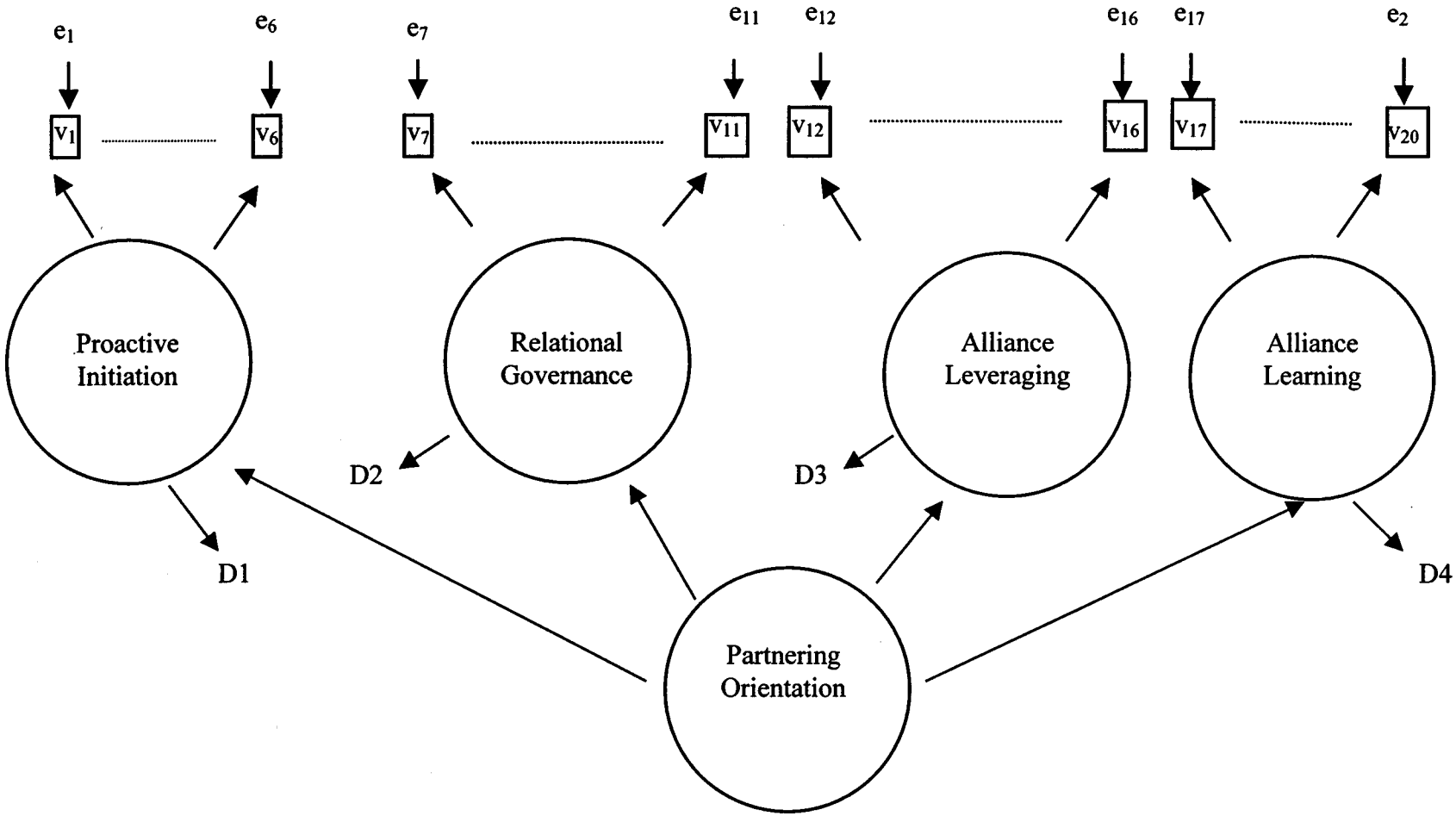

Figure 5.1:Proposed Factor-Structure for Partnering Orientation

Convergent validity is indicated by the strong and significant ($p < .01$) item loadings. All standardized loadings are above .552. Reliabilities for the four first-order factors, measured by coefficient alpha, are between .79 and .82. All inter-factor correlations are significant and positive, ranging between .47 and .69, indicating nomological validity. They are however significantly different from 1.00, indicating discriminant validity. As a further test of discriminant validity, the correlation between pairs of constructs was constrained to unity and the chi-square difference tested for significance. Thus, six additional CFA models were run, each constraining a pair of the four constructs to one, and the difference in chi-square from the baseline four-factor model computed. The chi-square differences from the six sets are 151.69, 92.58, 133.63, 68.09, 41.79, and 47.17 respectively, each for one degree of freedom. They are all highly significant ($p < .01$), suggesting further that the constructs exhibit discriminant

Table 5.3A. Goodness-of-Fit Indices for First Order Partnering Orientation CFA

Chi-Square	199.53
Degrees of Freedom	160
p-value	.02
CFI	.97
IFI	.97
BBNNFI	.96
RMSEA	.037

validity (Bagozzi, Yi and Phillips 1991).

The average variance extracted for each factor was compared to the squared correlation between that factor and all other factors in the CFA model. As displayed in Table 5.3B, the average variance extracted for each factor is > .4, indicating that sufficient amount of variance in the constructs is being explained by the items used to measure them. Some writers (Fornell and Larcker 1981) have suggested that this test may

Table 5.3B. Summary of Convergent and Nomological Validity Results for First Order Partnering Orientation CFA

Factor	Avg. Variance Extracted	Squared Correlation of Factor with other Factors
F1: Proactive Initiation	.425	F1—F2: .223 F1—F3: .341 F1—F4: .289
F2: Alliance Leveraging	.474	F2—F1: .223 F2—F3: .222 F2—F4: .479
F3: Relational Governance	.446	F3—F1: .341 F3—F2: .222 F3—F4: .432
F4: Alliance Learning	.455	F4—F1: .289 F4—F2: .479 F4—F3: .432

be used to evaluate discriminant validity. As the table illustrates, the average variance explained for alliance leveraging and alliance learning is slightly less than their squared correlation with each other. However, in either case, it is possible to increase the average variance to required levels by dropping the item with the weakest standardized loading. However, from a theoretical and substantive standpoint, it was decided to retain the constructs as is.

Discriminant validity was further tested via the LM multivariate test. A significant cross-loading of an item not hypothesized with a factor necessitates an examination. If the wording is so parallel, or there is some other theoretical rationale behind the cross-loadings, it is considered tenable and thus ignored. In this case, only two cross-loadings

were indicated, both of which could be explained. Overall, this stringent test for discriminant validity is supported.

Collectively, the tests indicate adequate confidence in the four first-order factor scales. In line with theory developed earlier, and supported by the positive and significant correlations between the first-order latent variables, a second-order CFA was conducted.

Second-Order CFA

Table 5.4A displays the fit indices of the second-order confirmatory factor analysis of partnering orientation, which posits PO as a latent higher order construct that is manifested in the four first order factors. The fit indices are excellent (BBNNFI: .96; CFI: .97; IFI: .97) with RMSEA of .04. The standardized loadings of the first order factors on PO are .67, .74, .72, and .89 respectively, and are all highly significant ($p <$ .01) as illustrated in Table 5.4B. The variance extracted from each factor is .45, .52, .55, and .8 respectively. In addition, the item loadings on the first order factors remain high and significant as in the first order model. In summary, it is concluded that the results support the hypothesized conceptualization of PO as a second-order construct.

Table 5.4A. Goodness-of-Fit Indices for Second Order Partnering Orientation CFA

Chi-Square	206.68
Degrees of Freedom	162
p-value	.01
CFI	.97
IFI	.97
BBNNFI	.96
RMSEA	.04

Table 5.4B. Item and Factor Loadings for Second Order PO CFA

Constructs	EQS Item-Construct Loading	
	Standardized	**t-value**
PROACTIVE INITIATION	.67*	6.95
1. We actively monitor our environment to identify partnering opportunities	.74	**
2. We are alert to market developments that create potential alliance opportunities	.68	9.67
3. We strive to preempt our competition by entering into alliances with key firms before they can	.67	7.87
4. We are responsive when approached with a proposal to form an alliance	.53	6.4
5. We often take the initiative in approaching firms with alliance proposals	.68	8.01
6. Compared to our competitors, we are far more **proactive and responsive** in finding and 'going after' strategic partnerships	.60	7.15
7. We routinely gather information about prospective partners from various forums (e.g. trade shows, industry conventions, databases, publications, internet etc.)***		
ALLIANCE LEVERAGING	.72*	6.14
1. We consider our alliances as a portfolio that requires overall coordination, and not as independent, one-off arrangements	.56	**
2. Our activities *across* different alliances are well coordinated	.85	7.43
3. We systematically coordinate our strategies *across* different alliances	.80	7.29
4. We have processes to systematically transfer knowledge *across* alliance partners	.65	6.43
5. Managers from different departments meet periodically to examine how we can create synergies *across* our alliances	.53	5.57
6. We treat our alliances as independent relationships, and rarely coordinate activities and strategies across our alliances***		
7. Our corporate office helps coordinate across our operating units' key alliances***		

Table 5.4B (continued)

Constructs	EQS Item-Construct Loading	
	Standardized	**t-value**
RELATIONALISM	.74*	7.08
1. Staying together during adversity/challenge is very important in our relationships	.67	**
2. We endeavor to build relationships based on mutual trust and commitment	.74	7.77
3. We strive to be flexible and accommodate partners when problems/needs arise	.65	7.59
4. We work out conflict resolution approaches early in our relationships	.50	5.96
5. We emphasize commitment to improvements that benefit the relationship as a whole, and not only individual parties	.75	7.86
6. When disagreements arise in our alliances, we usually reassess facts to try and reach a mutually satisfactory compromise***		
7. Information exchange with partners takes place frequently and informally, and not only according to pre-specified agreements***		
ALLIANCE LEARNING	.89*	9.27
1. We conduct periodic reviews of our alliances to understand what we are doing right and where we are going wrong	.78	**
2. We periodically collect and analyze field experiences from our alliances	.68	9.92
3. We modify our alliance related procedures as we learn from experience	.61	7.26
4. We diligently transfer know-how on alliance "do's" and "don'ts" to key managers	.62	7.37
5. We have databases of alliance-related information for managers to access when necessary (e.g., web page, electronic database, seminar material, manual etc.)***		
6. A good deal of informal 'hall talk' keeps alive lessons learned from our alliance experiences***		

* Indicates second order factor loadings

** Constrained to 1 for latent factor determination and model identification

*** Item dropped from analysis

CFA for Performance

As mentioned earlier, four items related to each performance construct, namely alliance performance, financial performance, and market performance, were modeled into a CFA. Raw data was used as input, and the three latent constructs allowed to covary with each other. Mardia's normalized estimate of 4.6 indicate no problems with multivariate normality assumptions in the data. Two error correlations were allowed to covary based on the initial LM Test results. Being between items of the same construct, they do not pose any problems (Byrne 1994). Table 5.5 displays the fit indices of the EQS confirmatory factor analysis. The strong global fit measures (BBNNFI: .99, CFI: 1.00 and IFI: 1.00) together with a RMSEA value of .008 and a significant chi-square (p = .46) indicate good fit.

Convergent validity is indicated by the strong and significant ($p < .01$) item loadings. All standardized loadings range between .44 to .88 with the exception of one variable, which has a loading of .39. Reliabilities, measured by coefficient alpha, for the constructs are .79, .79 and .83 respectively. All inter-factor correlations are significant and positive, ranging between .25 to .52, indicating nomological validity. They are however significantly different from 1.00, indicating discriminant validity. A series of chi-square tests confirmed discriminant validity of the constructs. In summary, the CFA for the performance constructs provide ample support for adequate psychometric properties of these scales.

Table 5.5. Goodness-of-Fit Indices for Performance CFA

Chi-Square	49.32
Degrees of Freedom	49
p-value	.46
CFI	1.00
IFI	1.00
BBNNFI	.999
RMSEA	.008

CFA for Antecedent Variables

An initial analysis of the inter-item correlations and exploratory factor analysis led to 38 items being loaded on nine constructs in this CFA, conducted exclusively on the antecedent variables. The construct of planning centralization, and its associated items, was dropped from further analysis at this stage since it exhibited low inter-item correlation in exploratory analysis. The covariance matrix was used as input, and the factors freed to covary with each other. Table 5.6 displays the fit indices of the EQS confirmatory factor analysis. The global fit measures (Chi-square: 817.6 with 584 dof, BBNNFI: .92, CFI: .93 and IFI: .93) together with a RMSEA value of .048 indicate acceptable levels of fit, especially considering the large degrees of freedom in the model.

Convergent validity is indicated by the strong and significant ($p < .01$) item loadings. All standardized loadings range between .44 to .91 with the exception of three, which are .34, .34 and .39 respectively. Construct reliabilities, measured by coefficient alpha, range between .73 to .9. The inter-factor correlations are significantly different from 1.00, indicating discriminant validity. Also, they were in the theorized directions. For example, top management risk taking propensity (measured as risk avoidance propensity) shows a negative correlation with both learning orientation and top

management commitment to alliances. Also, decision centralization shows a negative correlation with top management heterogeneity, which is in line with theory. In summary, the CFA for the antecedent constructs is satisfactory.

Table 5.6. Goodness-of-Fit Indices for Antecedent Variables CFA

Chi-Square	817.60
Degrees of Freedom	584
p-value	.001
CFI	.92
IFI	.93
BBNNFI	.93
RMSEA	.048

Full Measurement Model

Having conducted individuals CFAs on groups of variables, a comprehensive CFA was conducted. 73 items were modeled to load onto 16 constructs in this CFA. The covariance matrix was used as input, and the independent factors freed to covary with each other. Table 5.7A displays the fit indices of the EQS confirmatory factor analysis. The global fit measures (chi-square: 2934.62 with 2144 dof, BBNNFI: .86, CFI: .87 and IFI: .87) together with a RMSEA of .046 indicate acceptable levels of fit especially considering the large degrees of freedom, and number of variables and constructs combined with a relatively small sample size.

Convergent validity is indicated by the strong and significant ($p < .01$) item loadings. All standardized loadings range from .41 to .87, with the exception of three items, which are .33, .35, and .39 respectively. Reliabilities, measured by coefficient alpha, for the constructs range between .73 to .9. The inter-factor correlations are significantly different from 1.00, indicating discriminant validity. Also, they are in theorized directions. For example, top management risk taking propensity (measured as

risk avoidance propensity) shows a negative correlation with proactive initiation. Also, decision centralization shows a negative correlation with top management heterogeneity, which is in line with theory. In summary, the CFA provides ample evidence of acceptable levels of psychometric properties. Table 5.7B displays the items (including those that were eliminated during the process of measure purification), the coefficient alphas of the constructs, standardized loading of the items on respective constructs, and significance levels.

Table 5.7A. Goodness-of-Fit Indices for Full Measurement Model CFA

Chi-Square	2934.62
Degrees of Freedom	2144
p-value	.001
CFI	.87
IFI	.87
BBNNFI	.86
RMSEA	.046

Table 5.7B. Measurement Model and Confirmatory Factor Analysis by EQS

Constructs	EQS Item-Construct Loading		Cronbach's Alpha
	Standardized	t-value	
PROACTIVE INITIATION			.82
1. We actively monitor our environment to identify partnering opportunities	.74	10.65	
2. We are alert to market developments that create potential alliance opportunities	.66	9.16	
3. We strive to preempt our competition by entering into alliances with key firms before they can	.68	9.65	
4. We are responsive when approached with a proposal to form an alliance	.59	8.02	
5. We often take the initiative in approaching firms with alliance proposals	.67	9.45	
6. Compared to our competitors, we are far more **proactive and responsive** in finding and 'going after' strategic partnerships	.61	8.42	
7. We routinely gather information about prospective partners from various forums (e.g. trade shows, industry conventions, databases, publications, internet etc.)*			
ALLIANCE LEVERAGING			.80
1. We consider our alliances as a portfolio that requires overall coordination, and not as independent, one-off arrangements	.57	7.77	
2. Our activities *across* different alliances are well coordinated	.87	13.75	
3. We systematically coordinate our strategies *across* different alliances	.79	12.03	
4. We have processes to systematically transfer knowledge *across* alliance partners	.65	9.20	
5. Managers from different departments meet periodically to examine how we can create synergies *across* our alliances	.52	7.01	
6. We treat our alliances as independent relationships, and rarely coordinate activities and strategies across our alliances*			
7. Our corporate office helps coordinate across our operating units' key alliances*			

Table 5.7B (continued)

Constructs	EQS Item-Construct Loading		Cronbach's Alpha
	Standardized	t-value	
RELATIONALISM			.79
1. Staying together during adversity/challenge is very important in our relationships	.71	10.43	
2. We endeavor to build relationships based on mutual trust and commitment	.79	11.67	
3. We strive to be flexible and accommodate partners when problems/needs arise	.70	10.12	
4. We work out conflict resolution approaches early in our relationships	.47	6.25	
5. We emphasize commitment to improvements that benefit the relationship as a whole, and not only individual parties	.73	10.28	
6. When disagreements arise in our alliances, we usually reassess facts to try and reach a mutually satisfactory compromise*			
7. Information exchange with partners takes place frequently and informally, and not only according to pre-specified agreements*			
ALLIANCE LEARNING			.79
1. We conduct periodic reviews of our alliances to understand what we are doing right and where we are going wrong	.77	11.12	
2. We periodically collect and analyze field experiences from our alliances	.70	9.62	
3. We modify our alliance related procedures as we learn from experience	.61	8.43	
4. We diligently transfer know-how on alliance "do's" and "don'ts" to key managers	.64	8.79	
5. We have databases of alliance-related information for managers to access when necessary (e.g., web page, electronic database, seminar material, manual etc.)*			
6. A good deal of informal 'hall talk' keeps alive lessons learned from our alliance experiences*			

Table 5.7B (continued)

Constructs	EQS Item-Construct Loading		Cronbach's Alpha
	Standardized	t-value	
TMT HETEROGENEITY			.75
1. Our TMT is well represented by both 'conservatives' and 'liberals'	.60	7.89	
2. Our TMT consists of members with very different viewpoints and perspectives	.77	10.60	
3. Our TMT members have very diverse professional affiliations and contacts	.64	8.49	
4. Our TMT is so diverse that during deliberations, someone is bound to play "devil's advocate" and question the group consensus	.64	8.47	
TMT RISK AVERSION			.85
1. Our top managers have an inclination for high-risk, high-return projects (RC)	.63	8.69	
2. Our top managers typically adopt a cautious 'wait-and-see' attitude	.78	11.72	
3. Our top managers generally like to 'play it safe' when faced with challenges	.91	14.48	
4. Our top managers only like implementing plans which they are certain will work	.71	10.36	
TMT COMMITMENT			.88
1. Top managers often articulate that alliances are critical to our sustained growth	.78	11.83	
2. Top managers have been known to personally 'champion alliances' themselves	.70	10.10	
3. Top managers provide personal and visible support for new alliance initiatives	.79	12.09	
4. In their public statements (e.g., to customers, suppliers, distributors, investors etc.), our top managers highlight our strategic emphasis on alliances	.79	12.29	
5. Our top managers often emphasize how important it is for us to be perceived as a good collaborator and as a 'partner of choice' for other firms	.72	10.55	

Table 5.7B (continued)

Constructs	EQS Item-Construct Loading		Cronbach's Alpha
	Standardized	t-value	
DECISION MAKING CENTRALIZATION			.90
1. Except for minor decisions, very little action can be taken in this organization without supervisor approval	.83	13.21	
2. Even small matters have to be referred to someone higher up for a final answer	.87	14.16	
3. A person who wants to make his/her own decisions would be quickly discouraged	.90	14.94	
4. People here are allowed to make their own decisions about problems that come up in their jobs (RC)*			
FORMALIZATION			.74
1. Our systems and procedures embody our accumulated learning and best-practices	.33	4.06	
2. Our systems and procedures empower and help employee decision-making	.75	10.52	
3. Our procedures are designed to encourage creative decision-making	.84	12.09	
4. Our procedures are primarily viewed as hurdles to be circumvented discretely (RC)*			
INTEGRATING MECHANISMS			.73
Extent to which following are used to assure compatibility among decisions in one area (e.g., marketing) with those in other areas (e.g., product design):			
1. Interdepartmental committees (set up to allow departments to engage in joint decision-making)	.86	10.78	
2. Task forces (groups helping interdepartmental collaboration on projects)	.70	9.39	
3. Liaison personnel (who coordinate the efforts of several departments for the purposes of a project)	.78	9.35	
4. Design centers (consisting of functional specialists who work on an ongoing basis on multiple developmental projects over time)	.44	5.88	

Table 5.7B (continued)

Constructs	EQS Item-Construct Loading		Cronbach's Alpha
	Standardized	t-value	
LEARNING ORIENTATION			.84
1. Managers basically agree that our ability to learn is key to remaining competitive	.75	10.23	
2. The sense around here is that employee learning is an investment, not an expense	.71	10.42	
3. Learning in this organization is viewed as key to organizational survival	.62	8.61	
4. This organization strongly encourages the incorporation of fresh ideas and knowledge into the workplace	.86	12.69	
5. We rarely question our own biases about the way we interpret market information*			
6. Through periodic benchmarking, we incorporate industry best practices into our organization processes*			
PLANNING INCORPORATION			.88
1. Alliances are explicitly considered in our strategic planning process	.85	13.65	
2. Executives who manage our alliances participate actively in our strategic planning process	.73	10.94	
3. Our partnering strategy is driven by our overall strategic planning process	.85	13.56	
4. Alliances are an important component of our corporate strategy	.80	12.39	
5. We seek inputs from our alliances while setting our organizational goals and developing our business plans*			

Table 5.7B (continued)

Constructs	EQS Item-Construct Loading		Cronbach's Alpha
	Standardized	t-value	
ENVIRONMENTAL UNCERTAINTY			.79
1. The rate of product/service obsolescence in this industry is very high	.81	12.27	
2. Our production and service technologies change often and in major ways (e.g., advanced electronic components)	.82	12.57	
3. Our customers tend to look for new products all the time	.78	11.77	
4. Our new customers have product-related needs that are very different from those of our existing customers	.54	7.22	
5. We have to regularly change our marketing practices to keep up with competition	.41	5.37	
6. It is extremely difficult to predict our competitive landscape in the near future	.35	4.5	
ALLIANCE PERFORMANCE			.79
Rating compared to alliance-related objectives:			
1. Your organization's reputation in the market as a 'partner of choice'	.56	7.18	
2. The competitive strength of your alliance network	.77	11.1	
3. Strength of your relationships with key alliance partners	.68	9.43	
4. Ability to manage crisis and conflicts with your alliance partners	.70	9.87	
5. Learning new competencies from your partners*			
6. Frequency of third party arbitrators intervening in your alliances*			

Table 5.7B (continued)

Constructs	EQS Item-Construct Loading		Cronbach's Alpha
	Standardized	t-value	
FINANCIAL PERFORMANCE			.79
Rating of organization's performance, RELATIVE TO YOUR COMPETITOR(S):			
1. Profitability	.85	13.81	
2. Return On Investment	.85	13.19	
3. Cash Flow from Operations	.68	9.79	
4. Cost Control	.39	5.08	
MARKET PERFORMANCE			.73
Rating of organization's performance, RELATIVE TO YOUR COMPETITOR(S):			
1. Sales Growth	.60	7.89	
2. Market Share	.66	8.85	
3. Market Development	.76	10.43	
4. Product Development	.54	6.99	

STRUCTURAL MODEL

The structural model was tested along with the measurement model. One minor modification was made to the measurement model. The 20 items of PO were parceled into four variables, each measuring one first-order dimension of the higher-order construct, and made to load on the second-order construct of PO. The objective is to increase power of the tests by lowering the ratio of the number of estimated parameters to the sample size. Since the confirmatory factor analysis results for PO indicated support for the hypothesized factor structure, and the psychometric properties of the first-order constructs, this is justified. The covariance matrix was used as the input and Maximum Likelihood (ML) estimation method was used.

Figure 5.2 displays the supported and unsupported hypotheses, while the results of the tests are displayed in Table 5.8. The global fit indices show adequate fit given the large degrees of freedom in the model (chi-square=1953.1, dof=1298; BBNFI=.85; CFI=.86; IFI=.86; RMSEA=.053). Of the hypothesized paths, 11 emerge significant at $p < .05$. Below, test results for each hypothesis are described. Instead of following a chronological order, the hypotheses are discussed in logical sequence. Beginning with the influence of partnering orientation on performance, the discussion traces the effects of its antecedents, namely TMT partnering commitment, learning orientation and planning incorporation, and concludes with the influence of the exogenous variables, namely TMT heterogeneity, risk aversion, and the structural variables, on these three drivers of PO.

Impact of PO on Performance

It was posited that firms that are more capable at partnering are likely to be better performers. In other words, a positive relationship between partnering orientation and

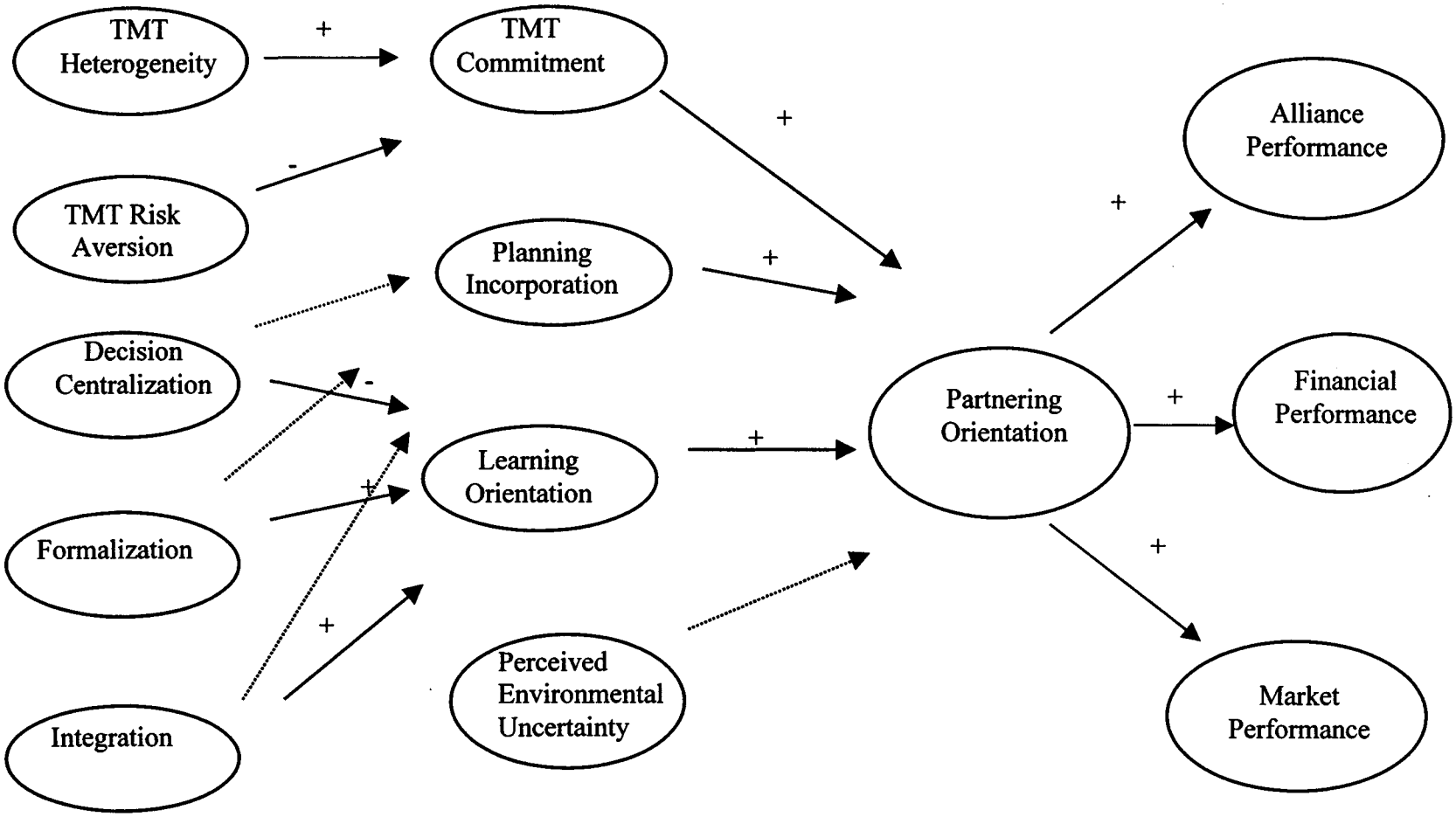

Figure 5.2: Model With Supported and Unsupported Relationships

Table 5.8: Assessment of Research Hypotheses by EQS

Relationships	Hypothesis	SEM Coefficient (Standardized)	t-value	Assessment ($p < .01$)**
TMT Commitment --- PO	H_1	.47	5.58	S
TMT Heterogeneity --- TMT Partnering Commitment	H_2	.33	3.41	S
TMT Risk Aversion --- TMT Partnering Commitment	H_3	-.28	-3.11	S
Learning Orientation --- PO	H_4	.18	2.43	S
Planning Incorporation --- PO	H_5	.57	6.24	S
Decision Centralization --- Planning Incorporation	H_6	-.15	-1.31	n.s.
*Planning Centralization --- Planning Incorporation	H_7			Not tested
Decision Centralization --- Learning Orientation	H_8	-.42	-4.33	S
Formalization --- Learning Orientation	H_9	.35	3.45	S
Formalization --- Planning Incorporation	H_{10}	.20	1.60	n.s.
Integration --- Learning Orientation	H_{11}	.21	3.21	S
Integration --- Planning Incorporation	H_{12}	.12	1.43	n.s.
Environment --- PO	H_{13}	-.07	-1.00	n.s.
PO --- Alliance Performance	H_{14}	.73	4.84	S
PO --- Market Performance	H_{15}	.42	3.78	S

* Variable dropped after preliminary correlation analysis and not included in structural model

** One-Tailed test

Note: Chi-Square = 1953.35, df = 1298, $p<.001$; BBNFI = .85; CFI = .86; IFI = .86; RMSEA = .053

various dimensions of organizational performance was hypothesized. The test results provide substantial support for these hypotheses. All three aspects of performance, namely alliance, financial, and market performance are significantly and positively related to partnering orientation.

Alliance Performance: H_{14} proposed that PO is positively associated with alliance performance. This hypothesis is strongly supported (standardized $\beta = .73, p < .01$). In addition, 54% of the variance in alliance performance is explained by PO.

Market Performance: H_{15} proposed that PO is positively associated with market performance. This hypothesis is supported (standardized $\beta = .42, p < .01$). In addition, 17.6% of the variance in market performance is explained by PO.

Financial Performance: H_{16} proposed that PO is positively associated with financial performance. This hypothesis is supported (standardized $\beta = .21, p < .01$). In addition, 4.3% of the variance in financial performance is explained by PO.

In summary, all three hypotheses relating PO to various aspects of performance are supported. Quite logically, PO appears to have the strongest impact on alliance performance. Partnering orientated processes primary impact is likely to be felt on issues related to a focal firm's reputation in the market as a reliable, competent, and trustworthy partner, the competitive strength of its alliance network, and relational bonds with its partners. The results indicate that all these issues, subsumed under the nomenclature of alliance performance, appear to be positively influenced by partnering oriented processes.

PO's significant relationships with the other two aspects of performance indicate that this capability translates into improved market and financial performance. The

greater explanatory power of PO on market performance (17.6% variance explained), compared to financial performance (4.3% variance explained), is interesting and may be explained as follows. As conceptualized, market performance subsumes two domains, namely sales growth and market share in existing businesses, and those indicators related to the future positioning of the firm, namely market and product development. Thus, market performance also carries implications for the future positioning of a firm, and the sustainability of its competitiveness. Accordingly, the full impact of market performance may not be felt in the short term, or reflected in current financial results. Second, marketing programs involve costs, with benefits accruing as a stream of future rents. Thus, financial performance in the short-term may be impacted.

In summary, there appears to exist universalistic relationships between partnering orientation and firm performance, thus supporting the idea that 'partnering capability' may be a key driver of firm performance. The significant results reported in this section relates happily to the fundamental question driving this dissertation, namely the link between partnering capability and firm performance.

Antecedents of PO

The hypothesized model of antecedents argues that partnering orientation is driven by perceived environmental uncertainty, and three internal factors, namely top management's support, the nature of the strategic planning process, and the organization's emphasis on learning. These three internal drivers of PO are in turn posited to be influenced by a set of factors relating to the composition of the team and the organizational structure. Top management support is argued to be influenced by its compositional and attitudinal characteristics, whereas the other two drivers are postulated

to be influenced by the structural characteristics of the organization. Each hypothesis is discussed in turn, followed by an overall summary.

TMT Partnering Commitment: H_1 proposed that TMT partnering commitment is positively associated with PO. This hypothesis is strongly supported (standardized $\beta = .47, p < .01$), indicating that endorsement from the executive suite is a key driver of partnering oriented behavioral processes.

Planning Incorporation: H_5 proposed that the incorporation of alliance related issues into the strategic planning process is positively associated with PO. This hypothesis is strongly supported (standardized $\beta = .57, p < .01$), indicating that the nature of the strategic planning process drives the development of partnering oriented processes.

Learning Orientation: H_4 proposed that learning orientation is positively associated with PO. This hypothesis is supported (standardized $\beta = .18, p < .01$), indicating that an organization's emphasis on learning encourages partnering oriented behavior.

Perceived Environmental Uncertainty: H_{13} proposed that perceived environmental uncertainty is positively associated with PO. This hypothesis is not supported (standardized $\beta = -.07, p < .2$). The result seems to indicate that environmental uncertainty in the form of customer dynamism, technological volatility, and competitive hostility, does not have a direct effect on a firm's partnering oriented behavior.

In summary, all three theorized internal drivers of PO are significant, while the external driver emerges non-significant. Among the three internal drivers, which together explain 65% of the variance in the PO construct, both strategic planning process and

TMT commitment appear to exert very strong influence on partnering oriented behavior. Although the effect size of learning orientation is smaller, it does indicate that together, these three internal factors, namely top management commitment, an alliance inclusive strategic planning process, and an overall learning emphasis, are key drivers of collaborative rent-seeking behaviors in an organization.

The results thus strongly support the theoretical role of top management as architects of an organization's design, as well as the evidence that surfaced during executive interviews. The embedded relational logic in the executive suite, and the consequent 'evangelizing' that emerges from the top, appears to be a key driver of an organization's strategic thrust on partnering. The results support the arguments made earlier that senior management championing offers a key signal to both internal and external stakeholders about the importance placed on partnering. Their hands-on involvement, and articulation of support, set a strategic direction for the organization, and possibly ensure resource allocation, which in turn ensures that the vision is adequately translated into action.

The strong influence of an alliance inclusive strategic planning process on PO highlights the critical role of developing routines that integrate a specific initiative into the strategy-making design phase. The results indicate that the ability of firms to integrate a critical strategic issue, namely partnering, into the strategic planning process impacts the development of related capabilities. This finding supports the notion that specific strategic issues can be programmed into the strategic planning process so that effective and coordinated action can take place (Judge and Douglas 1998), which can form the foundation for competitive advantage.

The positive and significant effect of learning orientation on PO suggests that the emphasis within an organization to acquire new competencies and capabilities has a positive spillover effect on alliance processes. Given the fundamental premise that an alliance is a mode to access and integrate transorganizational strategic assets, of which tacit knowledge often is a key component, it appears that organizations that value learning are also likely to place higher emphasis on partnering processes. Being open to external sources of knowledge, such organizations possibly suffer less from the 'not-invented-here' syndrome, thus allowing greater acceptance of partnering and associated processes and routines as a way of life.

The non-significance of environmental uncertainty is intriguing as is the negative coefficient. However, there is some indication in the market orientation, and new product literature that environment's impact on firm behavior and outcome is complex, and that it may very well serve as a moderator of the capability-performance relationship. Also, given that the effect of uncertainty on vertical integration has a long tradition of conflicting and sometimes confounding results, this result is not surprising. However, closer attention is certainly warranted in the future.

TMT Heterogeneity: H_2 proposed that heterogeneity in the top management team is positively associated with TMT partnering commitment. This hypothesis is supported (standardized $\beta = .33, p < .01$), indicating that diversity in the executive suite is likely to lead to a relational logic within the top management team which will be expressed through enhanced support for partnering activities.

TMT Risk Aversion Propensity: H_3 proposed that risk aversion among senior managers is negatively associated with TMT partnering commitment. This hypothesis is

supported (standardized $\beta = -.28, p < .01$). The significant and negative coefficient indicates that a greater risk taking propensity of the top management team will most likely be associated with commitment to partnering.

In summary, both antecedents relating to the composition, and attitude of the top management team appear to significantly influence the extent of support for alliances that is likely to emanate from the executive suite. Together, these two variables explain 25% of the variance in commitment, thus indicating that diverse, and non-risk averse senior management teams are more likely to facilitate and drive partnering oriented behavior in their organizations. The theory constructed around top management team is thus supported, both from outcome and antecedent perspectives.

Decision-making Centralization: H_6 and H_8 proposed that centralization of decision-making is negatively associated with both planning incorporation and learning orientation. While both coefficients are in the hypothesized direction, H_6 is not supported (standardized $\beta = -.15$), while H_8 is strongly supported (standardized $\beta = -.42, p < .01$). From the results, it appears that centralized decision-making has a negative impact on learning orientation. However, it does not appear to have any significant impact on the scope of the strategic planning process.

Formalization: H_9 and H_{10} proposed that an enabling type of formalization is positively related to both learning orientation and planning incorporation. Both coefficients are in the hypothesized directions. However, while H_9 is strongly supported (standardized $\beta = .35, p < .01$), H_{10} is not supported (standardized $\beta = .20$). From the results, it appears that while enabling formalization facilitates a culture of learning within

the organization, it may not have any impact on the scope of the strategic planning process.

Integration: H_{11} and H_{12} proposed that the use of integrating mechanisms is positively related to both learning orientation and planning incorporation. Both coefficients are in the hypothesized directions. However, while H_{11} is strongly supported (standardized $\beta = .21, p < .01$), there is no support for H_{12} (standardized $\beta = .12$). From the results, it appears that while the use of integrating mechanisms is likely to facilitate a culture of learning within the organization, it may not impact on the scope of the strategic planning process.

In summary, it appears that while all three aspects of an organization's structure, namely decision-making centralization, formalization, and integration, significantly impact an organization's learning orientation, they do not influence the scope of the strategic planning process although the coefficients are in hypothesized directions. The results indicate that while centralization of decision-making serves as a barrier to a learning orientation, enabling formalization and the use of integrating mechanisms foster it. The negative relationship between centralization of decision-making and learning orientation suggests that it may be useful to empower employees to make decisions at lower levels of organizations rather than concentrate decision-making in the upper echelons. The positive relationships between formalization and integration with learning orientation indicate that (1) an enabling logic of formalized rules and procedures fosters a culture of learning through capturing best practices, yet being flexible enough to allow managerial latitude in being innovative, and (2) that the use of complex integrating devices fosters an appreciation of the value of knowledge that resides outside one's

functional silo, and through the practice of working across diverse knowledge bases and capabilities facilitates an overall learning orientation in the organization.

Contrary to prior hypotheses however, none of these three structural variables organization appear to be significantly related to the scope of an organization's strategic planning process. It thus appears that whether alliance related issues are incorporated into the strategic planning process or not, is empirically unrelated to an organization's structural aspects. In other words, the structural characteristics of an organization seems to be unrelated to the scope of the strategic planning process and whether it incorporates alliance related issues. An alternative interpretation is that the scope of the planning process can be enlarged to include alliance issues regardless of the manner in which the organization is structured.

CHAPTER 6

DISCUSSION AND CONCLUSION

This research offer a number of insights into an area of strategic emphasis that is increasingly becoming important both from managerial and theoretical perspectives. Below, theoretical and managerial contributions of the study, its limitations, and future research directions are discussed.

THEORETICAL CONTRIBUTIONS

Traditionally, marketing research on alliances has been framed in the context of governance modes, and been embedded in transaction cost and theories of social exchange and relational norms. Recently, Day (1992) has emphasized the need for marketing researchers to integrate alliances with strategy (Day 1992). It is perceived that through such research, marketing's contribution to the ensuing dialogue regarding networks and alliances would be enhanced. Although this may have facilitated the emergence of terms such as relational resources, network competence, and alliance competence in the marketing literature, there is a general lack of rigorous theoretical and empirical work in this area. Simultaneously, recent research in management has articulated the need to investigate organization's collaborating technology (Madhok and Tallman 1998), relational capability (Dyer and Singh 1998), and cooperative capability (Gulati 1998).

This study focuses on organizational processes that empower firms to develop and implement effective transorganization-based competitive strategies. Thus, in terms of theoretical contribution, through a wide-ranging and integrative inquiry into the conceptual domain of partnering orientation, its antecedents, and implications on

organizational effectiveness, this dissertation expects to spur research on inter-firm relationships in new directions. The relatively limited theoretical span of extant marketing literature on alliances is extended by integrating diverse theoretical traditions in strategy, economics, organization theory, and marketing. The objective is to move the field toward developing a theory of partnering that is embedded within the ongoing strategy dialogue concerning the dynamic RBV of the firm.

More specifically, this study deals with three sets of questions:

1. What is partnering orientation? How can this capability be theoretically conceptualized and operationally measured?
2. Why is partnering orientation important? How does it impact performance?
3. How can partnering orientation be developed? Which organizational factors are key enablers of this capability, and which are the roadblocks?

The questions focus around 'what, why, and how' as they relate to firm processes, design elements, and performance implications of partnering capability. Below, the discussion elaborates on each of these questions.

Theoretical Conceptualization and Empirical Measurement of PO

A fundamental strategic issue forms the focus of this investigation, namely why certain firms are more successful at deriving competitive advantage through their alliances than others. Conceptualizing partnering orientation as a system of inter-related processes that generate collaborative rents, the theoretical contribution of this work lies in extending existing frameworks on collaborative rents by incorporating the idea of first-mover advantage in imperfect strategic factor markets, synergy through leveraging across a firm's portfolio of partners, and the knowledge based theory of the firm into an

integrative framework. Thus, the theoretical discussion surrounding collaborative rents is extended from the context of single dyadic alliances to issues covering a firm's first-mover advantage through strategic intervention in its 'partner space,' relational governance issues, coordinating across its portfolio of alliances, and in being able to secure collaborative rents from transforming experiential learning into organizational knowhow.

It is argued that a firm's capability to create a sustained flow of strategic assets is key to competitive advantage. The traditionally inward-looking view of the RBV with its primary focus on resources housed within a firm is extended to incorporate the idea that some strategic assets and are transorganizational in nature. Accordingly, firms that can access and utilize these in unique ways may realize an advantage over firms that are unable or unwilling to do so. The notion of collaborative rent-seeking behaviors is developed as a set of processes that constitute strategic choices. An existing framework of collaborative rents is extended in two ways. One, it is argued that the collaborative-rent generating process needs to be considered at multiple levels, namely at the level of individual alliances and at the portfolio level; and two, in a dynamic context, namely one that incorporates dynamic gains that accrue over time as learning enhances the efficiency and effectiveness of a firm's current practices and processes.

It is noted that firm orientations are useful from a taxonomic and heuristic viewpoint, and has strong managerial relevance. The value of theorizing firm orientations lies in being able to capture broad nuances of complex organizational phenomena within relatively simple and parsimonious concepts. Further, literature suggests that firm orientations, when measured from a process and activities perspective, reflect firm

capabilities. Recent research also suggests that firm orientation be treated as a set of behaviors and processes rather than as an aspect of culture. A process and activities view of partnering orientation is accordingly developed.

The idea of *partnering rent-seeking behavior* is developed to imply collaborative-rent creating organizational processes. Four such underlying sets of processes are identified from literature and in-depth interviews. First, identifying appropriate sources of the required capability along with systematic and proactive initiatives of the firm to identify and inter-link with these resources and capabilities. Second, managing individual relationships so that the idiosyncratic interfirm inter-linkages become strategic assets in their own right, and a source of relational rents and competitive advantage. Third, leveraging across disparate resource pools represented by a firm's array of alliances, thus creating synergy while minimizing conflicts across a firm's portfolio of alliances. Fourth, transforming localized alliance-related experiential learning into organization-wide collaborative know-how - a non-appropriable strategic asset that has implications for competitive advantage. In brief, these dimensions relate to initiating partnering relationships with capable firms, managing these relationships in a manner which enables effective and efficient blending of the different resources and capabilities of the firms, having an overall alliance strategy that enables leveraging across a firm's portfolio of alliances, and institutionalizing organization-wide processes that enable the transformation of alliance-related experiential learning into shared organizational know-how. These four dimensions of PO, namely *proactive initiation, relational governance, alliance leveraging, and alliance learning* cover four key aspects of partnering - initiating activities, relationship development and maintenance activities, seeking

synergies across alliances, and learning. The theoretical rationale behind each is developed.

Further contributions lie in the development of a scale to measure partnering orientation, which is conceptualized as a higher-order construct that is manifested through four first-order constructs. Table 6.1 displays the refined and purified items for each of the four dimensions. The strong support that emerges from the rigorous empirical testing of the psychometric properties of each of these scales, and the proposed factor structure of partnering orientation provides empirical validation of the conceptualization of these being an inter-related set of processes that reflect an overall partnering capability of a firm.

PO and Performance

Given the centrality of performance in strategy research, it is important to understand the implications of partnering capability on organizational outcomes. Although the importance of partnering as a route to competitive advantage has been widely acknowledged in the literature, this empirical relationship is largely untested.

Herein lies a substantive theoretical contribution of this study. Much of empirical work in the RBV centers around the question of whether a particular capability actually translates into higher performance. Also, there exists substantial debate in the literature on what constitutes firm performance. A multi-dimensional conceptualization of performance is utilized in this study. In addition to financial and market performance, the idea of alliance performance is introduced, relating to the firm's achievement of goals in the areas of competitive strength of its network, its ability to resolve crisis and conflicts

Table 6.1 A Purified Scale to Measure Partnering Orientation

PROACTIVE INITIATION

1. We actively monitor our environment to identify partnering opportunities
2. We are alert to market developments that create potential alliance opportunities
3. We strive to preempt our competition by entering into alliances with key firms before they can
4. We are responsive when approached with a proposal to form an alliance
5. We often take the initiative in approaching firms with alliance proposals
6. Compared to our competitors, we are far more **proactive and responsive** in finding and 'going after' strategic partnerships

ALLIANCE LEVERAGING

1. We consider our alliances as a portfolio that requires overall coordination, and not as independent, one-off arrangements
2. Our activities *across* different alliances are well coordinated
3. We systematically coordinate our strategies *across* different alliances
4. We have processes to systematically transfer knowledge *across* alliance partners
5. Managers from different departments meet periodically to examine how we can create synergies *across* our alliances

RELATIONALISM

1. Staying together during adversity/challenge is very important in our relationships
2. We endeavor to build relationships based on mutual trust and commitment
3. We strive to be flexible and accommodate partners when problems/needs arise
4. We work out conflict resolution approaches early in our relationships
5. We emphasize commitment to improvements that benefit the relationship as a whole, and not only individual parties

ALLIANCE LEARNING

1. We conduct periodic reviews of our alliances to understand what we are doing right and where we are going wrong
2. We periodically collect and analyze field experiences from our alliances
3. We modify our alliance related procedures as we learn from experience
4. We diligently transfer know-how on alliance "do's" and "don'ts" to key managers

with its partners, its reputation in the market as a partner of choice, and the strength of its relationships.

Strong support for the hypotheses relating PO to the three performance dimensions indicates that partnering capability may be a valuable, competitive advantage bestowing capability. Although the issue of sustainability is one that can only be addressed through a longitudinal study, the overwhelming evidence here indicates that firms that have succeeded in systematically institutionalizing the four process dimensions of partnering rent-seeking behavior appear to be better performers on all three aspects. This corroborates the findings of the Booz, Allen and Hamilton study, which found that firms who were better at alliances enjoyed better financial returns.

The strongest effect is on alliance performance, indicating that partnering orientation has implications for the equity a firm enjoys in the market for partners, the competitive strength of its network of allies, and the relational bonding within the network. PO's link with market performance implies that partnering orientation impacts both current indicators of business performance, namely sales growth and market share, but also indicators that are related to the future positioning of the firm, such as product development and diversification into new markets. The long term performance implications is interesting, since it suggests that the positional advantages that are created through this capability may actually be sustainable in nature. The relatively weak yet significant link with financial performance suggests the salience of this capability in regards to the bottom-line, and also heightens sensitivity to myriad other issues that impact on financial performance. As noted earlier in Chapter 3, partnering processes may, at times, lead to favorable outcomes on one performance dimension and

unfavorable outcomes on another. Since costs and returns may be skewed toward different periods of a relationship, synergistic quasi-rents may not be effectively and efficiently generated until some level of integration and value-creation takes place which actually reaches the market. Thus, expenditures may be high in the early stages of a relationship, and given that realization of synergistic potential is lengthy and laborious, rents as opposed to costs are biased towards later periods. In essence, the requisite resource commitment to partnering activities may detract from short-run profitability.

In essence, the following executive statement from the exploratory part of the research process turns out to be prophetic:

> "If you look at companies that outperform their peers in any particular segment, you will find they are better at partnering than their peers. It would be interesting to take the annual Business Week ranking of companies by industry, and then overlay a partnering competency ranking on them. I would say there would be convergence ... companies that are delivering greater levels of share-holder value are good at partnering."

Determinants of PO

A further theoretical contribution of this study lies in identifying and developing a theoretical model of the drivers of PO. Conceptualized in terms of factors that directly impact on PO, and those that act as antecedents to the main drivers of partnering orientation, the model integrates various theoretical bodies. The empirical results provide (1) strong support for the theorized roles of the 'executive suite,' the strategic planning process, and a learning culture, in driving partnering capability, (2) strong support for the theorized effects of team composition and attitude on alliance support from the top management team, and (3) partial support for the hypothesized effects of the structural variables on the learning orientation and strategic planning drivers of partnering orientation. Below, these are discussed in more detail.

The study suggests that PO is facilitated by the amount of emphasis top managers place on partnering orientation through continual articulation to employees, and external stakeholders, regarding the critical importance of alliances to the success of the firm, and the high level of organizational emphasis on striving to be a good collaborator and a partner of choice. In addition, alliance championing and personal, and visible support of top managers appears to be key ingredients that make a partnering oriented firm.

Which top management teams are likely to be more committed to partnering initiatives, and drive such processes through the organization? This is a key theoretical and managerially important question that this study addresses. Importantly, it appears that more heterogeneous top management teams, and those which are less risk aversive, are likely to be more committed to partnering. Diversity in the team, it has been argued earlier, is likely to be associated with a broader repertoire of actions, greater willingness to consider other points of views, and in general, a more externally focused management. The results strongly support this contention. In addition, it also appears that top managers have to be willing to take a certain amount of risk to be able to drive partnering oriented behaviors in their companies. In the absence of such a willingness to take risks, entrepreneurial action down the line would suffer, as a result of which partnering opportunities may be lost. Managers who are unwilling to put their careers on the line would shy away from partnerships, which by their very nature are fraught with uncertainty on multiple dimensions. Managers are more likely to generate innovative partnering ideas when they are intrinsically motivated to do so. They are also likely to 'take the risk' of initiating an alliance, and make relational investments (which is a critical determinant of whether the relationship becomes an idiosyncratic source of rents

or not), when they are confident that their top managers accept occasional failure as a price of doing business. In other words, managers will be more willing to take risks to enable the relationship become stronger, when they believe they have a 'right to occasional failure'.

Another strong driver of partnering orientation is the scope of the strategic planning process, and the extent to which alliance related issues are incorporated into it. It appears that organizations which systematically integrate alliances into their strategic planning process by involving executives who manage their alliances in the planning process, seek inputs from their partners while setting overall corporate goals and developing their business plans, and have a partnering strategy, are more partnering oriented in their business processes. This result is consistent with other research that has found positive relationships between the extent to which strategic issues are integrated into the formal strategic planning process and the firms responsiveness and performance on that specific dimension (Judge and Douglas 1998).

The learning orientation of a company emerges as another variable that is significantly associated with a partnering orientation. The results suggest that companies that have created a culture of 'learning' are likely to drive partnering oriented behavior. These companies have a shared understanding that the ability to learn and develop new competencies and capabilities are key to remaining competitive, and have a penchant to treat learning related costs as investments to be made and not expenses that need to be controlled and cut. The process of critically reflecting on existing wisdom, along with periodic benchmarking, and incorporating best practices from peer companies, that is evident in learning companies appears to be a key driver of partnering oriented processes.

A possible explanation may be that such companies have managed to shed the 'not-invented-here' syndrome which, according to exploratory interviews, is a big inhibitor of valuing alliances. With organizational emphasis on learning, and investment on development of new capabilities, it is logical that the search for complementary resources would extend to the transorganizational domain, thus facilitating a partnering orientation. Also, the openness to new ideas, and new stimuli that is necessary for imbibing new knowledge is also likely to stimulate relational behavior, knowledge transfer across partners, and learning how to be better at the partnering game.

The study provides only partial support for the hypothesized effects of the structural variables on learning orientation and scope of strategic planning. While all three structural variables turn out to have significant relationships with learning orientation, none are significantly related to the strategic planning variable.

As expected, centralized decision-making has a negative relationship with learning orientation. The results indicate that it may make sense to empower managers in order to build this capability. Formalization, conceptualized in the enabling mode, and the use of lateral integrating devices both are positively related to learning orientation. It thus appears that rules, and procedures, if designed as facilitators of decision-making and innovative behavior, rather than as compliance mechanisms, are likely to facilitate a culture of learning within an organization. Also, the use of interdepartmental committees, task forces, liaison personnel, and design centers, possibly creates an certain organicity within an company which fosters a culture of valuing knowledge an capability that may lie outside one's functional silo, thus increasing the overall organization's receptivity to learning.

The non-significant effects of structural antecedents on strategic planning is intriguing. Does this imply that structure does not impact planning processes? The non-significance of integration is surprising, since an organization which practices 'internal partnering' would be expected to be more sensitive to including their external partnering into their planning. Is this a data artifact, or are the theoretical drivers of the scope of the planning process different? This is addressed in the limitations and future research section.

MANAGERIAL CONTRIBUTIONS

The managerial relevance of this study derives directly from contemporary corporate initiatives being witnessed. Field interviews with senior managers in Fortune 1000 and other technology-intensive firms indicate that a great deal of attention is being focused on the imperative of developing alliance-related capabilities as an integral part of an organization's competitive repertoire. Developing an institutionalized partnering capability is rapidly emerging as a fundamental thrust area. For example, Eli Lilly considers its strategic collaborations to be the single most important source for 'real innovations,' and links its ability to be a good collaborator and a partner of choice as a key source of competitive advantage. A number of firms such as Kodak, Lucent, HP, Adobe, Cisco Systems, Xerox, FedEx, Eli Lilly, and Hallmark have already undertaken pioneering initiatives to create competency centers that will help foster partnering capability organization-wide. Along with the emergence of these internal 'alliance organizations,' job titles such as VP-Alliances, Director-Strategic Alliances, Alliance Managers are becoming common, all symptomatic of systematic efforts to develop and

implement strategies related to enhancing partnering capabilities and develop alliance-related best practices.

The managerial relevance of this project lies in its deliverables. First, this research develops a scale to measure a firm's partnering orientation, a tool that is valuable for capability audit and planning purposes. Second, prescriptive insights are provided on how firms can develop a partnering orientation. Finally, the study empirically tests for the relationship between PO and various performance metrics, and suggests that that the partnering orientation of a business is an important determinant of its performance. In brief, the findings of this research gives managers a comprehensive view of what management processes and activities constitute partnering capability, how it may be developed, and how partnering orientation impacts performance.

More specifically, our findings indicate that partnering orientation consists of multiple, inter-related system of processes. Attention is drawn to the fact that managerial attention needs to be focused on creating the holistic system, rather than disparate and single activities. The tendency to emphasize one and neglect the other might result in an imbalanced system with sub-optimal results. For example, just being a good partner is not enough. It is important for a firm to be entrepreneurial in striking partnerships, and pre-empting its competitors. Constant monitoring of the environment for new partnering opportunities, and being receptive to partnering proposals is key. Also, it is important to visualize collaborations as a systemic whole, so that the resources and capabilities of the entire system can be leveraged into the market place. This involves treating multiple alliances as a portfolio, and coordinating strategies an activities across them and not treating them as single, discrete alliances. Simultaneously, the results indicate the

importance of acquiring experiential learning from its alliances, and transforming it into an institutionalized organization-wide knowhow. In essence, the development of partnering capability necessitate multiple, simultaneous processes.

The findings pertaining to the drivers of PO indicate that support from the top is critical. The case of Eli Lilly is illuminating. The emphasis of the senior management on alliances and partnering is evident in the fact that the CEO's speech to shareholders focused on partnering and the need for Eli Lilly to be a partner of choice, and how processes are being re-invented so that this objective may be achieved. All this indicates that the top management has a critical role in fostering this capability, and that signaling and personal show of commitment from senior managers are required to develop an organization-wide thrust on partnering. The significant influence of links between top management team heterogeneity and their risk taking propensities on whether the senior management is committed to partnering or not carries implications for the choice of senior managers. For example, Kodak brought in their new CEO, George Fisher, from the partnering-intensive telecommunication industry. In turn, he brought in a number of executives from the IT industry. The partnering resistant culture at Kodak is under change as a result of the concerted effort of the new top management team. In essence, the compositional implications of this study on imply that firms may be better off if they manage to infuse their TMT with diversity, and risk-taking propensity, if partnering oriented behavior is likely to be encouraged.

This research also carries important implications for the manner in which the strategic planning process is carried out. It is important that alliances are integrated into the strategic planning process. The resultant centrality of alliances in planning

deliberations appears to facilitate generation of this capability. Also, given that alliances are often cross-functional and cut across many diverse departments and business units, incorporating them into the strategic planning process may help break down the organizational silos that develop. The results also indicate that emphasis needs to be placed on creating a culture of learning. Managers need to believe that the organization supports learning and capability enhancement endeavors in order to deliver on the organization's mandate to build partnering capability.

The role of how much an organization emphasizes learning is critical. The results suggest that active 'culture management' is important, whereby managers are made to believe that the organization supports the development of new capabilities and competencies, and is willing to view related costs as investment and not as expenses. Other than benchmarking and introspection sessions about the validity of existing business practices, managers can undergo systematic and programmatic skill upgrading by attending specialized training sessions and industry seminars dealing with cutting edge issues and practices in the field.

The research also indicates that formalization of systems and procedures, if carried out in a manner which facilitates decision-making and innovative behavior from managers, rather than ensure and monitor compliance, is important from a learning orientation perspective. Organizations where managers are empowered to make their own decisions, and where there are programmatic integration of departments and functions are likely to be more learning oriented, an essential aspect of partnering oriented behavior.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Other than the customary call for longitudinal studies, this research suggests several new directions for research that arise partially from some of its limitations, and partially from untested relationships, and logical extensions.

An important limitation of this study relates to the unit of analysis. While it may be argued that capabilities exist in organizations as a whole, there is some evidence that in large and diversified firms, there is some heterogeneity in the level to which individual units embody a specific capability or any set of organizational processes. Thus, to conceptualize a capability at the overall level of the firm may be misleading, since different units could be at different stages of developing a particular strategic orientation. In a similar vein, it is possible that different functions are at different positions in the partnering orientation continuum. The level of aggregation in this study may thus be a limitation. However, a start needs to be made, and this study provides a theoretical and empirical basis on which fine-tuned future research can proceed. Logical extensions here could be in two directions: First, in large diversified companies, does SBU-level partnering orientation account for inter-SBU performance differential? Second, the partnering orientation scale can be adapted to specific functional contexts, namely new product development, logistics, and channel management, and the question of whether a partnering orientation at the level of individual functions account for variance in their performance can be addressed.

Another potential limitation relates to the perceptual nature of the performance data. While the debate over the appropriateness of using perceptual or secondary data continues unabated in the literature (see Judge and Douglas 1998), the validity of the

partnering orientation – performance claim would be that much stronger if the results can be duplicated using archival performance data. Accordingly, an extension of this research would be to obtain archival financial data on the publicly traded firms in the sample, and conduct necessary statistical tests to check for the convergence of the perceptual and archival performance data, and also for the relationship with partnering orientation. One problem here, however, would be to control for industry effects since it is not very clear as to which SIC code to consider, namely the primary, or some secondary code that may have biased a respondent's answers.

Regarding sample size, while it is certainly comparable to contemporary scholarship in major marketing journals, the ratio of sample size to items is around 3.37, which is below the desired value of 5. While the problem of getting senior executives to respond is well documented, a larger sample size would increase the power of the tests, and thus allow greater degree of confidence in the results.

While the scope of the strategic planning process emerges as a key driver of partnering orientation, this study fails to offer insights into what may possibly drive this key antecedent. This remains an unresolved issue. Future research needs to unravel questions such as what influences organizations to incorporate alliances into the strategic planning process? Is environment or size moderating the relationship between the structural variables and strategic planning?

The issue of environmental uncertainty needs to be investigated further. Contradictory findings have been reported on the relationship between environmental uncertainty and vertical integration (Sutcliffe and Zaheer 1998). One way to resolve this issue, according to them, is to specify the source of uncertainty being examined. For

example, Balakrishnan and Wernerfelt's (1986) finding that the degree of vertical integration decreased with increased technological uncertainty implies that specific components of uncertainty relates to decisions about firm scope. Dickson and Weaver's (1997) failure to find a relationship between demand uncertainty and alliance use indicates the prudence of studying PEU in terms of 'where it emanates from.' As asserted by Sutcliffe and Zaheer (1998), "it is possible that different sources or dimensions of uncertainty have different implications for vertical integration" (p. 2). Thus, in addition to the moderating role of uncertainty, it may be beneficial to explore the effects of different types of uncertainty on the link between PO and each of the performance dimensions. With greater sample size, a multiple group analysis can be performed to test for these relationships. Given costs associated with partnering orientation, it is plausible that in certain kinds of environments, it is more valuable.

Future research needs to extend this work into international contexts. The impact of culture would be interesting and have implications for generalizability of the results. For example, in Japan, it is possible, given the tight linkages of the *keiretsu,* that firms do not exhibit a proactive tendency to look around for alliances outside their existing networks, at least in the domestic context.

Two other issues deserve attention in future research. The first has to do with what may be termed as a possible optimistic bias in this study, given the implicit assumption of positive collaborative rents. Is it true that collaborative rents are necessarily positive? Or is it also conceivable that rents emanating from collaborations may turn out to be negative in certain situations. Consider the scenario of a severe economic downturn. Is a firm which is relatively unattached benefited in such situations;

as compared to one that has traditionally operated within strong relational links? Is relational 'stickiness' a liability since a firm may find itself unable to cut off ties with firms that are now an economic and strategic burden. In such 'disaster' scenarios, may partnering capability be reflected in the ability of a firm to absolve itself of 'sticky' relationships that no longer deliver value? Is there a more complex set of processes that have to do with aligning a firm's alliance portfolio to environmental exigencies that need to be considered?

The second issue relates to firm size. Is it conceivable that processes that are appropriate for a large firm may be inappropriate for a small firm? Or is the conceptualization of partnering orientation contingent on market power? For example, is the issue of being a "partner of choice" the same from a large and small firm's perspectives? What is the balance that firms need to strike between initiating new relationships and being able to maintain them? Is this the same for small and large firms? How can smaller firms manage the interdependency process with larger firms? Future research needs to elaborate on issues that forms the boundary conditions of this study.

LIST OF REFERENCES

Achrol, Ravi S. (1991), "Evolution of the Marketing Organization: New Forms for Turbulent Environments," *Journal of Marketing,* 55 (4), 77-93.

---- (1997), "Changes in the Theory of Interorganizational Relations in Marketing: Toward a Network Paradigm," *Journal of the Academy of Marketing Science,* 25 (1), 56-71.

---- and Louis W. Stern (1988), "Environmental Determinants of Decision-Making Uncertainty in Marketing Channels," *Journal of Marketing Research,* 25 (1), 36-50.

Adler, Paul S. and Bryan Borys (1996), "Two Types of Bureaucracy: Enabling and Coercive," *Administrative Science Quarterly,* 41 (1), 61-89.

Aiken, Michael and Gerald Hage (1968), "Organizational Independence and Intraorganizational Structure," *American Sociological Review,* 33 912-30.

Amabile, Teresa M., Regina Conti, Heather Coon, Jeffrey Lazenby and Michael Herron (1996), "Assessing the Work Environment for Creativity," *Academy of Management Journal,* 39 (5), 1154-84.

Amit, Raphael and Paul J. H. Schoemaker (1993), "Strategic Assets and Organizational Rent," *Strategic Management Journal,* 14 (1), 33-46.

Anderson, James C. and David W. Gerbing (1982), "Some Methods for Respecifying Measurement Models to Obtain Unidimensional Construct Measurement," *Journal of Marketing Research,* 19 (4), 453-60.

---- and James A. Narus (1990), "A Model of Distributor Firm and Manufacturer Firm Working Partnerships," *Journal of Marketing,* 54 (1), 42-58.

Ansoff, Igor and E. McDonnell (1990), *Implanting Strategic Management*. New York: Prentice Hall.

Argyris, Chris and Donald A. Schon (1978), *Organizational Learning: A Theory of Action Perspective*. Reading, MA: Addison-Wesley.

Armstrong, J. Scott and Fred Collopy (1996), "Competitor Orientation: Effects of Objectives and Information on Managerial Decisions and Profitability," *Journal of Marketing Research,* 33 (2), 188-99.

---- and Terry S. Overton (1977), "Estimating Nonresponse Bias in Mail Surveys," *Journal of Marketing Research,* 14 (3), 396-402.

Astley, W. Graham and Edward J. Zajac (1991), "Intraorganizational Power and Organizational design: Reconciling Rational and Coalitional Models of Organization," *Organization Science,* 2 (November), 399-411.

Bagozzi, Richard P., Youjae Yi and Lynn W. Phillips (1991), "Assessing Construct Validity in Organizational Research," *Administrative Science Quarterly,* 36 (3), 421-58.

Bandura, Albert (1977), *Social Learning Theory.* Englewood Cliffs, N.J.: Prentice-Hall.

Barclay, Donald W. (1991), "Interdepartmental Conflict in Organizational Buying: The Impact of the Organizational Context," *Journal of Marketing Research,* 28 (2), 145-59.

Barnard, Christian (1938), *The Functions of the Executive.* Cambridge, MA: Harvard University Press.

Barney, Jay B. (1986a), "Strategic Factor Markets: Expectations, Luck and Business Strategy," *Management Science,* 32 (10), 1231-41.

---- (1986b), "Organizational Culture: Can It Be a Source of Sustained Competitive Advantage?," *Academy of Management Review,* 11 (3), 656-65.

---- (1991), "Firm Resources and Sustained Competitive Advantage," *Journal of Management,* 17 (1), 99-120.

---- (1992), "Integrating Organizational Behavior and Strategic Formulation Research: A Resource Based Analysis," in *Advances in Strategic Management,* P. Srivastava et al., eds. Greenwich, CT: JAI Press, 39-61.

---- and Mark H. Hansen (1994a), "Trustworthiness as a Source of Competitive Advantage," *Strategic Management Journal,* 15 ((Special Issue)), 175-90.

---- and Edward J. Zajac (1994b), "Competitive Organizational Behavior: Toward an Organizationally-Based Theory of Competitive Advantage," *Strategic Management Journal,* 15 ((Special Issue)), 5-9.

Bateman, Thomas S. and J. Michael Crant (1993), "The Proactive Component of Organzational Behavior," *Journal of Organizational Behavior,* 14 (2), 103-18.

Beamish, Paul W. and John C. Banks (1987), "Equity Joint Ventures and the Theory of the Multinational Enterprise," *Journal of International Business Studies,* 18 (2), 1-16.

Bleeke, Joel and David Ernst (1991), "Is Your Strategic Alliance Really a Sale?," *Harvard Business Review,* 73 (1), 97-105.

Boeker, Warren (1997a), "Strategic Change: The Influence of Managerial Characteristics and Organizational Growth," *Academy of Management Journal,* 40 (1), 152-70.

Borys, Bryan and David B. Jemison (1989), "Hybrid Arrangements as Strategic Alliances: Theoretical Issues in Organizational Combinations," *Academy of Management Review,* 14 (2), 234-49.

Bourgeois, L. J., III (1980), "Strategy and Environment: A Conceptual Integration," *Academy of Management Review,* 5 (1), 25-39.

Bowman, E. H. (1974), "Epistemology, Corporate Strategy, and Academe," *Sloan Management Review,* 15 35-50.

Boyd, Brian K., Gregory G. Dess and Abdul M. A. Rasheed (1993), "Divergence Between Archival and Perceptual Measures of the Environment: Causes and Consequences," *Academy of Management Review,* 18 (2), 204-26.

---- and Janet Fulk (1996), "Executive Scanning and Perceived Uncertainty," *Journal of Management,* 22 1-21.

Buchko, Aaron A. (1994), "Conceptualization And Measurement Of Environmental Uncertainty: An Assessment Of The Miles And Snow Perceived Environmental Uncertainty Scale," *Academy of Management Journal,* 37 (2), 410-25.

Bucklin, Louis P. and Sanjit Sengupta (1993), "Organizing Successful Co-marketing Alliances," *Journal of Marketing,* 57 (2), 32-46.

Burns, Tom and G. M. Stalker (1961), *The Management of Innovation.* London: Tavistock.

Burt, R. S. (1992), *Structural Holes: The Social Structure of Competition.* Boston, MA: Harvard University Press.

Chakravarthy, Balaji S. (1986), "Measuring Strategic Performance," *Strategic Management Journal,* 7 (5), 437-58.

Chandler, A. D. (1962), *Strategy and Structure.* Cambridge, MA: MIT Press.

Child, John (1972), "Organization Structure, Environment, and Performance: The Role of Strategic Choice," *Sociology,* 6 1-22.

Churchill, Gilbert A., Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research,* 16 (1), 64-73.

Collis, David J. (1994), "Research Note: How Valuable are Organizational Capabilities?," *Strategic Management Journal,* 15 (Special Issue), 143-52.

Conn, Henry P. and George S. Yip (1997), "Global Transfer of Critical Capabilities," *Business Horizons,* (January-February), 22-31.

Conner, Kathleen R. (1991), "A Historical Comparison of Resource-Based Theory and Five Schools of Thought Within Industrial Organization Economics: Do We Have a New Theory of the Firm?," *Journal of Management,* 17 (1), 121-54.

---- and C. K. Prahlad (1996), "A Resource-Based Theory of the Firm: Knowledge versus Opportunism," *Organization Science,* 7 (5), 477-501.

Cullen, John B., Jean L. Johnson and Tomoaki Sakano (1995), "Japanese and Local Partner Commitment to IJVs: Psychological Consequences of Outcomes and Investments in the IJV Relationship," *Journal of International Business Studies,* 26 (1), 91-115.

Cyert, R. M. and J. G. March (1963), *A Behavioral Theory of the Firm.* Englewood Cliffs, N.J.: Prentice-Hall.

Daft, R. L. and Arie Y. Lewin (1993), "Where Are The Theories for The 'New' Organizational Forms? An Editorial Essay," *Organization Science,* 4 (4), .

Day, George S. (1994), "The Capabilities of Market-Driven Organizations," *Journal of Marketing,* 58 (4), 37-52.

---- (1995), "Advantageous Alliances," *Journal of the Academy of Marketing Science,* 23 (4), 297-300.

----, Roger A. Kerin and P. Rajan Varadarajan (1992), "Marketing's Contribution to the Strategy Dialogue: The View from a Different Looking Glass," *Journal of the Academy of Marketing Science,* 20 (4), 323-43.

Deshpande, Rohit (1982), "The Organizational Context of Market Research Use," *Journal of Marketing,* 46 (4), 91-101.

---- and John U. Farley (1998), "The Market Orientation Construct: Correlations, Culture, and Comprehensiveness," *Journal of Market-Focused Maagement,* 2 (3), 237-40.

---- John U. Farley and Frederick E. Webster, Jr. (1993), "Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A Quadrad Analysis," *Journal of Marketing,* 57 (1), 23-37.

---- and Frederick E. Webster, Jr. (1989), "Organizational Culture and Marketing: Defining the Research Agenda," *Journal of Marketing,* 53 (1), 3-15.

Dess, Gregory G., Anil Gupta, Jean-Francois Hennart and Charles W. L. Hill (1995), "Conducting And Integrating Strategy Research At The International, Corporate And Business Levels: Issues And Directions," *Jounal of Management,* 21 (3), 357-93.

DeVellis, R. F. (1991), *Scale Development: Theory and Applications*. Newbury Park, CA: Sage.

Devlin, Godfrey and Mark Bleakley (1988), "Strategic Alliances: Guidelines for Success," *Long Range Planning,* 21 (5), 18-23.

Dickson, Pat H. and K. Mark Weaver (1997), "Environmental Determinants And Individual-Level Moderators Of Alliance Use," *Academy of Management Journal,* 40 (2), 404-25.

Dierickx, Ingemar and Karel Cool (1989), "Asset Stock Accumulation and Sustainability of Competitive Advantage," *Management Science,* 35 (12), 1504-13.

Doz, Yves L. (1996), "The Evolution Of Cooperation In Strategic Alliances: Initial Conditions Or Learning Processes?," *Strategic Management Journal,* 17 (Evolutionary Perspectives on Strategy Supplement)), 55-83.

Drucker, Peter F. (1995), "The Network Society," *Wall Street Journal,* (March 29), 12.

Dunning, John H. (1995), "Reappraising The Eclectic Paradigm In An Age Of Alliance Capitalism," *Journal of International Business Studies,* 26 (3), 461-91.

Dwyer, F. Robert, Paul H. Schurr and Sejo Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing,* 51 (2), 11-27.

Dyer, Jeffrey H. (1996), "Does Governance Matter? Kieretsu Alliances and Asset Specificity As Sources of Japanese Compatitive Advantage," *Organization Science,* 7 (6), 649-66.

---- (1997), "Effective Interfirm Collaboration: How Firms Minimize Transaction Costs and Maximize Transaction Value," *Strategic Management Journal,* 18 553-6.

---- and William G. Ouchi (1993), "Japanese-style Partnerships: Giving Companies a Competitive Edge," *Sloan Management Review,* (Fall), 51-63.

---- and Harbir Singh (1998), "The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage," *The Academy of Management Review,* 23 (4), 660-79.

Eisenhardt, Kathleen M. (1991), "Managing Culture as a Competitive Resource: An Identity-based View of Sustainable Competitive Advantage," *Journal of Management,* 17 (1), 191-211.

---- and Claudia Bird Schoonhaven (1996), "Resource-Based View of Strategic Alliance Formation: Strategic and Social Effects in Entrepreneurial Firms," *Organizaiton Science,* 7 (2), 136-50.

Ettlie, John E. and Ernesto M. Reza (1992), "Organizational Integration and Process Innovation," *Academy of Management Journal,* 35 (4), 795-827.

Fayol, H. (1949), *General and Industrial Management.* London: Pitman.

Finkelstein, Sydney (1992), "Power in Top Management Teams: Dimensions, Measurement, and Validation," *Academy of Management Journal,* 35 (3), 505-38.

---- and Donald C. Hambrick (1990), "Top-Management-Team Tenure and Organizational Outcomes: The Moderating Role of Managerial Discretion," *Administrative Science Quarterly,* 35 (3), 484-503.

Fiol, C. Marlene (1991), "Managing Culture as a Competitive Resource: An Identity-Based View of Sustainable Competitive Advantage," *Journal of Management,* 17 (1), 191-211.

Fites, Donald V. (196), "Make Your Dealers Your Partners," *Harvard Business Review,* (March-April), 84-95.

Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research,* 18 (1), 39-50.

Fredrickson, James W. (1986), "The Strategic Decision Process and Organizational Structure," *Academy of Management Review,* 11 (2), 280-97.

Galbraith, Jay R. (1973), *Designing Complex Organizations.* reading, MA: Addison Wesley.

Galer, Graham and Kees Van Der Heijden (1992), "The Learning Organization: How Planners Create Organizational Learning," *Marketing Intelligence and Planning,* 10 5-12.

Garvin, David A. (1993), "Building a Learning Organization," *Harvard Business review,* 71 (July-August), 78-91.

Gatignon, Hubert and Jean-Marc Xuereb (1997), "Strategic Orientation Of The Firm New Product Performance," *Journal of Marketing Research,* 34 (1), 77-90.

Geletkanycz, Marta A. (1997), "The Salience of 'Culture's Consequences': The Effects of Cultural Values on Top Executive Commitment to the Status Quo," *Strategic Management Journal,* 18 (8), 615-34.

Gemunden, Hans George and Thomas Ritter (1996), "Network Competence: Toward a Theoretical Framework of Reference," in *Proceedings of the Third Research Conference on Relationship Marketing: Contemporary Knowledge of Relationship Marketing,* A. Parvatiyar et al., eds., Atlanta: Center for Relationship Marketing, Emory University.

Gerbing, David W. and James C. Anderson (1988), "An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment," *Journal of Marketing Research,* 25 (2), 186-92.

Germain, Richard, Cornelia Droge and Patricia J. Daugherty (1994), "The Effect Of Just-In-Time Selling On Organizational Structure: An Empirical Investigation," *Journal of Marketing Research,* 31 (4), 471-83.

Ginsberg, Ari (1988), "Measuring and Modeling Changes in Strategy: Theoretical Foundations and Empirical Directions," *Strategic Management Journal,* 9 (6), 559-75.

Gomes-Casseres, Benjamin (1994), "Group Versus Group: How Alliance Networks Compete," *Harvard Business review,* July-August 62-74.

Govindarajan, Vijay (1986), "Decentralization, Strategy, and Effectiveness of Strategic Business Units in Multibusiness Organizations," *Academy of Management Review,* 11 (4), 844-56.

Granovetter, Mark (1985), "Economic Action and Social Structure: The Problem of Embeddedness," *American Journal of Sociology,* 91 (November), 481-510.

Grant, Robert M. (1991), "A Resource Based Theory of Competitive Advantage: Implications for Strategy Formulation," *California Management Review,* 33 (3), 114-35.

Gulati, Ranjay (1998), "Alliances and Networks," *Strategic Management Journal,* 19 293-317.

Gundlach, Gregory T., Ravi S. Achrol and John T. Mentzer (1995), "The Structure Of Commitment In Exchange," *Journal of Marketing,* 59 (1), 78-92.

Gupta, Anil K. and V. Govindarajan (1984), "Business Unit Strategy, Managerial Characteristics, and Business Unit Effectiveness at Strategy Implementation," *Academy of Management Journal,* 27 (1), 25-41.

Hackman, J. Richard and Ruth Wageman (1995), "Total Quality Management: Empirical, Conceptual, And Practical Issues," *Administrative Science Quarterly,* 40 (2), 309-42.

Hage, Jerald (1969), "Routing Technology, Social Structure and Organizational Goals," *Administrative Science Quarterly,* 14 368-79.

Hall, Richard (1992), "The Strategic Analysis of Intangible Resources," *Strategic Management Journal,* 13 (2), 135-44.

Hambrick, Donald C., Theresa Seung Cho and Ming-Jer Chen (1996), "The Influence Of Top Management Team Heterogeneity On Firms' Competitive Moves," *Administrative Science Quarterly,* 41 (4), 659-84.

---- and Phyllis A. Mason (1984), "Upper Echelons: The Organization as a Reflection of Its Top Managers," *Academy of Management Review,* 9 (2), 193-206.

Hamel, Gary, Yvez L. Doz and C. K. Prahlad (1989), "Collaborate With Your Competitors - And Win," *Harvard Business Review,* 89 (January-February), 133-39.

Hannan, M. T. and J. H. Freeman (1977), "The Population Ecology of Organizations," *American Journal of Sociology,* 82 929-64.

Harbison, John R. and Peter Pekar Jr. (1998), *Smart Alliances: A Practical Guide to Repeatable Success*. San Francisco, CA: Josey-Bass.

Hargadon, Andrew and Robert I. Sutton (1997), "Technology Brokering And Innovation In A Product Development Firm," *Administrative Science Quarterly,* 42 716-49.

Harrigan, Kathryn Rudie (1988), "Joint Ventures and Competitive Strategy," *Strategic Management Journal,* 9 (2), 141-58.

Hart, Stuart L. and Catherine Banbury (1994), "How Strategy-Making Processes Can Make A Difference," *Strategic Management Journal,* 15 (4), 251-69.

Hart, Stuart L. (1992), "An Integrative Framework for Strategy-Making Processes," *Academy of Management Review,* 17 (2), 327-51.

Heide, Jan B. (1994), "Interorganizational Governance in Marketing Channels," *Journal of Marketing,* 58 (1), 71-85.

---- and George John (1992), "Do Norms Matter in Marketing Relationships?," *Journal of Marketing,* 56 (2), 32-44.

Henderson, Rebecca and Iain Cockburn (1994), "Measuring Competence? Exploring Firm Effects In Pharmaceutical Research," *Strategic Management Journal,* 15 (Special Issue), 63-84.

Hill, Charles W. L. (1990), "Cooperation, Opportunism, and the Invisible Hand: Implications for Transaction Cost Theory," *Academy of Management Review,* 15 (3), 500-13.

---- (1995), "National Institutional Structures, Transaction Cost Economizing, and Competitive Advantage: The Case of Japan," *Organization Science,* 6 119-31.

Hrebiniak, Lawrence G. and William F. Joyce (1985), "Organizational Adaptation: Strategic Choice and Environmental Determinism," *Administrative Science Quarterly,* 30 (3), 336-49.

Hult, G. Thomas M. and O. C. Ferrell (1997), "Global Organizational Learning capacity in Purchasing: Construct and Measurement," *Journal of Business research,* 40 (2), 97-111.

Hunt, Shelby D. and Robert M. Morgan (1995), "The Comparative Advantage Theory Of Competition," *Journal of Marketing,* 59 (2), 1-15.

Hurley, Robert F. and G. Thomas M. Hult (1998), "Innovation, Market Orientation, and Organizational Learning: An Integration and Empirical Examination," *Journal of Marketing,* 62 (3), 42-54.

Itami, H. (1987), *Mobilizing Invisible Assets*. Cambridge, MA: Harvard University Press.

Jackson, Susan E. (1992), "Consequences of Group Composition for the Interpersonal Dynamics of Strategic Issue Processing," in *Advances in Strategic Management,* P. Srivastava et al., eds. Greenwich, CT: JAI Press, 345-82.

Janis, Irving L. (1972), *Victims of Groupthink.* Boston: Houghton-Mifflin.

Jaworski, Bernard J. and Ajay K. Kohli (1993), "Market Orientation: Antecedents and Consequences," *Journal of Marketing,* 57 (3), 53-70.

Jemison, David B. (1981), "The Importance of an Integrative Approach to Strategic Management Research," *Academy of Management Review,* 6 (4), 601-8.

Johnson, Jean (1999), "Strategic Integration in Industrial Distribution Channels: Managing the Interfirm Relationship as a Strategic Asset," *Journal of the Academy of Marketing Science,* 27 (1), 4-18.

Jones, Candace, William S. Hesterly, Karin Fladmoe-Lindquist and Stephen P. Borgatti (1998), "Professional Service Constellations: How Strategies and Capabilities Influence Collaborative Stability and Change," *Organization Science,* 9 (3), 396-410.

Jones, Kevin K. and Walter E. Shill (1991), "Allying for Advantage," *McKinsey Quarterly,* 3 73-101.

Judge, William Q. and Thomas J. Douglas (1998), "Performance Implications of Incorporating Natural Environmental Issues into the Strategic Planning Process: An Empirical Assessment," *Journal of Management Studies,* 35 (2), 241-62.

Khanna, Tarun (1998), "The Scope of Alliances," *Organization Science,* 9 (3), 340-55.

Kogut, Bruce and U. Zander (1992), "Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology," *Organization Science,* 3 383-97.

Kohli, Ajay K. and Bernard J. Jaworski (1990), "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing,* 54 (2), 1-18.

Koza, Mitchell P. and Arie Y. Lewin (1998), "The Co-Evolution of Strategic Alliances," *Organization Science,* 9 (3), 255-64.

Krueger, Norris F. (1993), "The Impact of Prior Entrepreneurial Exposure on Perceptions of New Venture Feasibility and Desirability," *Entrepreneurship Theory and Practice,* 18 (1), 5-21.

Lado, Augustine A., Nancy G. Boyd and Susan C. Hanlon (1997), "Competition, Cooperation, And The Search For Economic Rents: A Syncretic Model," *Academy of Management Review,* 22 (1), 110-41.

---- and Mary C. Wilson (1994), "Human Resource Systems And Sustained Competitive Advantage: A Competency-Based Perspective," *Academy of Management Review,* 19 (4), 699-727.

Lambe, C. Jay and Robert E. Spekman (1996), "The Bases of Alliance-Derived Competitive Advantage: Relationship and Resources," in *AMA Winter Educators' Conference Proceedings*, D. T. LeClair et al., eds., St. Petersburg, Florida.

---- and ---- (1997), "Alliances, External Technology Acquisition, and Discontinuous Technological Change," *Journal of Product Innovation Management,* 14 102-16.

Larson, Andrea (1992), "Network Dyads in Entrepreneurial Settings: A Study of the Governance of Exchange Relationships," *Administrative Science Quarterly,* 37 (1), 76-104.

Lau, Chung-Ming and Richard W. Woodman (1995), "Understanding Organizational Change: A Schematic Perspective," *Academy of Management Journal,* 38 (2), 537-54.

Lawrence, P. R. and J. W. Lorsch (1969), *Organization and Environment: Managing Differentiation and Integration.* Homewood, IL: Irwin.

Lei, David, Michael A. Hitt and Joel D. Goldhar (1996), "Advanced Manufacturing Technology: Organizational Design and Strategic Flexibility," *Organization Studies,* 17 (3), 501-23.

Lewin, Arie Y. and Carroll U. Stephens (1994), "CEO Attitudes as Determinants of Organization Design: An Integrated Model," *Organization Studies,* 15 (2), 183-212.

Li, Tiger and Roger J. Calantone (1998), "The Impact of Market Knowledge Competence on New Product Advantage: Conceptualization and Empirical Examination," *Journal of Marketing,* 62 (4), 13-29.

Lieberman, Martin B. and David B. Montgomery (1998), "First-Mover (Dis)Advantages: Retrospective and Link with the Resource-Based View," *Strategic Management Journal,* Forthcoming .

Lippman, S. A. and R. P. Rumelt (1982), "Uncertain Imitability: An Analysis of Interfirm Differences in Efficiency Under Competition," *The Bell Journal of Economics,* 13 (Autumn), 418-38.

Lorenzoni, Gianni and Charles Baden-Fuller (1995), "Creating a Strategic Center to Manage a Web of Partners," *California Management Review,* 37 (3), 146-63.

Lumpkin, G. T. and Gregory G. Dess (1996), "Clarifying The Entrepreneurial Orientation Construct And Linking It To Performance," *Academy of Management Review,* 21 (1), 135-72.

Lyles, M. (1988), "Learning Among Joint Venture-Sophisticated Firms,". in *Cooperative Strategies in International Business,* F. Contractor et al., eds. Lexington, MA: Lexington Books, 301-16.

Macneil, Ian R. (1981), "Economic Analysis of Contractual Relations: Its Shortfalls and the Need for a 'Rich Classificatory Apparatus'," *Northwestern Law review,* 75 (6), 1018-63.

Madhok, Anoop (1995), "Revisiting Multinational Firms' Tolerance For Joint Ventures: A Trust-Based Approach," *Journal of International Business Studies,* 26 (1), 117-37.

---- (1997), "Cost, Value And Foreign Market Entry Mode: The Transaction And The Firm," *Strategic Management Journal,* 18 (1), 39-61.

---- and Stephen B. Tallman (1998), "Resources, Transactions and Rents: Managing Value through Interfirm Collaborative Relationships," *Organization Science,* 9 (3), 326-39.

March, James G. and Herbert A. Sion (1958), *Organizations*. New York: Blackwell.

Menon, Anil, Sundar G. Bharadwaj and Roy Howell (1996), "The Quality And Effectiveness Of Marketing Strategy: Effects Of Functional And Dysfunctional Conflict In Intraorganizational Relationships," *Journal of the Academy of Marketing Science,* 24 (4), 299-313.

Menon, Ajay, Bernard J. Jaworski and Ajay K. Kohli (1997), "Product Quality: Impact Of Interdepartmental Interactions," *Journal of the Academy of Marketing Science,* 25 (3), 187-200.

Michel, John G. and Donald C. Hambrick (1992), "Diversification Posture and Top Management Team Characteristics," *Academy of Management Journal,* 35 (1), 9-37.

Miles, Raymond E. and Charles Snow (1978), *Organization Strategy, Structure and Process*. New York: McGraw-Hill.

---- and Charles C. Snow (1986), "Organizations: New Concepts for New Forms," *California Management Review,* 27 (3), 62-73.

Miller, Danny (1993), "Some Organizational Consequences of CEO Succession," *Academy of Management Journal,* 36 (3), 644-59.

---- and Cornelia Droge (1986), "Psychological and Traditional Determinants of Structure," *Administrative Science Quarterly,* 31 (4), 539-60.

---- and Peter H. Friesen (1978), "Archetypes of Strategy Formulation," *Management Science,* 24 921-33.

---- and Peter H. Friesen (1983), "Strategy-Making and Environment: The Third Link," *Strategic Management Journal,* 4 (3), 221-35.

Milliken, Frances J. (1987), "Three Types of Perceived Uncertainty About the Environment: State, Effect, and Response Uncertainty," *Academy of Management Review,* 12 (1), 133-43.

---- and Luis L. Martins (1996), "Searching For Common Threads: Understanding The Multiple Effects Of Diversity In Organizational Groups," *Academy of Management Review,* 21 (2), 402-33.

Mintzberg, Henry (1979), *The Structuring of Organizations*. Englewood Cliffs, N.J.: Prentice-Hall.

Mohr, Jakki and Robert Spekman (1994), "Characteristics Of Partnership Success: Partnership Attributes, Communication Behavior, And Conflict Resolution Techniques," *Strategic Management Journal,* 15 (2), 135-52.

Moorman, Christine, Rohit Deshpande and Gerald Zaltman (1993), "Factors Affecting Trust In Market Research Relationships," *Journal of Marketing,* 57 (1), 81-101.

---- and Anne S. Miner (1997), "The Impact Of Organizational Memory On New Product Performance And Creativity," *Journal of Marketing Research,* 34 (1), 91-106.

Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory Of Relationship Marketing," *Journal of Marketing,* 58 (3), 20-38.

Narver, John C. and Stanley F. Slater (1990), "The Effect of a Market Orientation on Business Profitability," *Journal of Marketing,* 54 (4), 20-35.

Nelson, R. and S. Winter (1982), *An Evolutionary Theory of Economic Theory and Capabilities*. Cambridge, MA: Harvard University Press.

Noordewier, Thomas G., George John and John R. Nevin (1990), "Performance Outcomes of Purchasing Arrangements in Industrial Buyer-Vendor Relationships," *Journal of Marketing,* 54 (4), 80-93.

Noteboom, B. (1996), "Toward a Learning Based Model of Transactions,". in *Transaction Cost Economics and Beyond,* J. Groenewegen, eds. Boston, MA: Kluwer, 327-50.

Ohmae, Kenichi (1989), "The Global Logic of Strategic Alliances," *Harvard Business Review,* (March-April), 143-54.

Oliver, Christine (1997), "Sustainable Competitive Advantage: Combining Institutional and Resource-Based Views," *Strategic Management Journal,* 18 (9), 697-713.

Olson, Eric M., Orville C. Walker, Jr. and Robert W. Ruekert (1995), "Organizing For Effective New Product Development: The Moderating Role Of Product Innovativeness," *Journal of Marketing,* 59 (1), 48-62.

Orton, J. Douglas and Karl E. Weick (1990), "Loosely Coupled Systems: A Reconceptualization," *Academy of Management Review,* 15 (2), 203-23.

Parkhe, Arvind (1991), "Interfirm Diversity, Organizational Learning, and Longevity in Global Strategic Alliances," *Journal of International Business Studies,* 22 (4), 579-601.

Pearce, Robert J. (1997), "Toward Understanding Joint Venture Performance And Survival: A Bargaining And Influence Approach To Transaction Cost Theory," *Academy of Management Review,* 22 (1), 203-25.

Penrose, Edith (1959), *The Theory of the Growth of the Firm*. New York: Wiley.

Peteraf, Margaret A. (1993), "The Cornerstones Of Competitive Advantage: A Resource-Based View," *Strategic Management Journal,* 14 (3), 179-91.

Pfeffer, Jeffrey and Gerald R. Salancik (1978), *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper & Row.

Porter, Michael E. (1980), *Competitive Strategy*. New York: Free Press.

---- (1996), "What is Strategy?," *Harvard Business Review,* November-december 61-78.

Powell, Thomas C. (1995), "Total Quality Management As Competitive Advantage: A Review And Empirical Study," *Strategic Management Journal,* 16 (1), 15-37.

Powell, Walter W., Kenneth W. Koput and Laurel Smith-Doerr (1996), "Interorganizational Collaboration And The Locus Of Innovation: Networks Of Learning In Biotechnology," *Administrative Science Quarterly,* 41 (1), 116-45.

Rindfleisch, Aric and Jan B. Heide (1997), "Transaction Cost Analysis: Past, Present, and Future Applications," *Journal of Marketing,* 61 (4), 30-54.

Ring, Peter S. (1996), "Fragile and Resilient Trust and their Roles in Economic Exchange," *Business and Society,* 35 (2), 148-75.

---- and Andrew H. Van De Ven (1992), "Structuring Cooperative Relationships Between Organizations," *Strategic Management Journal,* 13 (7), 483-98.

---- and Andrew H. Van de Ven (1994), "Developmental Processes Of Cooperative Interorganizational Relationships," *Academy of Management Review,* 19 (1), 90-118.

Roth, Kendall (1995), "Managing International Interdependence: CEO Characteristics In A Resource-Based Framework," *Academy of Management Journal,* 38 (1), 200-31.

----, David M. Schweiger and Allen J. Morrison (1991), "Global Strategy Implementation at the Business Unit Level: Operational Capabilities and Administrative Mechanisms," *Journal of International Business Studies,* 22 (3), 369-402.

Ruekert, Robert W., Orville C. Walker, Jr. and Kenneth J. Roering (1985), "The Organization of Marketing Activities: A Contingency Theory of Structure and Performance," *Journal of Marketing,* 49 (1), 13-25.

Rumelt, Richard P. (1984), "Toward a Strategic Theory of the Firm," in *Competitive Strategic Management,* R. Lamb, eds. NJ: Prentice-Hall, Englewood Cliffs, 556-70.

---- (1991), "How Much Does Industry Matter?," *Strategic Management Journal,* 12 (3), 167-85.

Sarkar, MB, Preet S. Aulakh and S. Tamer Cavusgil (1998), "The Strategic Role of Relational Bonding in Interorganizational Collaborations: An Empirical Study of the Global Construction Industry," *Journal of International Management,* 4 (2), 85-107.

Schendler, Bernton R. (1993) "How Toshiba Makes Aliances Work,". Fortune: 116-20.

Schmalensee, R. (1985), "Do Markets Differ Much?," *American Economic Review,* 75 341-51.

Schulze, W. S. (1992), "The Two Resource-Based Models of the Firm: Definitions and Implications for Research," in *Academy of Management Best Papers Proceedings*, J. L. W. L. R. Jauch, eds., .

Sherman, Stratford (1992), "Are Strategic Alliances Working?"," *Fortune,* September 21 77-8.

Sheth, Jagdish N. and Atul Parvatiyar (1992), "Towards a Theory of Business Alliance Formation," *Scandinavian International Business Review,* 1 (3), 71-87.

Simonin, Bernard L. (1997), "The Importance of Collaborative Know-How: An Empirical test of the Learning Organization," *Academy of Management Journal,* 40 (5), 1150-74.

Singh, Kulwant (1997), "The Impact Of Technological Complexity And Interfirm Cooperation On Business Survival," *Academy of Management Journal,* 40 (2), 339-67.

Sinkula, James M. (1994), "Market Information Processing And Organizational Learning," *Journal of Marketing,* 58 (1), 35-45.

----, William E. Baker and Thomas Noordewier (1997), "A Framework for Market-Based Organizational Learning: Linking Values, Knowledge, and Behavior," *Journal of the Academy of Marketing Science,* 25 (4), 305-18.

Sitkin, Sim B. and Amy L. Pablo (1992), "Reconceptualizing the Determinants of Risk Behavior," *Academy of Management Review,* 17 (1), 9-38.

---- and Laurie R. Weingart (1995), "Determinants Of Risky Decision-Making Behavior: A Test Of The Mediating Role Of Risk Perceptions And Propensity," *Academy of Management Journal,* 38 (6), 1573-92.

Slater, Stanley F. (1997), "Developing A Customer Value-Based Theory Of The Firm," *Journal of the Academy of Marketing Science,* 25 (2), 162-7.

Smith, Ken G., Stephen J. Carroll and Susan J. Ashford (1995), "Intra-and Interorganizational Cooperation: Toward a Research Agenda," *Academy of Management Journal,* 38 (1), 7-23.

----, Ken A. Smith, Judy D. Olian, Henry P. Sims, Jr., Douglas P. O'Bannon and Judith A. Scully (1994), "Top Management Team Demography And Process: The Role Of Social Integration And Communication," *Administrative Science Quarterly,* 39 (3), 412-38.

Stinchcombe, Arthur L. (1985), "Contracts as Hierarchical Documents," in *Organization Theory and Project Management,* A. L. Stinchcombe et al., eds. Oslo: Norwegian University Press, 121-71.

Stump, Rodney L. and Jan B. Heide (1996), "Controlling Supplier Opportunism In Industrial Relationships," *Journal of Marketing Research,* 33 (4), 431-41.

Sutcliffe, Kathleen M. (1994), "What Executives Notice: Accurate Perceptions In Top Management Teams," *Academy of Management Journal,* 37 (5), 1360-78.

---- and Akbar Zaheer (1998), "Uncertainty In The Transaction Environment: An Empirical Test," *Strategic Management Journal,* 19 (1), 1-23.

Tallman, Stephen B. and Oded Shenkar (1994), "A Managerial Decision Model Of International Cooperative Venture Formation," *Journal of International Business Studies,* 25 (1), 91-113.

Teece, David J., Gary Pisano and Amy Shuen (1997), "Dynamic Capabilities and Strategic Management," *Strategic Management Journal,* 18 509-33.

Thomas, Anisya S., Robert J. Litschert and Kannan Ramaswamy (1991), "The Performance Impact of Strategy-Manager Coalignment: An Empirical Examination," *Strategic Management Journal,* 12 (7), 509-22.

Thompson, James D. (1967), *Organizations in Action.* New York: McGraw Hill.

Van de Ven, Andrew H. and Marshall Scott Poole (1995), "Explaining Development And Change In Organizations," *Academy of Management Review,* 20 (3), 510-40.

Varadarajan, P. Rajan and Margaret H. Cunningham (1995), "Strategic Alliances: A Synthesis of Conceptual Foundations," *Journal of the Academy of Marketing Science,* 23 (4), 282-96.

Venkatraman, N. (1989), "Strategic Orientation of Business Enterprises: The Construct, Dimensionality, and Measurement," *Management Science,* 35 942-62.

---- and Vasudevan Ramanujam (1986), "Measurement of Business Performance in Strategy Research: A Comparison of Approaches," *Academy of Management Review,* 11 (4), 801-14.

Wally, Stefan and J. Robert Baum (1994), "Personal And Structural Determinants Of The Pace Of Strategic Decision Making," *Academy of Management Journal,* 37 (4), 932-56.

Webster, Frederick E., Jr. (1992), "The Changing Role of Marketing in the Corporation," *Journal of Marketing,* 56 (4), 1-17.

Weick, Karl E. (1995), *Sense making in Organizations.* Thousand Oaks, CA: Sage.

Wernerfelt, Birger (1984), "A Resource-Based View of the Firm," *Strategic Management Journal,* 5 (2), 171-80.

Wiersema, Margarethe F. and Karen A. Bantel (1992), "Top Management Team Demography and Corporate Strategic Change," *Academy of Management Journal,* 35 (1), 91-121.

Williamson, Oliver E. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: The Free Press.

---- (1996), *The Mechanisms of Governance*. New York: The Free Press.

Woodman, Richard W., John E. Sawyer and Ricky W. Griffin (1993), "Toward a Theory of Organizational Creativity," *Academy of Management Review,* 18 (2), 293-321.

Workman, John P., Jr. (1993), "Marketing's Limited Role in New Product Development in One Computer Systems Firm," *Journal of Marketing Research,* 30 (4), 405-21.

Youndt, Mark A., Scott A. Snell, James W. Dean, Jr. and David P. Lepak (1996), "Human Resource Management, Manufacturing Strategy, and Firm Performance," *Academy of Management Journal,* 39 (4), 836-66.