RELATIONSHIP STRATEGIES OVER THE CUSTOMER RELATIONSHIP LIFECYCLE: THE DIFFERENTIAL EFFECT OF INDIVIDUAL VERSUS ORGANIZATIONAL

RELATIONSHIPS

By

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A Dissertation submitted in partial fulfillment of the requirements for the degree of

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The members of the Committee appointed to examine the dissertation of TRENT WACHNER find it satisfactory and recommend that it be accepted.

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ABSTRACT

By Trent Wachner, Ph.D. Washington State University May 2008

Chair: Jean L. Johnson

Relationship Marketing (RM) has been a core philosophy in the marketing discipline for the last 20 years. The foundational premise of RM is strategic management of the overall buyerseller relationship. With the high cost of implementing RM, the mixed performance implications, and the suggested asymmetry in benefits (tilted towards the seller), scholars and firms alike have begun to evaluate contextual and alignment strategies that may help us better understand how to make RM more effective. One such area that has received managerial attention, but limited empirical support, is the differential impact on RM of individual versus organizational relationships. Selling firms want to understand how to reduce the dependence on individual "key contact" boundary spanning employees without impacting the effectiveness of the overall relationship. This dissertation attempts to understand this dilemma by evaluating individual versus organizational relationships across the relationship lifecycle in a business-to-business context.

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DEDICATION

This dissertation is dedicated to my wife, Susan, for sacrificing so much to allow me to pursue my dream. Without your unconditional love, support, and encouragement this dissertation would not be possible. You are truly the best wife and mother to our children a husband could ever ask for. Thank You!

Chapter 1: Introduction

Why Do Firms Enter Into Collaborative Relationships?

At the heart of marketing, and business for that matter, is the exchange: "Marketing science is the behavioral science that seeks to explain exchange relationships" (Hunt 1983 p. 13). In recent years the focus of the exchange relationship has shifted from transactional to relational exchanges, and the value of these relational exchanges can be seen as a key strategic resource to the firm (Achrol and Kotler 1999; Day and Montgomery 1999). Many benefits flow from relational exchanges, including increased inter-member satisfaction, reduced likelihood of defection from the relationship, and aid in the flow of tacit knowledge between organizations (Homburg, Workman, and Krohmer 1999; Varadarajan and Jayachandran 1999).

At first glance, however, relational exchanges may seem inefficient and expensive compared to transactional, market-based or arm's length transactions. Reduced transaction costs (Williamson 1985), the efficiency and flexibility of changing trading partners with little penalty (Ghoshal 1995), and the ability for price to provide a signaling and coordinating function, thus reducing the cost of information exchange, can all be seen as advantages of arm's-length market relationships. However, as scholars apply the resource-based view (RBV) (Barney 1991) and the relational view of the firm (Dyer and Singh 1998), arm's-length relationships have one glaring deficiency: the inability for the relationship itself to create a competitive advantage.

Dyer and Singh (1998) describe these market-based relationships as "incapable of generating relational rents because *there is nothing idiosyncratic about the exchange relationship that enables the two parties to generate profits above and beyond what other seller-buyer combinations can generate*" (pp. 661-662, italics in original). In other words, any benefits

described above regarding an arm's-length transaction can be duplicated by other firms, thus negating any competitive advantage it may bestow. This inability for market-based relationships to create a competitive advantage is one reason many firms seek collaboration with trading partners as a way to compete.

The relational view of the firm (Dyer and Singh 1998) highlights the value of relational exchanges through joint, relation-specific investments between trading partners that allow potential rents above what firms could earn independently. One such relation specific investment might be obtained through the deployment of boundary spanning employees. These boundary spanning employees create interfirm relationships that could be considered "assets" with the potential to create long term value for the firm (Srivastava, Shervani, and Fahey 1999). It is also suggested that relationships can create a competitive advantage through relational knowledge (Hogan, Lemon, and Rust 2002), the extension of brand equity (Rust, Zeithaml, and Lemon 2004), the development of trust and commitment (Doney and Cannon 1997) and through relational embeddedness (Kaufman, Jayachandran, and Rose 2006). This research will attempt to understand these relational assets under the concept of relationships provide within the overall interfirm relationship.

The Differential Impact of Interpersonal Relationships

The study of interfirm relationships illustrates an interesting dilemma regarding the unit of analysis evaluated. For example, Doney and Cannon (1997) separately measure the buyer's perception of trust in the salesperson and trust in the selling firm. While the process or antecedents of building trust differ for the salesperson and the selling firm, the impact of trust on the overall relationship are so similar, the authors conclude that "trust of the salesperson can be transferred to the supplier firm and vice versa" (p. 45). The authors subsequently treat trust in an individual as a subset of trust in the firm.

Recent empirical work has begun to challenge the concept of individual attributes "rolling up" into firm attributes, and researchers are now making an explicit distinction between firm and individual relationships. For instance, Kaufman, Jayachandran and Rose (2006) demonstrate the individual versus firm level role of relational embeddedness of new product acceptance in the retail channel. Using a heuristic-systematic model of persuasion, their study suggests that clearly superior products introduced into the retail channel are accepted regardless of the type of buyer-seller relationships. However, moderately attractive product acceptance is contingent on the strength of interpersonal relationships between the buying and selling firm.

Another example presented by Lovett, Harrison and Virick (1997) compares the buyer's perception of imitability of the individuals to the customer's perceived imitability of the firm. Finally, Iyer, Sharma and Evanschitzty (2006) propose that consistent processes and outcomes may even substitute for interpersonal relationships altogether, especially in an international context.

While progress is being made in addressing the individual versus firm view of relationships, much work is left to be done. In a recent meta-analysis on Relationship Marketing, Palmatier, Dant, Grewal and Evans (2006) attempted to reconcile the seemingly contradictory outcomes of relationship performance and implored researchers to further "differentiate the effects of boundary spanners from those with firms" (p.150). My research will follow this recommendation and address how firms manage and deploy individual versus firm relationships and the subsequent impact on the overall interfirm relationship.

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Key Contact Boundary Spanner Dilemma in Interfirm Relationships

The discussion of firm versus individual relationships leads us to an area in the study of relationships that receives managerial attention, but limited empirical and theoretical support. This research evaluates the implications of dependence on individual key contact boundary spanners in interfirm relationships. For example, a key contact boundary spanner leaves a firm, thus prompting customers to evaluate other options or, worse, actually following the key contact to the firm's competitor. The concern faced by firms is that when their customers have repeated interactions with boundary spanning personnel, the bond between the key contact boundary spanner and the customer may subordinate the interfirm relationship.

The marketing literature has treated this phenomenon with more prescriptive analysis than theoretical understanding of the underlying issues. For instance, Bendapudi and Leone (2002) studied interfirm relationships to understand customers' concerns over a loss of key contact boundary spanners and what vendor firms could do to reduce the potential negative impact of the loss or turnover of these key contact boundary spanners. The authors give guidance to selling firms in dealing with dependent individual relationships by recommending the rotation of key contact boundary spanners and the use of selling teams to reduce the likelihood of customer defection in the event of key contact boundary spanner turnover.

While this perspective may be useful to selling firms, I suggest that it takes a somewhat narrow view of the phenomenon. For instance, what are the implications for the overall customer relationship of following the recommendations set forth by Bendapudi and Leone (e.g., rotation of employees and the use of selling teams)? By definition, the relationship between individuals is idiosyncratic, a requisite for creating competitive advantage. If the individual is rotated or selling teams are introduced, then a new, idiosyncratic relationship is formed. Thus, a different

source of competitive advantage and a change in the very nature of the relationship is incorporated. In essence, reducing the role of individual key contact boundary spanners changes the nature of the relationship, and may impact relational rents.

Further, are there boundary conditions where it may be more harmful to the firm relationship when these tactics are implemented? One must ask: if a firm does become dependent on a key contact boundary spanner for continuity of the overall firm relationship, what was the rationale for creating this structure in the first place? Recently, Palmatier, Scheer, and Steenkamp (2007) addressed the impact of customer loyalty to the selling firm versus loyalty to the salesperson. One contribution of their research was the positioning of these two types of loyalty as a "trade-off" that needs to be effectively managed by the firm. Treating the relationship structure (individual or firm based) in the context of a trade-off provides the impetus and direction for this dissertation.

Relationship Changes Across Its Lifetime

As researchers and practitioners become more aligned on the importance of understanding and managing relationship structures, one area that has not been studied is the differential impact of individual versus organizational interactions at different stages of the *relationship life cycle*. In terms of business relationships, the relationship lifecycle refers to the distinct, usually predicable, behaviors, processes and orientations (Jap and Anderson 2007; Jap and Ganesan 2000) that occur between firms over time. While there are several conceptualizations of these stages, previous all research includes a form of exploration, maturity and dissolution (Dwyer, Schurr, and Oh 1987; Jap and Ganesan 2000; Ring and Van de Ven 1994).

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In evaluating interpersonal versus organizational relationships, these stages may give us insight into the differential impact of firms versus individuals. Instead of answering contextual questions such as what products, industries, type of relationships (transactional versus relational) or cultural situations where the structure of the relationship may impact the overall relationship, I argue that the "when" question is key: *When* in the relationship are interpersonal (as compared to group) interactions more or less effective or desirable? This idea has been touched upon in the context of mature markets (Narayandas and Rangan 2004), but the literature does not provide a holistic understanding of the impact of interpersonal versus organizational relationships throughout the overall lifecycle of the relationship.

Research Objectives, Questions and Conceptual Model

To fulfill this objective, this dissertation is designed to empirically examine the role of interpersonal, boundary spanning relationships over the course of the relationship lifecycle. In order to understand this phenomenon, I will evaluate relationships from the customer's perspective and study the perceptions of the individual contact within the firm. Based on resource dependency theory (Salancik and Pfeffer 1978) and agency theory (Eisenhardt 1988; Jensen and Meckling 1976), I consider equity embedded in relationships, which is distributed between the firm and the individual boundary spanners. I argue that a high level of firm relationship equity has the ability to minimize disruption of key contact boundary spanner turnover, while individual or boundary spanner equity is necessary to move between certain levels of the relationship lifecycle. Relationship equity is created by the relationship lifecycle. I expect individual or firm level). These processes are moderated by the relationship lifecycle. I expect individual relationship equity to be highest in the initial and declining phases of the relationship lifecycle.

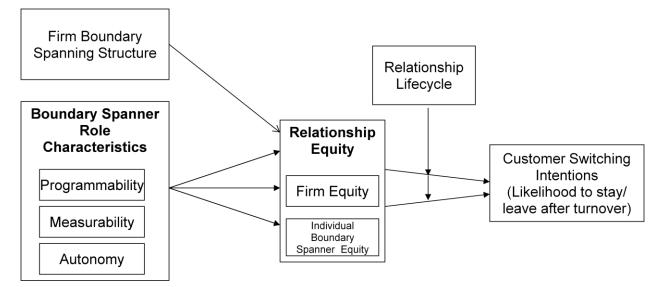
The dependent variable, and the ultimate outcome that concerns both selling and buying firms alike, is the likelihood of the customer switching or evaluating competitor firms after a key contact boundary spanner turnover. Customer switching intentions or likelihood to switch assesses whether the relationship bond is structural or social (Berry and Parasuraman 1991). A social bond indicates reliance on the individual boundary spanner, characterized by the buying firm exploring or considering alternative suppliers when a key contact boundary spanner leaves the selling firm. A structural bond, according to Berry and Parasuraman, would include bonds that go above individual relationships and increases the switching costs for customers. These structural bonds could, for example, include customized electronic data exchanges, which are specific to the interfirm relationship. Switching intentions are measured from the perspective of the buyer and determined by measuring the buyer's likelihood of future interactions with the selling firm and the likelihood of a firm to evaluate other vendors in the case of adverse actions or the loss of a key contact boundary spanner.

I explore these questions through the model shown in figure 1. I argue the extent to which relationship equity resides in either the firm or the individual boundary spanner is the result of the firm boundary spanning structure executed by the selling firm. Firm boundary spanning structure is derived from the level of individual versus team deployment. The more emphasis placed on the individual boundary spanner, the greater the individual relationship equity, while the greater the use of teams results in a higher level of firm equity. The distribution of relationship equity between the firm and the individual also derives from the boundary spanning role characteristics, which include programmability, measurability and autonomy. Programmability is the ability to define and codify and the behaviors involved in a particular task or job. Measurability refers to the availability of equitable measures of outcomes, and autonomy

refers to the extent to which boundary spanners can identify the relevant tasks and arrive at a course of action without management intervention.

In turn, I expect the dispersion of relationship equity to impact customer switching intentions. Further, I expect the dispersion of relationship equity to have a differential impact on customer switching intentions depending on the stage of the relationship lifecycle.

Figure 1 Conceptual Model



Examining the buyer-seller relationships deployed by the firm suggests that firms may be most effective in structuring their contact strategy in different ways throughout the relationship lifecycle (e.g., emphasis on interpersonal contact in the exploration and decline stages with a firm's processes developed in the growth and maturity phases). In other words, firms need to align their boundary spanner structure (individuals, teams, or rotated teams and individuals) to match the needs of different stages in the relationship.

Through this research I will show the theoretical and managerial grounding of the differential impact of interpersonal versus organizational relationships. When interpersonal versus organizational relationships are utilized at appropriate times within the relationship lifecycle, the dependency problem associated with rotation of key contact boundary spanners can then be managed.

Organization of Dissertation

This dissertation is organized as follows: In Chapter Two I provide an overview and theoretical background of relationship marketing, with a focus on relationship marketing in interfirm relationships. I then highlight and discuss the manifestation of individuals or boundary spanners, providing the link between the two organizations. These boundary spanners play a critical role in relationship development and relationship continuity. The boundary spanner paradox that highlights the tension between effective placement of boundary spanners and the potential dependency created when they become integral to the relationship is introduced.

Building on the framework developed in Chapter Two, Chapter Three introduces a relationship model that identifies the antecedents to relationship equity and the outcomes of relationship equity, moderated by the relationship lifecycle. The antecedents to relationship equity come from a theoretical foundation of agency theory and include the boundary spanning role characteristics of programmability, measurability and autonomy. Relationship equity is comprised of individual and firm equity, and the outcomes are measured by the buying firm's switching intentions. Chapter Four describes the method for acquiring and analyzing the data for which I will test my question.

Chapter 2: Literature Review and Theoretical Basis

Relationship Marketing and The Relational View of The Firm

Relationship marketing (RM) is based on the assumption that cooperative and collaborative relationships may be more beneficial than arm's length or transactional exchanges (Cannon and Perreault 1999; Doney and Cannon 1997; Morgan and Hunt 1994). As Dwyer, Shurr and Oh (1987) eloquently pointed out by using a marriage metaphor for business relationships, firms weigh the benefits of exclusivity with the opportunity costs of not working with others in establishing a relationship. The marriage metaphor is applicable because it highlights the advantages of forming business relationships including reduced uncertainty, managed dependence, and exchange efficiencies through effective communication and collaboration. One of the disadvantages of business relationships is the potential opportunity cost of forgoing other exchange relationships. The assumption is that collaborative and cooperative relationships can lead to greater economic value than either firm could obtain on its own (Parvatiyer and Sheth 2000).

The relational view of the firm (Dyer and Singh 1998) provides a theoretical explanation of the effectiveness of relationship marketing. The relational view explains how firms make relation specific investments between pairs or networks of firms (as the unit of analysis) to gain a competitive advantage and relational rent. One type of relationship specific investment deployed by firms is through their boundary spanning employees, who, due to their specialized nature and interaction between firms, create an idiosyncratic relationship by definition, and thus are potentially capable of creating strategic assets. A result of these relation specific investments is assets held by both firms. Focusing on human assets and knowledge sharing routines as a mechanism to create these relational rents, this research looks at the role that individual boundary spanners play in the overall interfirm relationship.

It is widely accepted that creating an idiosyncratic exchange relationship requires the specialization of assets (Amit and Schoemaker 1993; Dyer and Singh 1998). Williamson (1985) describes three types of specialized assets including 1) site specificity, 2) physical asset specificity and 3) human asset specificity. This research is concerned with the latter. Human asset specificity refers to "transaction specific know-how accumulated by transactors through long-standing relationships" (Dyer and Singh 1998 p. 662). In exchange relationships, the most visible form of human assets deployed by firms are called boundary spanners. In buyer-seller relationships, the seller's boundary spanners can include key contact boundary spanners and salespeople.

A useful perspective of the advantages of interfirm relationships that is pertinent to this research is illustrated by the bonding mechanisms that strengthen the relationship. Berry (2000) identifies three levels of bonding: 1) price, 2) social and 3) structural. Level one bonding in marketing relationships focus on price as the bonding mechanism. Price is easily imitated and allows for a low probability of sustained competitive advantage. Level two relies on social bonds, or customization of the relationship, which can withstand some pricing pressures. Level three bonds build on structural solutions to the customer's problems, and is "not dependent on the relationship skills of individuals" (Berry 2000 p 160), and therefore carries a higher probability of sustained competitive advantage.

Based on these structural bonds, RM emphasizes a long-term interactive relationship between the provider and the customer. However, Gummesson (1994) suggests that effective relationships need to be strategically planned, which at times may include transactional relationships. Berry and Parasuraman's three levels of bonding imply that firms may move between levels as the relationship needs to progress or retreat. Therefore, we can treat RM as a process that changes throughout the relationship lifecycle, with business markets focusing on the social and structural levels. This idea is especially relevant when identifying the roles of boundary spanners with customer relationships.

Palmatier, Dant, Grewal and Evans (2006) outline the antecedents, mediators (and moderators) and outcomes of RM in a meta-analytic study. Antecedents of RM include three perspectives: the customer perspective highlights relational benefits and dependence management. The seller perspective, which includes relationship investment and expertise, and the dyadic view, includes communication, similarity and conflict as key antecedents to effective RM. Outcomes of RM consist of cooperation, continuity and performance. The bulk of the empirical research has focused on relational mediators which include trust, commitment, relationship satisfaction and relationship quality (Anderson and Weitz 1989; Doney and Cannon 1997; Ganesan 1994; Morgan and Hunt 1994). However, even with a synthesis of 20 years of empirical research and over 38,000 relationships, the impact of some of these variables on the performance implications of RM are still inconclusive. These results and the advanced stages of RM research lead us to evaluate moderating variables.

Relationship Equity

The term "equity" in marketing can be used in two different contexts. The first context treats equity from a philosophical and fairness perspective that evaluates distribution and perceptions of justice (Adams 1963; Thibaut and Walker 1975; Tyler, Boeckmann, Smith, and Huo 1997). The second, more recent perspective comes from a financial viewpoint, and is used in marketing to quantify the value marketing activity brings to the organization (Day and

Montgomery 1999; Rust, Lemon, and Zeithaml 2001). The financial perspective started with the concept of brand equity and has more recently expanded to measure the financial value of customer relationships (Rust, Lemon, and Zeithaml 2001). Anderson and Narus (2003) consider brand equity a subset of a more expansive conceptualization of "marketplace equity" which includes channel and reseller equity, along with brand equity.

Marketing has had a long tradition of attempting to quantify the value its actions add to an organization (Srivastava, Shervani, and Fahey 1998). One conceptualization of this value is customer equity, which refers to *the total of the discounted lifetime values over all of the firm's current and future customers* (Rust, Lemon, and Zeithaml 2004 p. 110). Measuring customer equity is an analytical tool that treats all future interactions with the customer as an asset.

Traditionally, customer equity has been measured in the consumer context of loyalty, with benefits such as airline points programs, that entice the customers to stay with the firm by creating "aspiration value" (Rust, Lemon, and Zeithaml 2001). Aspiration value is the difference between the true value and the customer's perception of value. The airline example puts greater emphasis on reaching the next level (e.g., a free ticket) than the actual value of the points (about 3 cents). This suggests that the loyalty bonds in a consumer context are more subjective than objective.

When studying business relationships, the context of loyalty needs to be evaluated according to the actual value created from the relationship rather than the aspiration value evident in consumer relationships. This becomes even more important when teams are introduced, thus negating any effect consumer type loyalty programs may have on the decision to stay with the firm. Understanding the equity in business relationships is extremely important and many scholars have emphasized the interfirm relationship as one of their most important assets (Johnson 1999; Webster 1992). However, to date, very little attention has been paid to developing metrics to understand relationship equity. For this research, I draw on institutional theory and the role of embeddedness to understand interfirm relationship equity.

Institutional theory suggests that economic actions are embedded in the relationships held between firms (Granovetter 1985). Early theory on relational embeddedness suggests that relationships may constrain the efficiency of economic activity, due to the introduction of extraneous relationship factors. However, marketing and organizational theorists suggest that socially embedded relationships may provide a source of value between firms which enable certain transactions that would not have occurred otherwise (Dyer and Singh 1998; Srivastava, Shervani, and Fahey 1999). Additionally, this value has been shown to occur at both the individual and the firm level (Kaufman, Jayachandran, and Rose 2006). Following the direction of Dyer and Singh (1998), I attempt to understand the value of the interfirm relationship as an asset that builds relational rents, or value for both firms above what they could produce on their own.

Marketing scholars have recently promoted the concept of customer equity over brand equity due to the shift from product focused marketing to relationship focused marketing (Rust, Lemon, and Zeithaml 2004). From an outcome and measurement perspective, Rust, Lemon and Zeithaml (2004) define customer equity as "the total discounted lifetime values over all of the firm's current and potential customers" (p.110). Further, scholars treat relationship equity as a subset of customer equity (Hogan, Lemon, and Rust 2002). To understand relationship equity in firms, I define relationship equity in interfirm relationships as *the firm's assessment of the value of a bond that exists with an exchange partner including tangible benefits (e.g., from basic transactions) and extending to intangible benefits (e.g., reputation, market information, network* *position, collaborative advantages*). Additionally, this equity must be convertible to add value to the relationship. According to Srivastava, Shervani, and Fahey (1998) a convertible asset can be used to "exploit an opportunity and/or neutralize a threat in the external environment" (p. 4). In other words, repeated, positive interactions between firms can decrease the chance of relationship termination under adverse conditions.

Furthermore, recent empirical work strongly suggests a differential impact of firm versus individual relationships. For example, Doney and Cannon (1997) separately measure buyers' perception of trust in the salesperson and trust in the selling firm. While the process or antecedents of building trust differ for the salesperson and the selling firm, the impact of trust on the overall relationship is so similar the authors conclude that "trust of the salesperson can be transferred to the supplier firm and vice versa" (p. 45). The authors subsequently treat trust in an individual as a subset of trust in the firm. Kaufman, Jayachandran and Rose (2006) demonstrate the individual versus firm level role of relational embeddedness of new product acceptance in the retail channel. Furthermore, Lovett, Harrison and Virick (1997) compare the buyers perception of imitability of the individuals to the perceived imitability of the firm. Finally, Iyer, Sharma and Evanschitzty (2006) propose that consistent processes and outcomes may even substitute for interpersonal relationships altogether, especially in an international context. Taken in aggregate, these studies build a strong connection to the different levels of relationship equity that may develop among individuals and firms.

Manifestation of The Boundary Spanner Role in Interfirm Relationships

When studying relationship marketing, it is important to evaluate the roles of individuals in creating and maintaining interfirm relationships. These individuals are better known as "boundary spanners," because they represent the critical link and interface between organizations. Haytko defines boundary spanners as "economic agents representing their firms contractually to achieve specific goals" (Haytko 2004 p 312). Interestingly, much of the value in interfirm relationships is embedded in social relationships and networks (Uzzi 1999). As such, the ability to access this value is dependent on human agents. Most of the research to date on boundary spanners in interfirm relationships has focused on the interpersonal friendships that exist between individuals representing their respective firms (Haytko 2004; Price and Arnould 1999).

Understanding the role of boundary spanners in relationship development beyond interpersonal friendships may help to explain the inconsistent results of RM effectiveness. In fact, scholars have referred to the role of boundary spanning individuals in business relationships as "virtually unexplored" (Osborn and Hagedoorn 1997 p 274). After a recent and exhaustive review of the relationship marketing literature, Palmatier, Dant, Grewal and Evans (2006) made the following statement:

> "Researchers should differentiate the effects of customer relationships with boundary spanners from those with firms. Strategies such as team selling, salesperson disintermediation, and the use of call centers should be evaluated in light of the impact of interpersonal relationships (p. 150)."

The lack of differentiation between relationships with individual boundary spanners and the relationships with firms is often manifested in the reporting of the levels of relationships. Oftentimes, relationship levels in interfirm relationships studies are not distinguished, and in some cases are combined. Ganesan (1994), in a highly influential study on long term orientations of buyer-seller relationships, asked specific questions regarding trust in the representative (boundary spanner) of the firm, but reported the findings as general trust in the firm. This report makes an implicit assumption that the trust in individuals has the same impact as trust in a firm, which has been subsequently shown not to be the case. Doney and Cannon (1997) address this shortcoming by measuring both the trust and commitment to the salesperson and trust and commitment to the firm, and reported these factors as separate constructs. They found that trust and commitment to the individual and the firm are in fact distinct and separate constructs. However, their main hypotheses of trust in the firm and individual in choosing suppliers were not supported in their study.

One of the few empirical supported studies that directly measure the impact of organizational versus individual relationships evaluates the role of embeddedness of new product offerings in the retail channel. As mentioned in the introduction, Kaufman, Jayachandran and Rose (2006) demonstrate the role of relational embeddedness of new product acceptance in the retail channel. Using a heuristic-systematic model of persuasion, their study suggests that clearly superior products introduced to the retail channel are accepted regardless of the type of buyer-seller relationships; however, moderately attractive product acceptance is contingent on the strength of interpersonal relationships between the buying and selling firm. In the case of moderately attractive products, individual relationships are crucial for product acceptance, whereas individual relationships are not critical for unattractive or attractive products. The empirical support of the differential impact of individual versus organizational relationships in product development lends credence to studying whether the same effects hold in organizational relationships.

Boundary Spanning Role Characteristics

In order to understand the role of boundary spanners in collaborative relationships, I first discuss the role of knowledge held by boundary spanners and then draw on resource dependency

theory (Salancik and Pfeffer 1978) and agency theory (Eisenhardt 1988; Jensen and Meckling 1976) to identify situations where boundary spanners may hold valuable information that is critical to the firm and non-substitutable to that boundary spanner. Resource dependency theory identifies competency, substitutability and centrality as key resource identifiers, while agency theory evaluates the programmability, measurability and span of control of the agents or boundary spanners. *Programmability* is the ability to define and codify the behaviors involved in a particular task or job. *Measurability* refers to the availability of equitable measures of outcomes. Autonomy refers to the extent to which boundary spanners can identify the relevant tasks and arrive at a course of action without management intervention. These six constructs are indicators of boundary spanner relationship equity and can help a firm make sensible decisions regarding the trade-off between specialization and cooperation of account management.

Boundary spanners are differentiated from other employees by their extensive customer facing role. They act as a bridge between the customer and the firm. As such, they are in a unique position to acquire tacit and relational information about customers that is difficult for others to acquire.

The type of knowledge held by boundary spanners may help identify the mechanisms for their roles. The importance of boundary spanners has increased concomitantly with the significance of the relational exchange, yet their importance is often based on their ability to access and transfer both explicit and tacit knowledge (Grant 1996). Tacit knowledge is that which is not readily accessible or observable, and which is often derived over time through proximal relationships (Polyani 1962). Explicit knowledge, on the other hand, is knowledge concerning factual information. Whereas explicit knowledge is more easily observed and then transferred, tacit knowledge transfer often requires specialized abilities that are difficult to teach and which are learned over time. Grant (1996) describes three characteristics that allow firms to convert knowledge into value. Concerning the transferability of knowledge, Grant distinguishes between tacit and explicit knowledge, and identifies "*knowing how* with *tacit knowledge*, and *knowing about* facts and theories with *explicit knowledge*" (italics in original text) (Grant 1996 p 110). Explicit knowledge is easier to codify, and thus easier to transfer, and is revealed by its communication, whereas tacit knowledge is only observable through its application, which makes tacit knowledge transfer much more difficult and expensive.

Within an exchange relationship, explicit knowledge could include information concerning where and when parts are delivered, dates when delivery is expected, and protocol concerning the return of damaged items. This information is easily obtained and transferred. On the other hand, tacit knowledge could include knowledge concerning potential allies in the purchasing department of the client firm, information concerning social activities of clients, and knowledge concerning cultural practices within client firms. This knowledge provides the boundary spanner the ability to increase the value of the relationship by gaining access to important decision makers in the client firm. Yet this information is difficult to obtain and transfer. Herein lies the importance of the boundary spanner in relating and transferring this information to the firm.

Whereas agency theory was first proposed to explain the problems that arise when there is a separation of ownership and control within an organization (e.g. between the top managers and shareholders) (Jensen and Meckling 1976), it is also applicable to the boundary spanning situation. That is, since boundary spanners are agents of their respective organization, agency theory provides a theoretical foundation to explicate the problems that can arise for an organization employing the boundary spanners, as well as the types of mechanisms often proposed to ameliorate these problems. According to agency theory, potentially differing goals, as well as information asymmetry between the principal (i.e., the employing organization) and the agent (i.e., the boundary spanner) may allow the agent to engage in behaviors which benefit himself or herself at the expense of the organization (Eisenhardt 1989). For example, the agent may purchase excessive perquisites (Eisenhardt 1989), or engage in periodic shirking behavior (Kidwell and Bennett 1993), or otherwise engage in activities that provide no value to the organization. Oftentimes, the risk preferences of the agent and principal differ when the agent is more risk averse (Amihud and Lev 1981). This is problematic for the principal, because it reduces the likelihood that the agent will engage in reasonable risk taking, thereby reducing the potential upside returns available to the principal (Certo, Daily, Cannella, and Dalton 2003).

Agency theorists have proposed that certain safeguards could mitigate the agency problem *a priori*. These mechanisms include monitoring the agent, incentivizing the agent, and bonding the agent (Eisenhardt 1988; Williamson 1988). I argue, however, that the boundary spanning position renders these mechanisms increasingly impracticable in reducing the agency problem. Importantly, most governance mechanisms are unable to recognize the importance of tacit knowledge because this information is secondary to the functional role of the boundary spanner. Consider the case of a business consultant in a firm that charges by billable hours. Agency theory would look at 1) the programmability of the job, 2) the agent's span of control and 3) the risk borne by the consultant (Eisenhardt 1988). Let's assume that the consultant's job description is centered on his/her actual business consulting and the number of billable hours produced, as well as the amount of new clients brought into the business. The level of programmability, in this case would be mixed, since programmability refers to the ability to define the behaviors required for the job. Certain aspects of the consulting activities could be highly programmable. Assuming that the tasks involved are very straightforward and include defined behaviors, the amount of billable hours would be the direct basis for the compensation involved in a standard engagement with the client. However, a consultant is also often asked to bring in new business. Here, the behaviors are less defined, and the outcomes of these behaviors may be based on outcomes that the consultant can only partially control (hence, lower programmability), and those outcomes may be harder to evaluate. In this case, according to agency theory, commissions would be used to align the interests of the consultant and the firm.

Consultants (and boundary spanners) traditionally have a high span of control, or autonomy. A higher span of control makes it more difficult for the principal to monitor the behaviors of the agent. With a higher span of control, agency theory would prescribe more weight on commissions to influence behaviors. Lastly, risk asymmetries between the principal and agent will impact the incentive structure. Higher levels of commission, while increasing motivation, also increase the risk placed on the agent (Beatty and Zajac 1994). To increase risk symmetries, the firm should lower commissions and increase the salary of the agent.

In the above example, it may be a fairly straightforward task to set up governance mechanisms to ensure that a proper contract is established between the firm and the consultant. The incentives would be outcome-based, centered mostly on the production of billable hours, and additional incentives between salary and commission would be established to recognize the monitoring issues and risk asymmetries. As the relationship develops, these incentive structures could be adjusted to find the ideal combination that would properly motivate and control the boundary spanner.

What is common in the above example and many other agency relationships is that the goals are somewhat clear and transparent. When a risk asymmetry is present, for example, it is

usually visible and can therefore be managed with agency solutions. However, when viewing the sources of a firm's competitive advantage through the lens of the resource-based view of the firm (Barney 1991; Wernerfelt 1984), much of the value of the firm is found in tacit and intangible information and processes. In the case of boundary spanners, there is a significant amount of potentially valuable information being withheld because of the nature of their positions in dealing with customers and interfirm relationships. Since most governance mechanisms are designed around the primary functions of the boundary spanner, "agency problems" with boundary spanner's tacit information are not addressed. Importantly, the ability to garner tacit information is often a function of individual learning. Over time, boundary spanners establish closer contacts, as well as broader contacts, and become more capable of obtaining tacit information. As such, the information asymmetry between boundary spanners and their principal (i.e., their employer) is likely to increase. The implication is that agency mechanisms deteriorate in usefulness over time; there is no equilibrium. The mix of incentives, bonding, and monitoring initially established do not remain effective when the information asymmetry between the two parties systematically increases in favor of boundary spanners.

Based on the literature, I conceptualize boundary spanning roles to include programmability, measurability and autonomy. Programmability refers to the *ability to define and codify behaviors involved in a particular job or task*. Programmability is important to the functioning of interpersonal versus firm relationships because it gets at how easily a job or task can be transferred to other individuals or shared amongst a team. Programmability would be important in tasks that require high levels of interpersonal service such as profession jobs including lawyers, accountants and consultants where the level of individual expertise is important. High programmability suggests the task or job can be easily transferred since it would be a codified role, and thus not dependent on the individual who performs it (Eisenhardt 1988).

Measurability *refers to the availability of equitable measures of performance*. Measurability directly relates to the use of behavioral versus outcome based controls placed on the boundary spanner (Anderson and Oliver 1987; Oliver and Anderson 1995; Tremblay, Cote, and Balkin 2003). I suggest that if a task is not amenable to objective measures of performance, a heavier reliance will be placed on management involvement. Measurability is important to boundary spanning key contact employees such as salespeople since it impacts how they are compensated. The level of management involvement above the individual boundary spanning key contact employee will impact the customer bond between the individual and the overall firm relationship.

Autonomy refers to *the extent to which a boundary spanner can identify relevant tasks and arrive at a course of action without management interference* (Stock and Hoyer 2005; Wang and Netemeyer 2002). Autonomy also includes the impact of managerial involvement in such relationships, although it differentiates from measurability because a boundary spanner may still be autonomous with or without the availability of equitable measures of performance.

Firm Boundary Spanning Structure

It is important to note that interfirm relationships can be complex and are usually served by many individuals, many times made up as teams. This domain of this research will focus on the relationship between the selling firm (team or individual) and the members of the buying center. To put this into perspective, Jones, Dixon, Chonko, and Cannon (2005) identify several combinations of relationships that may occur related to the interfirm relationship. These relationships may include 1) relationships between members of the same team, 2) relationships between members of different teams and, 3) relationships between the selling team and other functional departments in the same firm (e.g. engineering, marketing, etc.), to name a few (see Jones, Dixon, Chonko, and Cannon 2005 for a thorough review). It is suggested that the relationship between the selling firm and the buying center offers the greatest opportunity for value creation (Cannon and Homburg 2001; Weitz and Bradford 1999), and thus the focus of this research.

Therefore, firms must choose how to structure their contact strategy with their customers. I define this firm boundary spanning structure *as the level of individual versus team deployment to satisfy the needs of a customer relationship*. As suggested and following previous literature (Workman, Homburg, and Jensen 2003), I treat firm boundary spanning structure as a continuous rather than a dichotomous construct as this relationship may be more fluid than static. Deploying selling teams to interact with customers may result in greater collaboration, coordination and cooperation (Perry, Pearce, and Sims 1999), although at a higher cost to the supplier firm (Jones, Dixon, Chonko, and Cannon 2005).

Human asset specificity allows the cospecialization of relationships, thus increasing efficiency and effectiveness by creating interorganizational assets (Dyer and Singh 1998). As shown by previous research, the impact of the type of relationship (e.g. firm boundary spanning structure) may have a differential impact on the outcome of the relationship (Bendapudi and Leone 2002; Kaufman, Jayachandran, and Rose 2006).

Relationship Lifecycle

In an effort to understand buyer-seller relationships beyond discrete events, scholars began viewing these relationships in the context of long-term associations with an assumption of future interactions. Based on that context, Dwyer, Shur and Oh (1987) developed a framework to understand the process in which these buyer-seller relationships evolve and change over time. The authors suggest that the prevailing assumption of discrete transactions without mention of relational elements were not characteristic of most business relationships. Relational exchanges transpire over time and "must be viewed in terms of its history and anticipated future" (p. 12).

To better understand business exchange relationships, the authors compare the evolution of business relationships with marriages. The advantage of both include decreased uncertainty and increased efficiency through managed dependence. The downside of this relational commitment is the opportunity costs of not participating in other exchanges. Businesses (and husband and wives) have to decide which direction is most advantageous. However, marriages do give us a framework for the evolution of business relationships. These processes include five general phases. Phase 1 includes awareness, where party "A" realizes that party "B" may be a feasible exchange partner. Phase 2 is the exploration phases where parties consider the "obligations, benefits and burdens, and the possibility of exchange" (p. 16). Phase 2 includes the development of relationship norms and expectations. Phase 3 refers to the expansion of the relationship where the partners increase interdependence. Phase 4 is the commitment phase, where implicit and explicit pledges of relational continuity occur. Finally, phase 5 (which many companies hope does not occur) is the dissolution phase, similar to divorce for marriages, in which the firms withdraw from the relationship.

There is little disagreement that relationships evolve and follow somewhat predictable stages through their lifetime. Two theories of relationship development offer complementary views of the relationship process. Dwyer, Schurr and Oh (1987) and Ring and Van de Ven (1994) both highlight relationships that include exploration, buildup/maturity and decline stages. The theoretical basis of this research lies in a social norms approach based on Macneil (1980). The supposition of the social norms approach is that trust and commitment evolve over time; as trust and commitment increase, so does the willingness of the parties to take risks. As these risks bring success to the organizations, trust and commitment are further increased, thus allowing more risks and the cycle continues, increasing the strength of the relationship.

It should be noted that the main difference between the two theories concerns the path dependence of events culminating in advancement to the next stage in the relationship (Jap and Anderson 2007). Dwyer, Schurr and Oh (1987) view relationships as a somewhat linear path, where once violations of commitments (and loss of trust) occur, there is little that can be done to impede the relationship from advancing to the dissolution stage. Ring and Van de Ven (1994), however, point to the role of individuals in allowing repeated cycles of negotiations after a breach of trust. In other words, individuals may be key to salvaging relationships when trust in the overall relationship is breached.

Another important area regarding the relationship lifecycle is the use of transaction specific investments (TSI) across the relationship lifecycle. While there is no mention of interpersonal or firm level relationship, the research is important enough that it needs to be discussed here. This research would be especially relevant if this dissertation was attempting to understand the role of commitment and trust throughout the relationship.

Jap and Ganesan (2000) identify transaction specific investments and how these TSI's impact the level of commitment held between parties in the supply chain. First, suppliers TSI's, the relational norms held between firms and explicit contracts are found to moderate the level of retailer's TSI's. Additionally, the stage of the relationship, including exploration, buildup, and maturity are found to impact the level of retailer's TSI's as well. All of these variables impact the retailer's perception of commitment to the relationship. In turn, the level of commitment to the

relationship is found to impact the evaluation of the supplier's performance, the level of conflict in the relationship and relationship satisfaction.

The research by Jap and Ganesan (2000) confirm the theory of transaction cost analysis which suggests that transaction-specific investments impact the level of commitment to the relationship. Their study also adds to other research that suggests that relationships differ across the relationship lifecycle, in this case in terms of transaction cost theory. Jap and Ganesan (2000) state, "This (research) opens several opportunities for future research focusing on interorganizational phenomena that are time and phase dependent" (p. 242), thus lending more credence to understanding other variables across the relationship lifecycle.

Following the supposition of Ring and Van de Ven (1994), this research will evaluate whether the stage in the relationship affects the impact of individuals on the overall relationship. To test this, I will evaluate the differential measure of relationship equity that is held within the firm and the equity that is held within the individual. I predict that individual boundary spanner equity is more important at the exploration stages of the relationship where less structural bonds have been formed between organizations and also at the decline phase where the strategic importance of the relationship may make it less desirable for firms to continue investing resources to continue the relationship.

Likelihood to Explore Alternatives

The dependent variable and the ultimate outcome that concerns both selling and buying firms alike, is the likelihood of the customer switching or evaluating competitor firms after a key contact boundary spanner turnover. Customer switching intentions or likelihood to switch assesses whether the relationship bond is structural or social (Berry and Parasuraman 1991). A social bond indicates reliance on the individual boundary spanner, characterized by the buying firm exploring or considering alternative suppliers when a key contact boundary spanner leaves the selling firm. A structural bond, according to Berry and Parasuraman, would include bonds that go beyond individual relationships such as developed process. Switching intentions are measured from the perspective of the buyer and determined by measuring the buyer's *likelihood of future interactions with the selling firm and likelihood of a firm to evaluate other vendors in the case of actions or the loss of a key contact boundary spanner*.

Actual switching costs are explored extensively in the literature. Jap and Ganesan (2000) evaluate the idiosyncratic investments made between firms across the relationship lifecycle. These costs include transaction specific investments, relational norms and the use of explicit contracts. In order to understand the implications of interpersonal versus organizational relationships across the relationship lifecycle it is necessary to control for these transaction-specific investments. Therefore I focus on indicators of future interactions rather than actual switching behaviors; actual switching behaviors are dependent on extraneous variables, such as transaction-specific investments, which might hide the actual impact the loss of a key contact boundary spanner might have on the relationship. Indicators of future interactions *depend on the likelihood to evaluate alternative suppliers in the event of the loss of a key contact boundary spanner*.

Table 1 highlights the constructs and definitions identified for this dissertation. The next chapter will outline the specific relationships and hypotheses behind these definitions and how they will be tested.

Construct	Source		
Relationship	The firm's assessment of the value of a bond that exists with an	Rust, Lemon and	
equity:	exchange partner including tangible benefits (e.g., from basic	Zeithaml 2001	
	transactions) and extending to intangible benefits (e.g.,		
	reputation, market information, network position, collaborative		
	advantages).		
Firm boundary	The use of teams versus individual contacts.	Homburg,	
spanning		Workman and	
structure:		Jensen 2003	
Programmability:	The ability to define and codify the behaviors involved in a	Eisenhardt, 1988	
	particular task or job.		
Measurability:	The availability of equitable measures of outcomes.	Oliver and	
		Anderson 1987	
Autonomy:	The extent to which a boundary spanner can identify relevant	Stock and Hoyer	
	tasks and arrive at a course of action without management	2005	
	intervention.		
Relationship	The distinct, predicable behaviors, processes and orientations	Jap and Ganesan	
Lifecycle:	that occur between firms over time.	1994, 2000	
	Exploration: You both are discovering and evaluating goal		
	compatibility, integrity, and performance of the other, as well as		
	potential obligations, benefits, and burdens involved with		
	working together on a long-term basis. Buildup: You both are		
	receiving increasing benefits from the relationships, and the level		
	of trust and satisfaction is growing in such a way that you are		
	increasingly willing to commit to a long-term relationship		
	Maturity: You both have an ongoing, long-term relationship in		
	which both parties receive acceptable levels of satisfaction and		
	benefits from the relationship Decline : One or both of you have		
	begun to experience dissatisfaction and are considering		
	alternatives, contemplating relationship termination, or		
	beginning to end the relationship		
Likelihood to	Indicators of future interactions that depend on the likelihood of	New Scale	
leave:	evaluating alternative suppliers in the event of the loss of a key		
	contact boundary spanner.		

Table 1 Constructs and Definitions Identified for this Dissertation

Chapter 3: Research Model and Hypothesis

The purpose of this chapter is to build empirically testable hypotheses around the conceptual model presented in Figure 1. A full model with hypotheses is identified below (Figure 2). As shown in the figure, I expect the antecedents to relationship equity, e.g., the boundary spanner role characteristics of programmability, measurability and autonomy, to have a direct effect on the level of relationship equity. Next, I will address the concept and measurement of firm versus individual relationship equity and the outcome of interest in relationship equity, which indicates a firm's switching intentions. Importantly, as depicted, the path between relationship equity and switching intentions is moderated by stage in the relationship lifecycle.



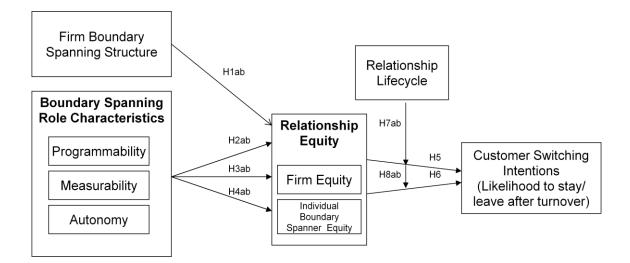
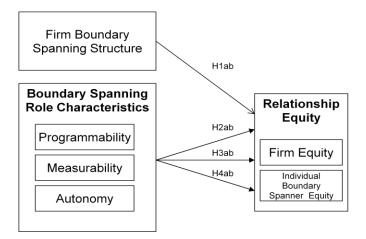


Figure 3 Antecedents to Relationship Equity



Antecedents to Relationship Equity

Firm Boundary Spanning Structure

Firms must choose how to structure their relationships with customers. The heart of the key contact boundary spanner dilemma identifies the predicament a firm faces when identifying its contact strategy. Should the firm use individuals and risk relationship dependency on that individual boundary spanner? Or should the firm use selling teams and dilute the effectiveness of individual actions for the sake of reduced dependence? I propose the configuration in which the selling firm's contact strategy with its customers impacts the levels of equity that are held between the firm and the individual. I treat firm boundary spanning structure as a continuous rather than dichotomous variable, as the levels of team use may vary across relationships. This analysis leads to the following hypothesis:

H1: Firm boundary spanning structure (high in team, low in individual) is positively related to: a) firm relationship equity; and, firm boundary spanning structure (high in individual, low in team) is positively related to b) individual relationship equity.

Boundary Spanning Role Characteristics

In the case of boundary spanners, agency theory provides us with a background to understand the antecedents of relationship equity. I argue that many of the problems which agency theory attempts to reduce may actually harm interfirm relationships when they are not considered in context.

Agency theory focuses on the contract between principals and agents; it is designed around aligning the goals of the principal and agent, verifying the behaviors of the agent and aligning risk between the two parties (Eisenhardt 1988; Eisenhardt 1989). The contract described here can be considered as a metaphor to describe mechanisms instituted *a priori* to decrease potential problems that are described as a moral hazard, adverse selection or risk-sharing asymmetries between the parties. Agency theory assumes that agents are self-serving, rational and risk-averse, while moral hazard assumes that agents will not put forth the agreed upon effort or will shirk responsibilities when able to do so, focusing on utilizing their own utility over that of the principal. Adverse selection refers to the "misrepresentation of the ability of the agent" (Eisenhardt 1989 p 61) and assumes that principals cannot verify the skills or abilities of the agent either before or after hiring. Risk-sharing asymmetries assume that the principals are less risk-averse than agents, since they are able to spread their risk more efficiently (Basu, Lal, Srinivasan, and Staelin 1985).

In marketing, much of the attention on reforming the aforementioned agency problems is viewed through the lens of sales force control systems, specifically, behavior versus outcomebased control systems. Behavioral control relies on monitoring the *process* that the agents utilize in interacting with the firm's customers, while outcome-based systems utilize outcome measures instead of behavioral measures to evaluate agents (Anderson and Oliver 1987; Oliver and Anderson 1995). Other mechanisms include monitoring, incentivizing, and bonding the agent (Eisenhardt 1989; Williamson 1981). Many of the decisions involved in designing these systems surround characteristics of the boundary spanner's role, which includes the programmability and measurability of the job and the level of supervision or autonomy of the agent. While these systems have been studied extensively in the literature regarding such outcomes as knowledge, motivation and performance outcomes of the agents and their firms, my intent is to measure the impact of these roles on the interfirm relationship itself.

Programmability

Programmability involves the ability to define and codify the behaviors involved in a particular task or job (Eisenhardt 1988). A highly programmed task is one in which the behaviors can be precisely defined, whereas a task in low programmability is hard to define; it typically involves a high level of interpersonal service and interaction in the exchange (Bowen and Jones 1986; Eisenhardt 1988). When tasks or roles are highly programmatic, the customer bond is based on structural bonds, and not interpersonal bonds. Tasks low in programmability increase the interpersonal interaction involved with the service component of the exchange and will therefore increase the level of relationship equity in the relationship at both the individual and firm level. This analysis leads to the following hypothesis:

H2: Boundary spanning characterized by high levels of programmability is negatively related to: a) firm relationship equity; and b) individual relationship equity.

Measurability

Measurability of outcomes is prevalent in the compensation and control literature (Oliver and Anderson 1995; Tremblay, Cote, and Balkin 2003). Measurability refers to the availability of equitable measures of outcomes (Anderson and Oliver 1987). The compensation and control literature views behavior based controls as a function of low task measurability, with outcome based controls a function of high task measurability. The logic is that when the cost of measuring outcomes is low, it is more efficient to reward boundary spanners on output, rather than incurring the high cost of behavior monitoring. While this construct is linked to task programmability (Eisenhardt 1988), I believe that a measurable difference in constructs will still be found. I expect to find that the more difficult the measurement of outcomes, the more time boundary spanners will spend with their customers, since they will be measured on outcomes, and not on spending time with management justifying behavioral processes. Research has identified repeated customer interactions as antecedents to trust and commitment, and therefore relationship equity (Doney and Cannon 1997). Therefore, the more time spent with customers, the higher the level of relationship equity. This analysis leads to the following hypothesis:

H3: Boundary spanning characterized by measurable outcomes is negatively related to: a) firm relationship equity; and b) individual relationship equity.

Autonomy

Job autonomy refers to the extent to which a boundary spanner can identify relevant tasks and arrive at a course of action without management intervention (Stock and Hoyer 2005; Wang and Netemeyer 2002). High levels of job autonomy have been shown to have a positive impact on many organizational factors, including job satisfaction, motivation and performance (Breaugh 1985; Spector 1986). One argument in favor of higher levels of job autonomy would give a boundary spanner a more active role in the relationship, while restricted job autonomy would create a passive role (Peccei and Rosenthal 2001). I argue that the more active the role of the boundary spanner, the more relational interaction will occur, and therefore there will be a higher level of relationship equity. This analysis leads to the following hypothesis:

H4: High levels of boundary spanner autonomy are positively related to: a) firm relationship equity; and b) individual relationship equity.

Outcomes of Relationship Equity

Switching intentions instead of actual switching behaviors are used in this research due to the cross-sectional nature of the study. Switching intentions are an indicator of relational dissolution, and may be the best measurement option in the absence of a longitudinal design.

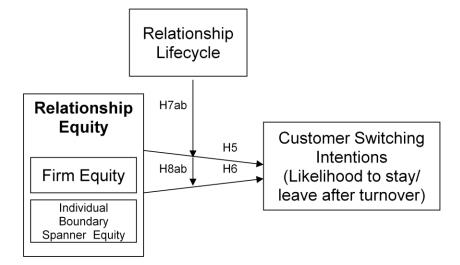
Switching intentions are from the perspective of the buyer and measures the buyer's intentions to continue or terminate the relationship with the seller or to evaluate other vendors in response to the loss of a key contact boundary spanner. Similar approaches have been used in the literature as a dependent variable, including anticipation of future interactions (Doney and Cannon 1997) and likelihood of relationship continuation (Anderson and Weitz 1989). In the case of relationship continuation, the authors measured the predictions of relationship continuation five months after the initial survey and found that the predictions and outcomes were consistent, thus supporting the measure of intentions as a valid predictor of a future state. Furthermore, switching intentions have an advantage over measuring actual dissolution of the relationship in that actual dissolution of the relationship is measured in terms of a dichotomous variable and thus loses the variance inherent in a measure of switching intentions, which can be measured as a continuum.

In terms of switching intentions, a higher level of relationship equity can mitigate the threat of a firm leaving after key contact boundary spanner turnover (Figure 4). As suggested in previous literature (Lovett, Harrison, and Virick 1997), interpersonal closeness can increase the risk of switching after key contact boundary spanner turnover, while firm closeness can decrease this risk.

Actual switching costs are explored extensively in the literature. Jap and Ganesan (2000) evaluate the idiosyncratic investments made between firms across the relationship lifecycle. These costs include transaction specific investments, relational norms and the use of explicit contracts. In order to understand the implications of interpersonal versus organizational relationships across the relationship lifecycle, it is necessary to control for these transactionspecific investments. Therefore, I focus on indicators of future interactions rather than actual switching behaviors (Crosby, Evans, and Cowles 1990). Actual switching behaviors are dependent on extraneous variables, such as transaction-specific investments, which might hide the true impact a loss of a key contact boundary spanner might have on the relationships. Indicators of future interactions *depend on the likelihood to evaluate alternative suppliers in the event of the loss of a key contact boundary spanner*.

- H5: Firm relationship equity is negatively related to switching intentions after turnover.
- H6: Individual relationship equity is positively related to switching intentions after turnover.

Figure 4 Outcomes of Relationship Equity



The Moderating Role of Relationship Lifecycle

An important and enduring managerial question centers on the impact on an interfirm relationship when a key contact boundary spanner leaves (Bendapudi and Leone 2002). The solutions identified by these authors allude to the strategy of not allowing a firm to become dependent on key contact boundary spanners in the first place. I believe that the phenomena are much more complex. Drawing from an organizational learning perspective that posits learning as a multi-level process (individual-group-organizational) that occurs within firms, I extend this framework to interfirm relationships. I contend that interfirm relationships involve learning that also involves a multi-level process.

Crossman, Lane and White (1999) describe organizational learning as a framework involving the "4 –i's": intuiting, interpreting, integrating, and institutionalizing. They contend that intuiting and interpreting occur at the individual level, integrating occurs at the group level, while institutionalizing happens at the organizational level. If this is true for interfirm relationships, individual relationship equity is more important for relationship survival at the intuiting and interpreting stage, while firm equity is more important at the integrating stage.

Figure 5 Moderating Effect of Relationship Equity-Firm

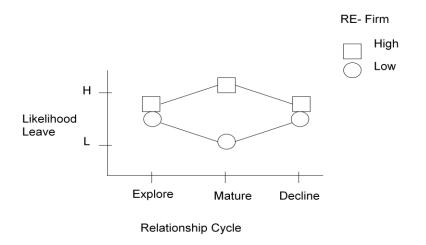
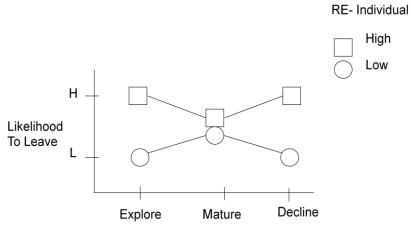


Figure 6 Moderating Effect of Relationship Equity-Individual



Relationship Cycle

A convergent view of the intuiting and interpreting stage comes from Ring and Van de Ven (1994), who describe the role of interpersonal relationships in 1) defining the degree of uncertainty in the relationship, 2) specifying the extent that trust plays in resolving conflicts, and 3) defining the expectations of efficiency and equity in the relationship. The moderating impact of relationship equity at different stages of the relationship lifecycle is identified in Figure 5 and Figure 6.

Following the organizational learning framework (Crossan, Lane, and White 1999) and suggestions by Ring and Van de Ven (1994), the process of intuiting and interpreting occur at the exploration stage. Consequently, the impact of the individual boundary spanning key contact employee will have a greater impact at the exploration stage than the maturity phase. This analysis leads to the following hypotheses:

 $H7_a$: Firm relationship equity will have less impact on switching intentions at the exploration stage compared to the growth/maturity stage.

H7_b: Firm equity will have less impact on switching intentions at the decline stage compared to the growth/maturity stage.

 $H8_a$: Individual boundary spanner equity will have greater impact on switching intentions at the exploration stage compared to the growth/maturity stage.

H8_b: Individual boundary spanner equity will have greater impact on switching intentions at the decline stage compared to the growth/maturity stage.

Chapter 4: Methodology

Research Context and Design

The research context consists of buyers from firms in industrial markets. The target respondents are from member firms of the Institute of Supply Management (ISM). Utilizing a membership list provided by ISM, a three three-wave mailing approach was conducted to contact potential respondents. This approach utilized a professionally designed postcard and directed targets to an Internet landing page, allowing them to complete the survey online or request a hard-copy survey via postal mail (see appendix B for examples). Respondents were offered both a summary of results and entry into a raffle to elicit a response.

To confirm the respondent's status as a key and knowledgeable informant, the survey contained two selection questions asking whether the respondent was in fact in a buying/procurement position and whether he or she had knowledge of and/or responsibility for a specific vendor relationship. The online survey will not allow respondents to proceed if the responses to either of these questions is "no."

While the study of the development and processes involved in business relationships is best completed under longitudinal designs, this methodology is almost impractical outside of a case study or small research sample approach (Anderson 1995; Narayandas and Rangan 2004). Sample attrition, unrealistic expectations of industry participation and difficulty in the correct timing of questionnaires leads Anderson (1995) to propose cross-sectional designs over longitudinal designs. In the absence of longitudinal design, Anderson (1995) suggests a multisampling approach to appropriate segments across the relationship lifecycle. Therefore, this research consisted of a cross-sectional, multi-sampling approach to correspond with stages of the relationship lifecycle.

Study Design Approach

Phase 1 In-depth interviews: The first phase of the research process consisted of telephone interviews with senior managers of buying firms for the purpose of measure validation and confirmation of the nomological net. The measures used in this dissertation were refined to match the needs of the firms through personal in-depth interviews (a detailed description of these interviews can be found in Appendix A). Through these personal interviews, existing scales were refined to match the verbiage of the participating firms. Four personal interviews were conducted with individuals in senior buying roles.

The field interviews commenced with four semi-structured interviews with managers; the interviews were designed to provide a broad understanding of the role individuals and teams play in interfirm relationships. As such, I tried to represent both the "buyer" side and the "seller" side. The buyer side included two professional, active buyers. The "seller" side included a former professional buyer who now represents the product side (he now sells to buyers) and a managing partner of a professional services firm that deals mainly with personnel deployment issues.

Each of these semi-structured interviews began with contrasting statements of the importance of individuals in interfirm relationships. To begin, I read the following statements and asked the respondents for their reaction to these statements:

Based on your experience with customers (suppliers), please comment on the following statements:

- **Perspective #1**: Sometimes a key employee walks out the door and customers follow. Management needs to develop a bond with the customer that is so broad and deep it supersedes any one employee. This can be accomplished through rotation of employees, the use of selling teams and the standardization of procedures.
- **Perspective #2**: Sometimes a relationship is created and sustained *because* of a key contact employee. In this case, the interpersonal relationship, personal knowledge of the customer and the decision-making authority vested in the individual is responsible for the relationship success. Diluting this relationship through rotation of employees, the use of teams and standardization of procedures would adversely impact the customer relationship.

After discussing the fit of the previous statements in relationship to their business, I presented my research model and probed for nomological validity from the respondents. All of the interviewees commented on the importance of these issues in their business and all gave me highly constructive feedback to guide this research. A common theme arising from these discussions was the importance of the product or brand standing behind that product. One respondent even suggested that strong products can make up for "lousy" service, and product quality played a big role in his view of the importance of vendor relationships. On the seller side, the interviewee strongly concurred that relationship structure is a very salient topic within his firm. Upper management regularly discusses "risk mitigation" strategies in their meeting in order to reduce the dependence of individuals on the overall firm strategy.

Overall, all interviews agreed that the research and model are of concern and relevance to their business, thus confirming nomological validity. In addition, they were helpful in guiding the wording and flow of the actual survey instrument. Four interviews were conducted; three of those interviews took approximately one hour, and the fourth interview lasted 1.5 hours.

Phase 2 Customer surveys: The second phase of the research project, which consisted of postcards with instructions on how to complete the survey, was sent to member firms of the ISM. This survey consisted of a cross-sectional design from multiple industries and buying functions. Following the Total Design Method (TDM) established by Dillman (2000), the survey was sent in multiple waves. Three notices were utilized. Within two weeks of the initial notification, a reminder postcard was sent, and 10 days later the final reminder was sent. All surveys were sent via US postal mail.

Measures and Instrument Development

Following scale development procedures (Churchill 1979; Gerbing and Anderson 1988), an initial item pool was created from published scales. Through interviews with industry experts, the items proposed were presented for review and input. Through the interview process, new scales were introduced based on respondent feedback. All of these scales are included in the appendix.

Most of the constructs utilized in this study have substantial measurement history. New scales are identified as such. Following are descriptions of the measurement scales (left to right following the research model).

Firm Boundary Spanning Structure

Firm boundary spanning structure is designed to measure the use of teams in boundary spanning relationships. The scale is based on work by Workman, Homburg and Jensen (2003). The measure utilizes a Likert-type scale with seven points anchored by "strongly disagree" (1) to "strongly agree" (7). Examples of items include: 1) The vendor makes most of their decisions by teams, and 2) The vendor uses teams to plan and coordinate the activities for this account. Programmability

The measure of programmability is based on existing work by Eisenhardt (1998). The scale is measured from the buyer's perception of the product or services provided by the vendor. The items use a seven point Likert-type scale with slight variations of each anchor. Therefore, the anchor points are embedded into each question's descriptions. For example:

- If your key contact employee were to take an extended leave, someone else could jump right in and take over
- Any team member could take over the duties of the key contact employee if he or she was away
- It would take someone a long time to learn the job of the key contact employee The tasks of the key contact employee are routinized

Measurability

Measurability is a new scale culled from the compensation literature involving boundary spanner control systems. Anderson and Oliver (1987) identify two types of control systems that include behavior-based versus outcome-based controls. Behavior-based control is characterized by high levels of subjective measurements, considerable managerial monitoring of behaviors and an emphasis on the process, rather than on the outcome. Conversely, outcome based controls utilize objective measures of performance (when available) and relatively little monitoring of boundary spanners. This measure uses a 7 point Likert-type scale that includes similar but unique anchors for each question.

- To what extent does the vendor firm look to you for feedback on the performance of the key contact? 1. Minimal feedback, 7. Extensive Feedback.
- To what extent do you believe your key contact is measured by behaviors rather than outcomes (e.g. sales). 1. Mostly outcomes, 7. Mostly Behaviors

Autonomy

Autonomy is a related measure to measurability, in that is attempts to quantify the extent to which supervisors monitor their subordinates' behaviors. However, the difference is that measurability identifies the availability or absence of objective performance indicators, whereas a boundary spanner could be autonomous even without the availability of objective performance measures. This measure uses a 7 point Likert-type scale using strongly disagree and strongly agree as anchors. Examples of this measurement include:

- Their supervisor stays in close contact with them.
- Their supervisor rarely asks for information on how they are doing (R)

Relationship Lifecycle

In terms of business relationships, the relationship lifecycle refers to the distinct, usually predicable, behaviors, processes and orientations that occur between firms over time. While there are several conceptualizations of these stages, previous research refers to a form of exploration,

maturity and dissolution. Following Jap and Ganesan (2000) and Dwyer, Shur and Oh (1987), key characteristics are easily identified at each stage, and respondents will be asked to identify the current stage of the relationship with the vendor in question based on these characteristics. These relationship lifecycle stages are identified below:

Relationships typically evolve through a number of phases. Which of the following best describes your relationship with the salesperson or firm?

- **Exploration**: You both are discovering and evaluating goal compatibility, integrity, and performance of the other, as well as potential obligations, benefits, and burdens involved with working together on a long-term basis.
- **Buildup**: You both are receiving increasing benefits from the relationship, and the level of trust and satisfaction is growing in such a way that you are increasingly willing to commit to a long-term relationship.
- **Maturity**: You both have an ongoing, long-term relationship in which both parties receive acceptable levels of satisfaction and benefits from the relationship.
- **Decline**: One of both of you have begun to experience dissatisfaction and are considering alternatives, contemplating relationship termination, or beginning to end the relationship.
- **Deterioration**: One or both of you have begun to negotiate terms for ending the relationship and/or are currently in the process of dissolving the relationship.

Switching Intentions

The cost of switching relationships has been studied extensively in the marketing literature (Burnham, Frels, and Mahajan 2003; Jap and Ganesan 2000). However, switching costs may inhibit the actual impact at the loss of a key contact boundary spanning relationship. Based on the concept of switching intentions (Crosby, Evans, and Cowles 1990), a new scale is introduced to measure switching intentions, rather than actual switching costs. Using a Likerttype scale with highly unlikely to highly likely as anchors, the following example will be utilized to measure switching intentions:

How likely are you to continue doing business with the vendor in the following circumstances? 1. My key contact leaves for a competitor; 2. My key contact leaves and goes outside the industry; 3. My key contact begins to "drop the ball" on my account.

Control variable:

One factor that could impact the types of relationships held by buying firms is the experience of the buying agent. Therefore, buying experience (in years) was included as a control variable.

Phase 2 Data Collection Procedures

The second phase of the research project consists of mailers inviting prospective respondents to take a paper or internet survey and was sent to members of Institute of Supply Management (ISM). ISM provided a list of active members from US-based companies with title 1, 2, and 3 and SIC codes 280, 360, 390, 730, & 890. Titles 1, 2, and 3 include all levels of buyers in their membership roster and translate as follows: Title 1: Vice President, Director of Purchasing; Title 2: Purchasing Manager, Materials Manager, Supervisor, Senior Buyer; Title 3: Buyer, Associate Buyer, and Purchasing Agent. The titles were used by firms within the SIC code and were randomly chosen, with the number of firms within each SIC code distributed evenly at around 1000 each.

Key informant status was obtained through several means. First, being current members of the ISM ensured that these contacts were very likely in procurement roles. Second, all contact titles related to buying positions. Finally, two levels of confirmation were included in the contact deployment to ensure that sufficient and relevant relationship knowledge was present. The initial mailing began by asking the following two qualifying questions: 1) Are you in a buying/procurement position?; and 2) Do you manage at least one vendor relationship? The postcard then directed respondents to the web-site if they answer yes to these questions. An additional check of key informant status is provided by the first two questions of the online survey, which required an affirmative response to the above questions before respondents could proceed.

Survey Response

There are several ways to view the survey responses. I mention this because this survey was not a traditional survey, as it integrated several qualification steps as well as integrating paper and internet response options. First, I will report the traditional numbers (e.g. firms contacted to final responses), then I will report several metrics that integrate web and paper responses as well as qualification ratios.

The initial mailing list from ISM contained 5000 member names. To increase the accuracy of the mailing addresses and identify non-viable addresses, the mailing list was certified through US postal service software CASS. CASS is a certification system from the United States Postal Service (USPS) that standardizes mailing addresses (to increase delivery accuracy) and removes invalid addresses. The initial run through CASS removed 274 non-viable addresses to reduce the initial mailing to 4726 names. An additional 199 mailers were returned as undeliverable, producing 4527 usable names. The first mailing produced 41 responses, the

second mailing produced 36 responses and the final mailing produced 27 responses, for a usable n of 104 and a response rate of 2.3%. While this response rate is low compared to traditional interfirm relationship surveys, there may be several reasons for this trend. For purposes of this dissertation, the research reporting was cut off one week after the third mailing, with new responses still arriving. Based on the trend that has occurred since the cutoff date, I expect the final responses to be closer to 200 completed responses, about a 4% effective response rate. Additionally, this survey process deployed several steps to qualify respondents via a web-based landing page and internet and hard copy survey options, as well as opt-out options. These results are discussed and reported next.

It should be noted that none of the mailings contained the actual surveys. To complete the survey, the respondent had to request a hard copy or go to the web landing page to take the online version. The first mailing included a detachable business reply postcard that potential respondents could simply return to initiate a hard copy request (see appendix B for landing page and postcards). The respondent could also go to the landing page and request a hard copy by inserting their unique ID number on the postcard, or they could take the survey online by clicking a link on the web page. The two subsequent mailers did not include a tear-off business reply card, only the option to go to the landing page.

As of the cutoff date, 166 unique visitors came to the landing page. An additional 22 postcard requests arrived via the initial tear off business reply card. Thus, the total sample could be considered to be 188 (although there is no way to tell if the respondents who returned the business reply card also visited the landing page). Out of the sample of 188, 117 surveys were submitted, with 13 surveys rejected for incomplete data, for an effective response rate of 55%.

Of those completed surveys, 83 completed the survey online (where all of the incomplete surveys were received as well), and 21 were returned via hard copy. The returned hard copy surveys came from 27 total requests for an 83% effective response rate.

To address the potential for nonresponse bias, I used the procedure outlined by Armstrong and Overton (1977) to measure the difference in early and late responders. Data was split into two groups based on response date and *t-tests* were conducted to determine whether any significant differences in key variables were found in the data. No significant differences were discovered. Table 2 outlines the mean scores of key variables in the data based on early and late respondents.

Construct	Mean Early	Mean Late	Difference (at $\alpha =$
	Score	Score	.05)
Teams	4.28	4.73	Not Significant
Programmability	3.76	4.08	Not Significant
Measurability	3.81	3.97	Not Significant
Autonomy	4.57	4.45	Not Significant
Individual Equity	5.33	5.47	Not Significant
Firm Equity	5.21	4.91	Not Significant
Likelihood to Stay	5.54	5.15	Not Significant

Table 2 Non Response Bias

The information and statistics presented in chapter four provide evidence that informants are knowledgeable and capable to adequately report on their buying relationships as well as support of a sufficient sample for this research. Therefore, it is reasonable to conclude the resulting data are valid and suitable for this research. Chapter five provides descriptions of measures purification and validation and results of the hypotheses testing.

Chapter 5: Data Analysis and Results

Measure Purification and Validation Description

The validity and dimensionality of the reflective constructs were analyzed by performing a confirmatory factor analysis (CFA) with maximum likelihood estimation. Items were deleted based on high cross loadings in order to improve the model fit (Gerbing and Anderson 1988). The fit was validated through a measure of Chi Square and comparative fit index (CFI), as well as root mean square of approximation (RMSEA). Finally, a test of reliability was calculated for each construct, with the intent that all scales will exhibit scores exceeding the .7 norms set by Nunnally (1978).

Reliability:
$$\frac{(\Sigma\lambda i)^2}{(\Sigma\lambda i)^2 + \Sigma\Theta ii}$$

Overall, I utilized the CFA model to indicate that my constructs possess satisfactory psychometric properties. Once psychometric properties were confirmed, all items of the constructs were summated, and construct scores were used in the regression analyses.

Additional tests of discriminant validity were performed. First, I compared the square root or the average variance extracted for each construct with its correlations with the other constructs (Fornell and Larcker 1981) using the following formula:

Average Variance Extracted:
$$\frac{\Sigma\lambda i^2}{\Sigma\lambda i^2 + \Sigma\Theta ii}$$

A correlation matrix is presented where the square roots of the average variance extracted values are calculated for each of the constructs along the diagonal. The objective is to show that all values representing the square root of average variance extracted are substantially greater than all other correlations. Second, through an examination of the cross-loadings (through a principal

component analysis), I hope to show that no item will load more highly on another construct than it did on the construct it is intended to measure. Overall, I looked for cross-loadings to be minimal (less than .3).

Hypothesis Testing Description

The hypotheses were tested by performing a covariance based moderated regression, with switching intentions as the dependent variable. Following the procedure suggested by Aiken and West (1991), the control variables will be entered first, followed by the main effects, and then the two-way interaction terms. All the interacting predictors will be centered, and the interaction terms will be created by multiplying the centered predictors (Cohen, Cohen, West, and Aiken 2002). This procedure is recommended because it eliminates multicollinearity between the predictors. The final results of the regression analyses will be displayed in a separate table. For parsimony's sake, only the standardized coefficients will be presented.

Results

Measure Purification

Prior to performing a confirmatory factor analysis model, I explored the unidimensionality of the measures using Exploratory Factor Analysis(EFA). Several items were dropped based on cross-loadings and low item-total correlations (below .5). These measures include four items of individual equity (Vi4, Vi5, Vi6, and Vi7), two items from firm equity (VF5 and VF7), one item from measurability (MB4), and two items from autonomy (AT3 and AT4) (see Tables 3 and 4). The initial measure purification was completed in SPSS 15 utilizing Principal Component Analysis with Varimax Rotation.

Table 3 Measurement Model Items and Factor Loadings

Construct Factor		
<u>Use of Teams</u> Thinking about the relationship with your specific vendor, please rate the extent to which you agree with the statements below:		
When there is a problem related to this account, my vendor brings in a group to solve it.	.86	
The vendor makes most of their decisions by teams.	.70	
The vendor uses teams to plan and coordinate the activities for my account.	.83	
<u>Programmability</u> Thinking of the tasks and the job that the key contact employee is performing, indicate your level of agreement with the following statements:		
If your key contact employee were to take an extended leave, someone else could jump right in and take over	.78	
Any team member could take over the duties of the key contact employee if he or she was away	.87	
It would take someone a long time to learn the job of the key contact employee	.65	
The tasks of the key contact employee are routinized	.73	
<u>Measurability</u>		
To the best of your knowledge, indicate your level of agreement with the following statements:		
The performance of the key contact employee is measured mostly based on his or her level of sales	.75	
The compensation of the key contact employee is 100% commission based	.78	
The vending firm rarely checks with me for feedback on my satisfaction with the key contact employee	.70	
The performance of the key contact employee is easy to measure for the vending firm.	dropped	
Autonomy		
Based on your interactions with your key contact, please answer the following questions based on your	our	
assessment of their interaction with management.		
Their supervisor makes sure everyone knows what to do and how to do it	.75	
Their supervisor stays in close contact with them	.80	
Their boss rarely asks me for information on how they are doing (R)	dropped	
They don't have much contact with their company's management. (R)	dropped	
Management there stays very well informed of key contact's activities	.85	
They are subject to very little direction from our company's management. (R)	.81	

¹ All items were measured using seven-point scales anchored by 1= "strongly disagree" and 7 "strongly agree" unless otherwise indicated

Construct	Factor Loadin	
<u>Firm Equity</u>		
Please answer the following questions about your relationship with the firm by c	ircling	
your answer in the scale below		
The relationship with this firm is worth a lot to my organization.	.82	
My firm highly values its relationship with this firm.	.82	
The relationship with the firm is particularly valuable for us.	.88	
The bond we have developed with this firm is strong.	.74	
Our relationship with this firm is beyond basic procurements.	dropped	
The relationship I have with this firm is very productive	.64	
This firm is very easy to work with.	dropped	
Individual Equity		
Please answer the following questions about your relationship with the individua	ıl key	
contact by circling your answer in the scale below:	2	
The relationship with this key contact is worth a lot to my organization.	.88	
My firm highly values its relationship with this key contact	.82	
The relationship with the key contact is particularly valuable for us.	.83	
The bond we have developed with this key contact is strong.	dropped	
Our relationship with this key contact is beyond basic procurements.	dropped	
The relationship I have with this key contact is very productive	dropped	
This key contact is very easy to work with.	dropped	
Likelihood to Leave*		
How likely are you to continue doing business with the vendor in the following circumstar	ices?	
My main contact leaves for a competitor	.86	
My main contact leaves and goes outside the industry		
My main contact begins to "drop the ball" on the account	.73	
*Likelihood to Leave scale was anchored by 1 "very likely" and 7 "very unlikely"		

Confirmatory Factor Analysis

Measure Validation

The validity and dimensionality of the reflective constructs were assessed by performing a confirmatory factor analysis (CFA) with maximum likelihood estimation. In order to meet the minimum recommendation of 5 observations per parameter, including the error term as well as path coefficients (Bentler and Chou 1987), two CFA models were created. The first model included the use of teams (3 items), programmability (3 items), measurability (3 items) and autonomy (4 items). The second model, which is the right side of the model, includes the antecedents to likelihood to stay, and include firm equity (5 items), individual equity (3 items) and likelihood to stay (3 items). The results of the confirmatory factor analysis are displayed in Table 5.

Measurement	Range of	Construct	Average	CFI	RMSEA	X2 (d.f.)
Model	Standardized	Reliability	Variance			
	Factor Loading		Extracted			
Use of Teams	.7683	.66	.65	.94	.07	87.97 (59)
Programmability	.5184	.66	.53			
Measurability	.5265	.33	.33			
Autonomy	.6089	.81	.64			
Value-Firm	.7892	.89	.75	.92	.13	114.57
Value- Individual	.8692	.85	.77			(41)
Likelihood to	.6892	.72	.65			
Leave						

Table 5 Confirmatory Factor Analysis Results

In order to test the model fit, I performed tests of chi-square (χ^2) goodness of fit, comparative fit index (CFI) and root mean square error of approximation (RMSEA). The chisquare measures the null model with the hypothesized model. A significant chi-square signifies the hypothesized model is significantly different from the null model. While the chi-square should be considered the first step in testing the model, it may be sensitive to sample size and therefore additional fit tests are suggested (Byrne 2006). The comparative fit index (CFI) also compares the hypothesized model with the null model and adjusts for sample size. Scores for the CFI range from 0.0 to 1.0 with a value greater than .90 indicating an acceptable fit to the data (Bentler 1990). A third measure of goodness of fit is the root mean square error of approximation (RMSEA). The RMSEA is used in conjunction with the chi-square statistic due to the potential for the chi-square to reject a model based on sample size. The RMSEA gives an approximation of fit expected if the model were drawn from the population (Bentler 1990). RMSEA values ranging from .05 to .08 are considered acceptable.

The first model, which include the antecedents to relationship equity (use of teams, programmability, measurability and autonomy), exhibited an acceptable fit with a χ^2 of 87.97 (df = 59, p = .000), a comparative fit index (CFI) of .94, and a root mean square error of approximation (RMSEA) of .07, with a 90% interval of .04 to .098. The second model, which include the antecedents to likelihood to stay (firm and individual equity), demonstrated a marginal fit with a χ^2 of 114.51 (df = 41, p = .000), a comparative fit index (CFI) of .92, and a root mean square error of approximation (RMSEA) of .13, with a 90% interval of .10 to .16.

In the models, all loadings of the constructs are substantive and significant (all p's < .001). Indeed, all loadings are greater than the .6 value, with the exception of measurability and

programmability. One item for programmability measured .51 and two items for measurability loaded at .53 and .55. Otherwise, most loadings measured at .7 or higher with one measure from autonomy loading at .60 and another measure from measurability loading at .65. In addition, the covariances were significantly less than one, and the average variances extracted exceeded .5 for all constructs, with the exception of measurability (see discussion this paragraph). Finally, construct reliability was calculated for each construct, with the goal of each scale exhibiting scores exceeding the .7 norms set by Nunnally (1978). The construct for measurability proved to be unreliable, obtaining a loading of .33. I believe this was a faulty measure for 3 reasons: 1) it is a newly created scale and was not subjected to sufficient pre-testing, and 2) the scale items ask the buyer to rate the seller on items that may not be readily identifiable and 3) I did not provide the option of *not applicable*. Ideally, this question should be asked directly to the sellers, rather than leaving the interpretation up to the buyer side of the relationship. Additionally, the use of teams and programmability showed marginal reliability with loadings of .66 each.

Aside from the low loadings on the measurability scale, the overall CFA model indicates that these constructs possess satisfactory psychometric properties. As a result, the items of the constructs were summated, and construct scores were used in the regression analyses.

Table 6 presents the correlation matrix where the square roots of the average variance extracted values are calculated for each of the constructs along the diagonal (in bold characters). As shown, all values representing the square root of average variance extracted are substantially greater than all other correlations. Second, an examination of the cross-loadings (through a principal component analysis) showed that no item loaded more highly on another construct than it did on the construct it is intended to measure. Overall, cross-loadings were found to be minimal (less than .3).

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	Mean	SD	TM	PG	MB	AT	VF	Vi	LS	EXP
Teams (TM)	4.48	1.48	.81							
Programmability (PG)	3.90	1.00	.17	.73						
Measurability (MB)	3.88	1.28	15	.033	.57					
Autonomy (AT)	4.51	1.11	.28**	.031	46	.80				
Firm Equity/Value (VF)	5.08	1.27	.50**	08	08	.49**	.87			
Individual Equity/Value (Vi)	5.40	1.22	.28**	10	.00	.10	.41**	.88		
Switching intentions (LS)	5.36	1.18	.27**	10	06	.10	.27**	.38**	.81	
Experience (EXP)	15.22	8.45	.21*	18	.11	.17	06	.163	.02	-
Note 1: *p<.05; and **p<.01 (two-tailed distribution).										
Note 2: Figures on the diagonal represent the square root of the average variance extracted.										

Table 6 Descriptive Statistics Correlation Matrix

Hypothesis Testing

Following analysis of factors and the latent variables, hypothesis testing was performed using ordinary least squares (OLS) regression in SPSS 15. Four models were created to test the hypotheses. The first model regressed the following independent variables: 1) use of teams; 2) programmability; 3) measurability; and 4) autonomy with the dependent variable "firm equity." The second model contained the same independent variables, all of which regressed on the dependent variable of individual equity. The third model regressed firm equity and individual equity on switching intentions, while the fourth model tested the interaction effect of relationship lifecycle on the relationship between firm and individual equity with switching intentions. All models included the control variable of buying experience (in years).

All of the interacting continuous predictors were mean centered (this procedure is recommended because it eliminates multicollinearity between the predictors), and the interaction terms were created by multiplying the mean centered predictors with the dummy variables (Cohen, Cohen, West, and Aiken 2002). I created two dummies variables that capture the exploration stage and the decline stage; the category maturity was used as the reference group. Aiken and West (1991) also suggest that when a significant moderator is found, the interaction effect should be plotted to understand its nature or meaning. I plotted the predicted value of likelihood to stay for values between +/- 1 standard deviation for the continuous variables (i.e., relationship life cycle), I used values of 0 or 1 to represent the stage of interest. The final results of the regression analyses are displayed in Table 7 and Table 8.

Table 7 Regression Analysis Models 1 and 2

	Model 1: Firm Equity			Model 2: Individual Equity		у
	Beta	T-value	р	Beta	T-value	р
Control Variable						
Buying Experience (EXP)	04	-3.10	.00**	.01	.76	.44
Main Effects:						
Teams (TM)	.41	5.85	.00**	.23	2.70	.01**
Programmability (PG)	26	-2.64	.01*	16	-1.38	.17
Measurability (MB)	.05	.08	.54	.04	.40	.69
Autonomy (AT)	.46	5.23	.00**	.02	.17	.85
	$\mathbf{R}^2 46$	%		$R^2 10^{\circ}$		

Table 8 Regression Analysis Models 3 and 4

Dependent Variable- Likelihood to Stay								
	Model 1: Main Effects			Model 2:				
				Interaction Effects				
	Beta	T-value	р	Beta	T-value	р		
Control Variable								
Buying Experience (EXP)	.00	.01	.99	.00	.23	.81		
Main Effects:								
RLF-Exploration ^a	.37	1.48	.14	.58	2.21	.03*		
RLF- Decline ^a	15	05	.96	.05	.14	.88		
Firm Equity/Value (VF)	.10	.98	.32	36	-1.59	.12		
Individual Equity/ Value (Vi)	.30	2.93	.00**	1.06	3.84	.00**		
Interaction Effects								
VF X RLF-exploration				.22	.55	.59		
VF X RLF-decline				.52	1.94	.06		
Vi X RLF-exploration				57	-1.40	.17		
Vi X RLF-decline				94	-2.95	.00**		
	\mathbf{R}^2 18	%		R² 26%				

Note: * p < .05; and ** p < .01 (one-tailed distribution; df = 103). ^a Relationship Life Cycle (RLF) Maturity stage is the reference group

Hypothesis Testing: Direct Effects

Hypothesis 1ab

H1: Firm boundary spanning structure (high in team, low in individual) is positively related to: a) firm relationship equity; firm boundary spanning structure (high in individual, low in team) is positively related to: b) individual relationship equity.

The first hypothesis concerns the relationship between the use of teams and the resulting impact on firm and individual equity. H1a suggests that the use of teams results in higher levels of firm equity, supported (b=.41, p = .00). H1b, which suggests that the use of teams results in higher levels of individual equity, is also supported (b=.23, p= .01). This finding is in line with the notion that teams increase collaboration and interaction amongst firms (Perry, Pearce, and Sims 1999), which in turn increase the individual and firm relationship equity levels.

Hypothesis 2ab

H2: Boundary spanning characterized by high levels of programmability is negatively related to: a) firm relationship equity; and b) individual relationship equity.

The second hypothesis concerns the relationship between programmability and the resulting impact on the firm and on individual equity. H2a, which suggests high levels programmability, results in lower levels of firm equity, as supported by the following equation: (b=-.26, p=.01). H2b, which suggests that high levels of programmability results in lower levels of individual equity, is not supported, although results are directionally consistent (b=-.16, p= .17). The direction of the results confirms that tasks that are programmable reduce the need for interpersonal interaction, thus reducing the interaction between the firm and boundary spanner.

However, more analysis is needed to understand the non-significant findings of the levels of programmability and its impact on individual equity.

Hypothesis 3ab

H3: Boundary spanning characterized by measurable outcomes is negatively related to: a) firm relationship equity; and b) individual relationship equity.

The third hypothesis concerns the relationship between measurability and the resulting impact on firms and individual equity. H3a, which suggests that high levels of measurability results in lower levels of firm equity, is not supported (b=.05, p = .54). H2b, which suggests that the use of teams results in higher levels of individual equity is not supported (b=.04, p= .69). Research suggests that high levels of measurability reduce the need for behavioral monitoring, and thus less management intervention (Anderson and Oliver 1987) which in turn impact cooperation and interactions leading to decreased firm and individual equity. The current research does not support this proposition.

Hypothesis 4ab

H4: High levels of boundary spanner autonomy are positively related to: a) firm relationship equity; and b) individual relationship equity.

The fourth hypothesis concerns the relationship between autonomy and the resulting impact on firm and individual equity. H4a, which suggests that higher levels of autonomy result in higher levels of firm equity, is supported (b=.46, p = .00). H4b, which suggests that higher levels of autonomy result in higher levels of individual equity, is not supported (b=.02, p= .85). Peccei and Rosenthal (2001) suggest higher levels of autonomy increases the active role a boundary spanner assumes in an interfirm relationship. This research leads to an increase in firm equity from autonomy, but not individual equity.

Hypothesis 5ab

H5: Firm relationship equity is negatively related to switching intentions after turnover.

Hypothesis 5 suggests that when the customer has a high level of relationship equity with the vendor, the customer will be less likely to leave the firm relationship if the key contact does not fulfill their obligations. This hypothesis is not supported (b=.12, p=.20). This hypothesis fails to support the notion that a strong firm relationship may mitigate the adverse actions of the individual boundary spanner.

Hypothesis 6ab

H6: Individual relationship equity is positively related to switching intentions after turnover.

Hypothesis 6 suggests that when the customer has a high level of relationship equity with the individual they will be more likely to leave the firm relationship if the key contact does not fulfill their obligations. This hypothesis is not supported, even though it was significant in the wrong direction (b= .32, p= .002). The finding, which is surprising, suggests the stronger the relationship with the individual, the *less* likely the customer is to leave if the boundary spanner leaves. The unexpected direction could be the result of spurious relationship in which a confounding factor is not accounted for. Further research on this hypothesis is warranted.

Hypothesis Testing: Moderated Effects

The next step for the hypothesis testing is to understand the potential moderating impact of the relationship lifecycle on the likelihood to stay. To accomplish this, I first had to ensure that a sufficient response rate for each category of relationship lifecycle was received. This was a concern since I did not force respondents to choose a relationship in a particular category. Out of the 104 responses, 23 identified the exploration stage, 21 identified the buildup phase, 24 identified the maturity phase, 35 identified the decline phase and 1 response identified the deterioration phase. Following the lead of Jap and Anderson (2007), I combined the decline and deterioration phase, since there was only one case that fell into the deterioration phase, and those cases share similar attributes. Upon reflection, the exploration and buildup phases also contain similar attributes, so those cases were combined as well. Consequently, the final categories consisted of: exploration (44 cases); maturity (24 cases); and decline (36 cases). To test the interactions, I created a dummy variable for maturity as the comparison stage. This follows my theoretical predictions that difference would occur between exploration and maturity as well as maturity and decline. Aiken and West (1991) also suggest that when a significant moderator is found, the relationship should be assessed between the independent and dependent variable for +/-1 standard deviation to understand the exact nature of the moderations (Tables 7 and 8). It should be noted that even though the exploration \rightarrow maturity stages were not significant, I still plotted them to understand the directional impact of these variables. All of the interacting predictors were mean centered, and the interaction terms were created by multiplying the mean centered predictors (Cohen, Cohen, West, and Aiken 2002).

As suggested by Baron and Kenny (1986), a moderator is a variable the affects the direction and/or strength of the relationship between the independent and dependent variables.

As such, this research predicts different stages of the firms' relationship will impact the strength of the relationship between the independent variables firm and individual equity and the depended variable likelihood to stay. Using the mature stage of the relationship lifecycle as the reference group, I compared the strength of the exploration and decline stage and its impact on the firm and individual equity \rightarrow likelihood to stay relationship.

Table 7 depicts the expected and actual results of the moderated relationship of firm equity on likelihood to stay and Table 8 predicts the expected and actual results of individual equity on likelihood to stay. The specific expectations and results are described below.

Hypothesis 7ab

 $H7_a$: Firm relationship equity will have less impact on switching intentions at the exploration stage compared to the growth/maturity stage.

This hypothesis suggests that the exploration stage of the relationship lifecycle will have a greater impact on the firm relationship equity \rightarrow switching intention relationship than the growth/maturity stage. This hypothesis is not supported (b= .40, p= .32). While directionally correct, these results do not support the contention that interpersonal relationships are more important at the beginning stages of a relationship.

H7_b: Firm equity will have less impact on switching intentions at the decline stage compared to the growth/maturity stage.

This hypothesis suggests that the decline stage of the relationship lifecycle will have a greater impact on the firm relationship equity \Rightarrow switching intention relationship. This hypothesis is supported (b= .56, p= .04). This hypothesis supports the contention that firm relationships are less important at the decline phase of a relationship as shown in the plotted interaction in Table

7. Firm equity is important during the mature phase of the relationship, but has less impact on the customer switching intention at decline phase.

Hypothesis 8ab

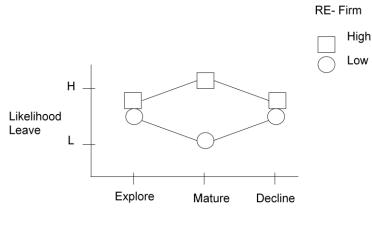
H8_a: Individual boundary spanner equity will have greater impact on switching intentions at the exploration stage compared to the growth/maturity stage.

This hypothesis suggests that the exploration stage of the relationship lifecycle will have a greater impact on the individual relationship equity \rightarrow switching intention relationship. This hypothesis is not supported (b= -.56 p= .18). The moderation expected was that compared to the maturity level, high levels of individual relationship equity at the exploration level would result in customers being more likely to leave the relationship at the chance of boundary spanner turnover. While directionally correct, the study does not support the contention that individual relationships have a greater impact at the exploration stage of the interfirm relationship lifecycle as suggested by social norms theory and relationship lifecycle studies.

 $H8_b$: Individual boundary spanner equity will have greater impact on switching intentions at the decline stage compared to the growth/maturity stage.

This hypothesis suggests that the decline stage of the relationship lifecycle will have a greater impact on the individual relationship equity \Rightarrow switching intention relationship. This hypothesis is supported (b= -.74, p= .02). Related to the above moderation, the study supports the value of individual equity at the advanced stages of the relationship lifecycle. Hence, interpersonal relationships at the decline phase of the relationship lifecycle have a substantive impact on keeping customers in the relationship.

Figure 7 Hypothesis 7ab: Expected and Actual Results



Expected Results

Relationship Cycle

Actual Results

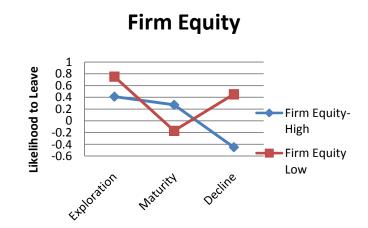
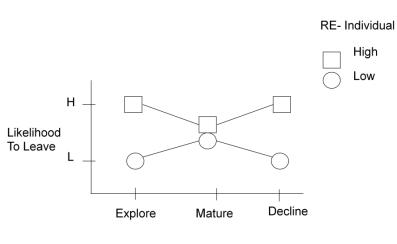


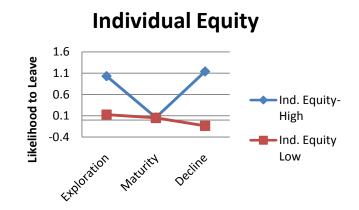
Figure 8 Hypothesis 8ab: Expected and Actual Results



Expected Results

Relationship Cycle

Actual Results



Summary Discussion of Results

Based on the overall results in Table 9, I find mixed support for the hypothesis in the research models. For the antecedents to firm and individual equity, the use of teams seems to be the most reliable predictor of firm and individual equity, as both relationships are supported. Programmability and autonomy also predict firm equity, but not individual equity. Measurability seems to have no impact on firm or individual equity; however the results of the factor analysis and CFA seem to point to a very poor construct (more in the discussion section).

On the right side of the model which includes antecedents to switching intentions and the moderating impact of individual verses firm equity, it seems individual equity has more predictive power than firm equity. The main effect of individual equity on switching intentions and the moderating impact of relationship lifecycle- decline phase are supported. In addition, plotting the interaction effects points to a directionally correct model that is partially supported with firm switching moderated by relationship equity-decline being what some might say is "marginally" significant at .06.

Table 9 Hypotheses Summary

Hypothesis	Hypothesized Path	Hypothesized Direction	Supported?	В	р
1a	Relationship Configuration →Firm Equity	Positive	Yes	.41	.00
1b	Relationship Configuration →Ind. Equity	Positive	Yes	.23	.01
2a	Programmability → Firm Equity	Negative	Yes	26	.01
2b	Programmability → Individual Equity	Negative	No	16	.17
3a	Measurability → Firm Equity	Negative	No	.05	.54
3b	Measurability → Individual Equity	Negative	No	.04	.69
4a	Autonomy → Firm Equity	Positive	Yes	.46	.00
4b	Autonomy →Ind. Equity	Positive	No	.02	.85
5	Firm Equity → Switching Intentions	Negative	No	.12	.20
6	Individual Equity → Switching Intentions	Positive	Yes	.32	.002
7a	Firm Switching Exploration → Maturity	Positive	No	.40	.59
7b	Firm Switching Maturity → Decline	Positive	No	.56	.06
8a	Individual Switching Exploration → Maturity	Negative	No	57	.17
8b	Individual Switching Maturity → Decline	Negative	Yes	94	.02

Chapter 6: Discussion and Limitations

Purpose and Contribution of This Study

In order to understand the strategic deployment of boundary spanning individuals and their impact on customer relationships, this dissertation examines the antecedents of firm and individual equity and the link to interfirm relationship continuity. I drew upon the concept of relational rents created by joint, relationship specific assets between trading partners in the form of human assets. To understand how these assets impact the interfirm relationship, I evaluated the role characteristics of the boundary spanner, the boundary spanners' relationship to firm and individual equity, and their differential impact across the relationship lifecycle. I propose that individual and firm level relationships have different effects on relationship continuity based on phases of the interfirm relationship lifecycle.

A mail and internet survey was deployed to members of a national buying association to examine the role of task characteristics on firm and individual equity. The role of firm and individual equity was then evaluated on the outcome of relationship continuity across the relationship lifecycle. The central contribution of this study is to add to the empirical understanding of the key contact boundary spanning dilemma in interfirm relationships in which firms must weigh the potential dependence of individual contacts versus the costs of deploying teams to manage relationships.

Discussion of Findings

Main Effects

The first model evaluates the antecedents to firm and individual equity and includes the use of teams as well as the boundary spanning role characteristics of programmability, measurability and autonomy. The use of teams evaluates whether the structure of boundary spanner deployment has an effect on the equity held by the firm or individual. Boundary spanning role characteristics assess the attributes of the exchange between firms.

The first hypothesis concerns the relationship between the use of teams and the resulting impact on firm and individual equity. I refer to the use of teams as *Firm Boundary Spanning Structure*. That is, firms decide how to structure relationships with their customers by levels of team interaction. Deploying teams to interact with customers may result in greater collaboration, coordination and cooperation (Perry, Pearce, and Sims 1999). This finding lends theoretical support to Dyer and Singh's (1998) concept of strategic assets in which human assets have the ability to create relational rents. However, the beneficial outcomes of the use of teams result in a higher cost to suppliers (Jones, Dixon, Chonko, and Cannon 2005). Firms must find avenues to weigh the cost/benefit of the use of teams- especially in terms of risk management. In this research, the use of teams supports both an increased in firm equity as well as an increase in individual equity.

Programmability refers to the ability to define and codify behaviors involved in a task. When tasks (or transactions) involve a low level of programmability, meaning that the interactions between firms are difficult to define and codify, a higher level of interpersonal service or human asset specificity is required (Dyer and Singh 1998; Eisenhardt 1988). I also suggest that the nature of knowledge and characteristics of programmability which creates additional value in relationships with programmability is low. High programmability uses explicit knowledge that can be codified and easily passed on; low programmability relies on tacit knowledge that can only be transferred through observation (Grant 1996). Explicit knowledge is easier to codify, and thus easier to transfer and is revealed by its communication, whereas tacit knowledge is only observable through its application. As such within the boundary spanner firm structure, this application comes at a higher cost, which firms can only justify based on specific instances. The hypothesis is empirically justified with firms and is directionally correct, but is not statistically significant, with individuals. However, I believe that with a larger sample, the relationship between programmability and individual equity may become significant.

Measurability, which refers to the availability of equitable measure of performance, turns out to be an unreliable construct and poor predictor for this research. Both predictions for measurability were found to be non-significant. I believe these findings (or lack of findings) was due to a faulty measure for three reasons: 1) it is a newly created scale and was not subjected to sufficient pre-testing; and 2) the scale items ask the buyer to rate the seller on items that may not be readily identifiable; 3) I did not provide the option of *not applicable*. Ideally, this question should be asked directly to the sellers, rather than leaving the interpretation up to the buyer side of the relationship.

Autonomy, which refers to the ability of the individual boundary spanner to make decisions without management intervention, gives mixed and somewhat surprising results. Autonomy, it turns out, predicts increased firm equity, but the prediction of individual equity was not supported. While I hypothesized that autonomy would lead to both firm and individual equity, intuitively autonomy would lead to individual equity which would in turn lead to firm equity. However, the study found that autonomy only leads to firm equity. Future studies may be warranted, but one explanation for this effect would be that in order to reduce dependence, firms allow boundary spanners to make autonomous decisions only when the firm \rightarrow customer relationships are strong to begin with.

The main effects in the second model include the antecedents of the likelihood to stay: firm equity and individual equity. In essence, the proposition that the level of equity between the individual or firm held by the customer may impact their propensity to continue or leave the relationship is the heart of this dissertation. This proposition begs the managerial question of whether firms can follow the advice of Bendapudi and Leone (2002) and decrease the dependence on individual boundary spanners without impunity. The results of this study show that firm equity does not have an impact on the likelihood to stay (b .12, p .20), while individual equity does predict the customers commitment to the relationship (b .32, p .002).

Post-hoc analysis of Hypothesis 5 and 6: Comparison of Beta's

While not included in the formal hypotheses, an important question arose during the course of analysis as to whether firm or individual equity has a greater impact on switching intentions. I suggest that close relationships with individual boundary spanners have a greater impact on the decision as to whether a customer would stay with a firm when that individual leaves the firm. Therefore I propose that individual equity has a greater impact than firm equity on customer switching intentions.

To test this proposition, I followed the suggestion by Cohen, Cohen, Aiken and West (2002) for testing Beta's from different independent variables on a single dependent variable from the *same* sample. To accomplish this test, I first calculated the inverse correlation matrix, validity coefficients and Beta's for the independent variables firm equity and individual equity

and the dependent variable likelihood to stay. I then calculated the difference for the standard error for β_1 and β_2 using the following formula:

$$SE_{\beta 1-\beta 2} = \sqrt{\frac{1-R_y^2}{n-k-1}(ri^{ii}+r^{ii}+2r^{ij})}$$

Then a t value was calculated based on the observed difference in the above equation:

$$t = \frac{\beta_i - \beta_j}{SE_{\beta_i - \beta_j}}$$
 or $11.36 = \frac{.337 - .133}{.017}$

Thus, a t-value of 11.36 p<.01 and the proposition that individual equity has a greater impact than firm equity on likelihood to stay is supported.

Moderated Effects

As suggested by Baron and Kenny (1986), a moderator is a variable that affects the direction and/or strength of the relationship between the independent and dependent variables. As such, this research predicts that different stages of the firms' relationship will impact the strength of the relationship between the independent variables firm and individual equity and the dependent variable of likelihood to stay. Using the mature stage of the relationship lifecycle as the reference group, I compared the strength of the exploration and decline stages and their impact on the firm and individual equity \rightarrow likelihood to stay relationship.

It turns out that the exploration stage is a poor measure of switching intentions for both firm and individual equity, while the maturity phase is in fact predictive. Using the maturity phase of the relationship lifecycle as the control group, the effects of the exploration stage on likelihood to stay was not significant for either individual or firm equity. The effects of the decline phase on switching intentions with firm equity was marginally significant (b .56, p . 06) with a significant finding for individual equity (b -.94, p .02). However, what is interesting and

needs further exploration is that when the interactions are plotted for interpretation all moderation effects are directionally correct. What these results suggest is that the phase of the relationships lifecycle impacts the strength of the independent variables (firm and individual equity) at both the exploration and decline phases of the relationship lifecycle.

Limitations of Study

The results of the dissertation need to be considered with regards to a few limitations. Most of these limitations relate to the data collection methodology deployed for this study. Survey research usually has a few inherent limits that are at best addressed in an attempt to minimize their impact.

First, the cross-sectional nature of the survey limits the ability to make causal inferences. When studying stages of a firm relationship, a longitudinal design is recommended, but this is almost impractical outside of a case study or small research sample approach (Anderson 1995; Narayandas and Rangan 2004). Ideally, to study the phenomenon of interest would be to follow firms across the relationship lifecycle and measure the desired independent variables at each given phase. To minimize this limitation, I utilized a multisampling approach that measures relationships at different stages and makes some assumptions regarding their trajectory, thereby reducing true casual inferences (Anderson 1995).

Another limitation of the methodology deployed with this dissertation is the potential for common method bias. Common method bias occurs when the same informant provides information for both the independent and dependent variable (Podsakoff, MacKenzie, Lee, and Podsakoff 2003). This potential bias could be reduced by collecting dyadic data or obtaining secondary research to support the primary data collection. The collection of dyadic data is planned as the next steps for this current research. Another limitation, related to the above discussion on common method bias, is the manner in which the respondent was asked to make observations about the vendor chosen for the study. The construct of measurability is of particular concern, showing extremely poor reliability and validity. Measurability is drawn from the compensation literature concerning behavior versus outcome compensation. In retrospect, I do not think the key informant is qualified to answer questions about the chosen vendor's compensation. Measurability (or more specifically type of compensation) is not always readily observable outside of the vendor firm. Therefore, as suggested above, the collection of dyadic data is recommended to resolve this issue.

Finally, the relatively low response rate in this study may introduce a nonresponse bias. A nonresponse bias occurs when the respondents to a survey answer differently than those who did not respond (Dillman 2000; Yu and Cooper 1983). Obviously, for this research there is no practical way to know for sure whether nonresponse bias occurred absent of collecting another sample from the survey population and comparing the results. Because of the expense of collecting an additional sample, this step was not undertaken.

Managerial Implications

The focus of managerial relevance of this research falls under the boundary spanning dilemma described in chapter one. Bendapudi and Leone (2002) recommend the rotation of key contact employees and the use of selling teams to reduce the likelihood of customer defection in the event of boundary spanner turnover. However, the competitive advantage held by the firm may be a result of these individual boundary spanner relationships, and following these recommendations may have an adverse impact on relational rents. Therefore, it is important for firms to understand the situational aspects or boundary conditions that exist, and which may

affect the overall customer relationship. In other words, it may not be a question of "if" an employee should be rotated, but "when" and under "what" conditions.

This research has attempted to reconcile, in a managerially relevant fashion, the *when* and *what* conditions. The *when* condition considers timing across the relationship lifecycle. I assessed the difference in likely customer turnover at the exploration and decline phases of the relationship lifecycle. The results empirically confirm the differential impact of individual versus organizational relationships at the decline phase of the relationship lifecycle. At the decline phase, individual relationships were found to reduce the likelihood of defection compared to the firm level relationships. These results can help firms divert organizational resources to customers from the decline phase to the maturity phase. Not only does this save the firm money, but can strengthen the relationship as well.

The *what* condition phase of rotating employees or the use of teams involves the boundary spanning task characteristics of the exchange. Specifically, it can direct firms to evaluate the programmability and measurability of the task and the level of autonomy given to the individual boundary spanner in order to make resource deployment decisions.

Future Research

In a recent meta-analysis on customer relationship management, Palmatier, Dant, Grewal and Evans (2006) suggest reconciliation of the seemingly contradictory outcomes of relationship performance, imploring researchers to further "differentiate the effects of boundary spanners from those with firms" (p.150). I believe the research undertaken for this dissertation takes a modest step towards empirically testing this phenomenon.

However, there are still many avenues that need investigation. The first is the role of dependency on the antecedents to firm and individual equity. This includes the boundary spanner

characteristics of competency as well as the role characteristics of sustainability and centrality (Salancik and Pfeffer 1978) and their impact on firm and individual equity.

Another area of potential research interest and managerial relevance (as confirmed by my qualitative interviews) is the impact of product attractiveness on the firm versus individual equity. Product attractiveness and its impact on interfirm relationships has been evaluated in the consumer packaged goods category (Kaufman, Jayachandran, and Rose 2006), but I believe this avenue of research could also be valuable in more industrial relationships.

Finally, the concept of purchase risk and individual versus firm equity could be relevant for managers and researchers alike. When the decision to purchase a product or continue a relationship is risky, does the buyer rely more on individual relationships or firm level relationships? How does this vary across the relationship lifecycle?

In summary, the study of individual versus organizational relationships across the relationship lifecycle offers much promise for future research. This topic will continue to be a very compelling question for managers, one which will continue to drive research interest.

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APPENDIX A

Qualitative Data Collections: Summary of Interviews

Interview #1

The first field interview was with a merchandise buyer for high-end department store. This buyer is very product focused. He stated a high quality product (or brand) can make up for a lot of shortcomings in the relationship and service attributes. "If the vendor has quality products, the key contact makes no difference in my purchase decision". Much of his buying decisions are based on consumer demand and his products definitely have a lifecycle and continually fall in and out of customers.

Most of his vendors do not have much autonomy. When an issue arises or he needs special attention due to a problem, it is assumed his vendor will involve their management. Hence- most of his vendors have little authority to make decisions. The most they can do is understand his problems in running his business and help him foresee problems before they occur.

Interview #2

This person was interviewed obtain the viewpoint of the "seller" or the person providing services. He is the managing partner of a service based business and in many cases the key contact is the "product". In terms of managerially relevance, upper management at this firm constantly struggles with balancing the effectiveness of the key contact with creating dependency on the key contact with their customers. Upper management calls this "risk mitigation" strategy.

The discussions around reducing risk involve finding ways to involve the entire firm in the relationship rather than relying on the individual key contact. The most popular strategy is to have the key contact initiate the business, then bring in teams to cater to the needs of the customer. The struggle this firm faces (and probably not unlike other similar firms) is how to keep the key contact happy when they begin to bring in teams to manage the account. The more common solution is to keep giving the key contact more responsibility, but this comes at a price. The other issue concerns the customers. If they use teams and the teams are not as effective as the individual, the customer will negotiate the terms of the working relationship up front and explicitly state how the key contact will be used with the account. When this happens, it puts management in a tough position because it effectively limits flexibility in human resource deployment within the firm.

To reduce risk, the firm makes a concerted effort to document all activities related to the account. They also use "the key contact to get in the door, then deliver through a superior value proposition that transcends the individual". Scalability is also a big issue when dealing with human resource capitol.

Overall, this interview confirmed the nomological validity of the model by highlighting the challenges of the delivery firm in meeting the customer needs.

Interview #3

The third interview was with a buyer with a firm that sells products to the government that are exclusively obtained through very specific contracts. Therefore, the specifications they need from vendors are very clear and non-substitutable. Essentially, when they obtain a contract they need to make sure they have vendors in place that can deliver before they agree to the terms. This creates a somewhat unique position with their vendors that creates very strong and symbiotic relationships

Due to this unique relationship, the key contact is important but does necessarily not create or sustain the relationship. However, the key contact is critical in maintaining the relationship. The buyer stated what they need most from their vendor is speed, since the market is volatile and fast changing. It is very important that problems are resolved quickly and this can only be done by someone that is knowledgeable and intimate with the account. Again, I believe these relationships may be somewhat unique due to their contractual obligations disallowing substitutes.

Interview #4

The 4th interview was with a professional buyer for a major university. This buyer is a generalist and manages many relationships. What is most important to this buyer is finding vendors that can make his job easier. What this means is that even commodity type purchases can be influences by the service that accompanies them. In this case, the key contact relationships may in many times sway his decision to purchase from a particular vendor.

In this buying situation, the more responsibility his employer gives him, the more he has to rely on his personal contacts to help manage his relationships. In many of his relationships, he would not think twice about following some if his more reliable key contacts to whatever firm they went to. He has become much too dependent on their individual services.

Non-specific qualitative comments

In addition to the field interviews, I also allowed for respondents to comment at the end of the survey in an open ended text box labeled "Comments to the Researchers". The most insightful comments surrounded the terminology of vendors versus suppliers:

- I believe that the term "vendors" should be replaced by "suppliers" unless the relationship has no mutually beneficial value. This denotes a more professional relationship, as well.
- Vendors provide a product like selling hot dogs at baseball games, suppliers provide more.

The feedback on suppliers versus vendors will be useful regarding future research. Here are other interesting comments as well, in no particular order:

- Our company strives to establish these types of relationships. I feel the relationship with the key contact helps to avoid and resolve issues when they arise as the relationship is more personal.
- The firm I chose to base my responses on had a non compete clause in the contract and started to compete prior to the date agreed on. The non-compete ends soon and they are positioning themselves to take business away from us next year. Our firm is looking into ceasing business with them though they have performed well on the contract.
- The parts I buy from this company can be purchased from many vendors. My company doesn't really focus on vendor relationship just wants delivery met. This company does do its best to provide the best price and delivery. The inside sale rep is very

knowledgeable and was out of the office for 6 weeks which caused major chaos to our orders. The outside sales rep is here every week and does bring along upper management periodically.

- This seems more geared to salesperson-buyer relationship. My experience is more of a customer-supplier relationship. Additionally, my situations are with proprietary supplier and I have little or no ability to switch to another supplier.
- In today's manufacturing world the buyer / vendor relationship is only noticed within a particular company when things go wrong, i.e.. poor quality, delivery issues, ect... If all is going well, the relationship is presumed to be in good order and not given a second thought. It takes two dedicated professionals to build upon and maintain a level of trust and commitment in order for each firm to succeed, making the transactions between companies seamless, not an easy task. Good luck with your studies and this survey.
- 80% of my key contacts are easy to work with. 20% are difficult. I believe it is because
 of poor overall management and the contact having difficulty influencing
 production/plant direction. Some contacts have poor communication skills.

APPENDIX B

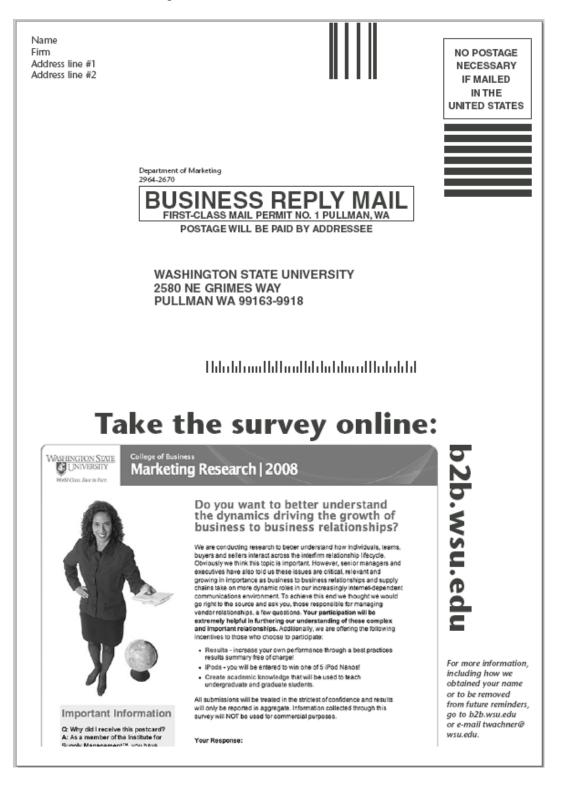
Postcard Contact Strategy and Internet Landing Page

To balance satisfactory response with cost implications, 3 rounds of postcards were sent. The first postcard contained instructions to go to an Internet landing page to take the survey online or to request a hard copy to be mailed out to the respondent. The first postcard also included a tear out business reply card allowing respondents to request a hard copy via another method.

Exhibit B1- First Mailing Front and Fold



Exhibit B2- First Mailing- Back and Fold



Do you want to understand why business relationships succeed (or fail)? So do we...

REMINDER: A few weeks ago we contacted you requesting your participation in an academic survey. (If you have already responded, please disregard this message). If not, please help! The survey is brief and the knowledge created will give college students a unique perspective of buyer-seller relationships.

To complete the survey, learn more, or request a paper copy, please visit **b2b.wsu.edu**. Please have your survey code available (located on the reverse of this card above your name). All submissions will be treated with the strictest of confidence. A report summary will be provided in recognition of your contribution of time and expertise. Thank you for your assistance!

Sincerely,

Jean L. Johnson, Ph.D., Gardner O. Hart Distinguished Professor of Marketing 509-335-1877, johnsonj@wsu.edu Trent Wachner (main contact) Doctoral Candidate 509-335-4102, twachner@wsu.edu

Do you want to understand why business



Exhibit B5- Third and Final Mailing

e). nce

relationships succeed (or fail)? So do we... FINAL REMINDER: Please help—We need your input! We are getting ready to close this survey and urgently request your participation (If you have already responded, please

are getting ready to close this survey and urgently request your participation (If you have already responded, please disregard this message). Many times in these surveys those who have NOT responded have the most valuable insight. Please take 15 minutes and help us out. Your time is appreciated.

To complete the survey, learn more, or request a paper copy, please visit **b2b.wsu.edu**. Please have your survey code available (located on the reverse of this card, above your name). All submissions will be treated with the strictest of confidence. A report summary will be provided in recognition of your contribution of time and expertise. Thank you for your assistance!

Sincerely, Jean L. Johnson, Ph.D., Gardner O. Hart Distinguished Professor of Marketing 509-333-1877, johnsonj@wsu.edu

Trent Wachner (main contact) Doctoral Candidate 509-335-4102, twachner@wsu.edu



Exhibit B5- Web Landing Page

WASHINGTON STATE World Lines. New to Name

College of Business Marketing Research | 2008



Important Information

Q:Why did i receive this postcard? A:As a member of the institute for Supply Management[™], you have been selected to participate in this research project.Responding to the survey is completely voluntary.ISM policy allows for the release of limited member information to researchers, to be used only for specific approved research projects.

Q1s this study approved? A:This study has been reviewed and approved for human subject participation by Washington State University's Institutional Review Board (IRB). If you have any questions about your rights as a participant. please call IRB at (509) 335-3668. Participation in this study is voluntary. You may refuse to participate, or refuse to answer any questions.

Q:Will I see the results of the study? A flyou are interested in obtaining an Executive Summary of our key findings and conclusions, please provide an email address in the appropriate box at the very end of the survey.

Do you want to better understand the dynamics driving the growth of business to business relations?

We are conducting research to better understand how individuals, teams. buyers and sellers interact across the interfirm relationship lifecycle. Obviously we think this topic is important. However, senior managers and executives have also told us these issues are critical, relevant and growing in importance as business to business relationships and supply chains take on more dynamic roles in our increasingly internetdependent communications environment. To achieve this end we thought we would go right to the source and ask you, those responsible for managing vendor relationships, a few questions. Your participation will be extremely helpful in furthering our understanding of these complex and important relationships. Additionally, we are offering the following Incentives to those who choose to participate:

- Results increase your own performance through a best practices results summary free of charge!
- IPods you will be entered to win one of 5 IPod Nanos!
- Create academic knowledge that will be used to teach undergraduate and graduate students.

All submissions will be treated in the strictest of confidence and results will only be reported in aggregate. Information collected through this survey will NOT be used for commercial purposes.

Your Response:

Yes, I will help!* Click the button to the right to begin the online survey. Go to Survey Please have survey code from postcard available.

Yes, I will help, but. *

I would like a hard copy of the survey sent to me. Please entersurvey code from postcard in box.

Survey Code Submit

No than kyou.

I am unable to help at this time. Please enteryour survey code from postcard and we will remove you fromfuture reminders.

Survey Colde Submit

Thank you for your time.

Jean L. Johnson, Ph.D. The Gardner O Hart Distinguished Ph.D.Candidate Professor Department of Marketing Washington State University 509-335-1877 johnsonj@wsuedu

Trent Wachner (Main contact) Department of Marketing Washington State University 509-335-4102 twachner@wsu.edu

WSU Colege of Susiness. PO Sox 644750, Washington State University, Pulman WA 921644750, 8558556433. Contact Us

APPENDIX C

Research Instrument- Paper Version

Business Relationships Survey

Sponsored by: Washington State University School of Business

Thank you for participating in this study about business relationships. Don't spend too much time or read too much into any one question. This survey should take approximately 15 minutes to conscientiously complete. Washington State University research protocol requires us to keep your responses strictly confidential. Your responses will only be analyzed at the aggregate level. Thank you again for your participation. Your answers and insights are both valued and important.

To begin, we need to ask two qualifying questions:

Are you in a buying/procurement position (directly or indirectly)?	YES	NO □
Do you have (or had) responsibility and/or knowledge of a specific vendor relationship?		

If you are not able answer yes to both questions, please forward this questionnaire to someone you believe is appropriate in your company.

Survey Instructions:

The survey is designed to uncover how individuals and teams interact across the lifecycle of interfirm relationships. To complete this survey, we ask the following:

 $1. \$ Choose a specific firm that you have a working relationship where you are the "buyer" and the firm is the "vendor"

2. The firm must have a person assigned to your account that you have regular interaction and would be characterized as your main or "key" contact

3. If possible, choose a firm where your assessment of the relationship with the key contact may differ from your assessment of the firm (e.g. you have a stronger positive or negative feeling towards the individual versus the firm).

Please think of a specific vendor and key contact relationship and proceed: Sincerely,

Jean L. Johnson PhD The Gardner O Hart Distinguished Professor Department of Marketing Washington State University 509-335-1877 johnsonj@wsu.edu Trent Wachner (Main contact) PhD Candidate Department of Marketing Washington State University 509-335-4102 twachner@wsu.edu For the questions below, please represent partial years of experience by using a single decimal place. e.g. "five and a half years of experience", simply input 5.5 into the appropriate box.

How long have you been involved in purchasing/procurement?	Years
How long have you been in purchasing with your current employer (in years)?	Years
How long have you had a relationship with the vendor you selected for this survey?	Years
How long have you had a relationship with the key contact you chose for this survey?	Years

Business relationships typically evolve through a number of phases. Which of the following best describes your relationship with the vendor firm?

Exploration: You both are discovering and evaluating goal compatibility, integrity, and performance of the other, as well as potential obligations, benefits, and burdens involved with working together on a long-term basis.

- **Buildup**: You both are receiving increasing benefits from the relationships, and the level of trust and satisfaction is growing in such a way that you are increasingly willing to commit to a long-term relationship
- Maturity: You both have an ongoing, long-term relationship in which both parties receive acceptable levels of satisfaction and benefits from the relationship.
- Decline: One of both of you have begun to experience dissatisfaction and are considering alternative, contemplating relationship termination, or beginning to end the relationship.
- **Deterioration**: One or both of you have begun to negotiate terms of ending the relationship and/or are currently in the process of dissolving the relationship

Thinking about the relationship with your specific vendor, please rate the extent to which you agree with the statements below:

	Strong Disagi			ither Agre Disagree			Strongly Agree
	1	2	3	4	5	6	7
When there is a problem related to this account, the vendor brings in a group to solve it.							
The vendor makes most of their decisions by teams.							
The vendor uses teams to plan and coordinate the activities for my account.							

Thinking of the relationship with the vendor firm you selected:

	Disagre			· Disagre			Agree
	1	2	3	4	5	6	7
If this vendor relationship went sour, it would negatively impact my standing in my company.							
My firm would hold me responsible if this particular vendor relationship failed to perform.							
This is a risky vendor to work with.							
I choose to continue to work with this vendor even though my firm does not fully support this relationship.							
Working with this vendor is more of my idea than my firm's idea.							
<i>Compared to the competition, the product(s)</i>	or serv	ice(s)	provide	ed by t	his ver	ndor:	

Strongly	
Disagree	

.. ...

	1	2	3	4	5	6	7	
Has minimal performance risk.								
Has strong overall value.								
Possesses high quality features or product								
composition.								
Has strong market demand.								

Thinking of the relationship with the vendor FIRM, please answer the following questions:

	Disagre	,		either Ag or Disagr			Strongly Agree
	1	2	3	4	5	6	7
This vendor keeps promises it makes to us.							
This vendor is always honest with us.							
We believe the information that this vendor							
provides us.							
When making decisions, this vendor considers our welfare as well as its own.							
We trust this vendor keeps our best interests in mind.							
This vendor is trustworthy.							

Thinking of the relationship with the vendor FIRM, please answer the following questions:

	Stron Disag			leither Ag or Disagr			Strongly Agree
	1	2	3	4	5	6	7
Our firm often regrets the decision to do business with this supplier.							
Overall, we are very satisfied with this supplier.							
We are very pleased with what this supplier does for us.							
Our firm is not completely happy with this supplier.							
If we had it to do all over again, we would still choose this supplier.							

The relationship I have with the vendor FIRM ...

	Stron Disag	5,		leither Ag or Disagr			Strongly Agree
	1	2	3	4	5	6	7
is something we are very committed to.							
is very important to us.							
is something we intend to maintain indefinitely.							
is something we really care about.							
deserves our maximum effort to maintain.							

Thinking of the relationship with the KEY CONTACT, please answer the following questions:

	Strongl Disagre	,		ther Agre Disagree		Strongl Agree	,
	1	2	3	4	5	6	7
This key contact has been frank in dealing with me.							
This key contact does not make false claims.							
•	<u> </u>	<u> </u>					
I think this key contact is completely open in dealing with me.							
This key contact seems to be concerned with my needs.							
This key contact is trustworthy.							

Thinking of the relationship with the KEY CONTACT, please answer the following questions:

<i>4</i>	Strongl Disagre	,		her Agre: Disagree		Strongl Agree	,
	1	2	3	4	5	6	7
I am delighted with my overall relationship with this key contact.							
I wish more firms' key contacts were like this person.							
I would like my relationship with this key contact to continue in the coming year.							
It is a pleasure dealing with this key contact							
The relationship I have with this KEY CONTA	СТ						
·····	Strongl Disagre	,		her Agree Disagree	9	Strongl Agree	
	1	2	3	4	5	6	7
is something I am very committed to.							
is very important to me.							
is something I intend to maintain for the long-term.							
is something I really want to maintain.							

deserves my maximum effort to maintain.

How likely is it that your firm will make a purchase from this vendor in the following timeframes?

Tonowing timenames:							
	Very	Likely	ι	Jndecide	ed	Ver	y Unlikely
	1	2	3	4	5	6	7
In the next 3 years?							
In the next 1 year?							
In the next month?							
business with the vendor in the following circumstances?	, 1	ery Likely	3	Undecic 4	5	Very Uı 6	7
	1	2	3	4	5	6	7
My key contact leaves for a competitor							
My key contact leaves and goes outside the industry	Γ						
My key contact begins to "drop the ball" on the account	ne [

П

П

Please answer the following questions about your relationship with the firm and your relationship with the individual key contact by circling your answer in the scale below:

1-Strongly	Disagree
------------	----------

2-Disagree 3- Somewhat Disagree 4- Neutral 5- Somewhat Agree 6- Agree 7- Strongly Agree

FIRM (referring to the overall firm **KEY CONTACT** (only referring to the relationship) individual key contact employee) **Strongly Agree** Strongly Strongly Strongly Disagree Disagree Agree The relationship with this 1 2 firm/key contact is worth a lot to my organization. My firm highly values its relationship with this firm/key contact. The relationship with the 1 2 firm/key contact is particularly valuable for us. The bond we have developed 2 with this firm/key contact is strong. Our relationship with this 1 2 firm/key contact is beyond basic procurements. The relationship I have with 1 2 this firm/key contact is very productive This firm/key contact is very easy to work with.

Thinking of the tasks and the job that the key contact is performing, indicate your level of agreement with the following statements:

	Stron Disag 1	5,	either Ag or Disagro 4	6	Strongly Agree 7
If your key contact were to take an extended leave, someone else could jump right in and take over.					
Any team member could take over the duties of the key contact if he or she was away.					
It would take someone a long time to learn the job of the key contact.					
The tasks of the key contact are routinized.					

To the best of your knowledge, indicate your level of agreement with the following statements:

	Strongly Disagree			either Ag or Disagre			Strongly Agree
	1	2	3	4	5	6	7
The performance of the key contact is measured mostly based on his or her level of sales.							
The compensation of the key contact is 100% commission based.							
The vending firm rarely checks with me for feedback on my satisfaction with the key contact.							
The performance of the key contact is easy to measure for the vending firm. Almost done! Hang in there							

Based on your interactions with the key contact you selected, please answer the following questions based on your assessment of their relationship with management (to the best of your ability):

	Strongly Disagree			ther Agre Disagre			Strongly Agree
	1	2	3	4	5	6	7
The key contact's supervisor makes sure they know what to do and how to do it.							
The key contact's supervisor stays in close contact with them.							
The key contact's supervisor rarely asks them for information on how they are doing.							
The key contact does not have much contact with their company's management.							
Management at the vendor stays very well informed of key contact's activities.							
The key contact is subject to very little direction from the company's management.							

Thinking about the key contact you selected, please answer the following questions

	Strongly Disagree		Neither Agree or Disagree			-	Strongly Agree
	1	2	3	4	5	6	7
This key contact is very knowledgeable about his/her job.							
This contact knows his/her product line very well.							
This person is NOT an expert.							

Thinking about the key contact you selected, please answer the following questions:

	Strongly Disagree			either Agı or Disagre			Strongly Agree
	1	2	3	4	5	6	7
It would be difficult to replace this key contact with someone else from the same firm.							
It would require a great deal of effort to switch to a new key contact even if I stayed with the same firm.							
I would lose significant benefits if I switched to another key contact in the firm.							
There are other people within the vendor firm that could provide the same benefits.							

Thinking about the key contact you selected, please answer the following questions:

	Strongly Disagree			ither Agr r Disagre	-	Strongly Agree	
	1	2	3	4	5	6	7
This key contact has the clout to get his/her way with the vendor.							
This key contact is one of the vendor's most important salespeople.							
This key contact has power within his/her firm.							

Approximately what percentage of your interaction with this customer...

	<10%	10%	30%	50%	70%	90%	>90%
involves some form of IT (e.g., email, database, EDI, CRM, conference calls, computer automated ordering, internet etc.)?							
involves personal face-to-face contact?							

Please indicate the level of investment your firm has made in...

rease maleate the level of myestment your min h	Little					Substantial				
	1	2	3	4	5	6	7			
Electronic Data Interchange (EDI) with customers										
Electronic fund transfer for payment										
Email, fax, or other IT for customer communication										
Automated ordering systems										
Intranet										
Extranet										
Customer Specific Software										
Sales Force Automation										

Relative to an industry average, how sophisticated is the IT infrastructure you use with this customer (please check the appropriate box for each item)?

	Basi		•			State	of the	
							Art	
	1	2	3	4	5	6	7	
Hardware								
Software								
Telecommunications								
IT Personnel Skills								1

Please answer the following questions about your industry:

	Strongly Disagree		Neither Agree or Disagree			Strongly Agree	
	1	2	3	4	5	6	7
Buyer-supplier relationships are highly valued in our industry.							
Most firms in our industry try to build strong buyer- supplier relationships.							
Building strong buyer-seller relationships is the norm in the industry.							

This section of the survey seeks some personal information. This information will only be used to obtain a sense of the broad characteristics of all survey participants. And again, like all of the data gathered in this survey, your responses will be treated totally confidentiality and never shared. Please check the answer that best describes your situation.

What is your Gender?		Male	Female
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Which of the following age groups do you fall into?

19 years & younger	40-49
20-29	50-59
30-39	Over 60

Most research only analyzes responses from one side of the relationship. To increase our overall understanding of business relationships, we would like to ask a few questions of the key contact you chose in the study. We would appreciate if you would provide the key contacts name and contact information so we can ask them a few questions.

<u>Your responses will be kept strictly confidential;</u> none of your responses will be shared with the key contact.

Key Contact Name	
Key Contact Email	
Key Contact Phone # (Optional)	

Finally, we may need to contact you in the future with clarifications on this survey, to notify winners of the drawing or to share a summary of the survey results. We will NEVER share this information or contact you for any other purpose. Please provide your email address below.

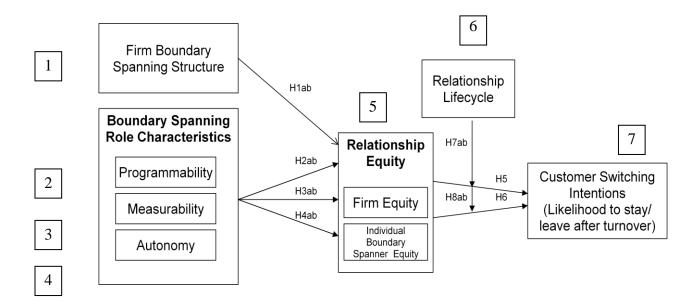
Your email address	
Would you like a copy of the	
survey results? (yes/no)	

THANK YOU!

Please return the survey in the enclosed business reply envelope.

APPENDIX D

Measures



Dissertation Scales

Firm Boundary Spanning Structure:	116
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Measurability	116
Autonomy	. 117
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Relationship Lifecycle	. 119
Likelihood to stay	120
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MEASUREMENT – all construct items measured using 7-point "strongly disagree" to "strongly agree" perceptual scaling (with a "neither" midpoint) unless noted otherwise.

Firm Boundary Spanning Structure

Relationship configuration: the use of teams versus individual contacts. (Homburg, Workman and Jenson 2003)

Workman, John P., Jr., Christian Homburg, and Ove Jensen (2003), "Intraorganizational determinants of key account management effectiveness," *Academy of Marketing Science. Journal*, 31 (1), 3.

INSTRUCTIONS: Thinking about the relationship with your specific vendor, please rate the extent to which you agree with the statements below:

When there is a problem related to this account, my vendor brings in a group to solve it.

The vendor makes most of their decisions by teams.

The vendor uses teams to plan and coordinate the activities for my account.

Programmability

Programmability: the ability to define and codify the behaviors involved in a particular task or job. (cf., Eisenhardt 1988)

Eisenhardt, Kathleen M. (1988), "Agency-And Institutional-Theory Explanations: The Case of Retail Sales Associates," *Academy of Management Journal*, 31 (3), 488.

Thinking of the tasks and the job that the key contact employee is performing, indicate your level of agreement with the following statements:

- If your key contact employee were to take an extended leave, someone else could jump right in and take over
- Any team member could take over the duties of the key contact employee if he or she was away
- It would take someone a long time to learn the job of the key contact employee
- The tasks of the key contact employee are routinized

Measurability (New Scale)

Measurability: the extent to which the compensation and performance of the key contact employee is based on measurable outcomes (i.e., salary) or intangible behaviors (i.e., customer satisfaction). (cf., Oliver and Anderson 1987)

To the best of your knowledge, indicate your level of agreement with the following statements:

- The performance of the key contact employee is measured mostly based on his or her level of sales
- The compensation of the key contact employee is 100% commission based
- The vending firm rarely checks with me for feedback on my satisfaction with the key contact employee
- The compensation of the key contact employee is principally measured by the level of satisfaction of his or her customers (not his or her sales)
- The performance of the key contact employee is easy to measure for the vending firm.

Autonomy

Autonomy: the extent to which a boundary spanner can identify relevant tasks and arrive at a course of action without management intervention. (Eisenhardt 1989)

Oliver, Richard L. and Erin Anderson (1994), "An empirical test of the consequences of behavior- and outcome-based sales control systems," *Journal of Marketing*, 58 (4), 53.

Based on your interactions with your key contact, please answer the following questions based on your assessment of their interaction with management. (1. Strongly disagree, 7 Strongly agree)

- Their supervisor makes sure everyone knows what to do and how to do it
- Their supervisor stays in close contact with them
- Their boss rarely asks me for information on how they are doing (R)
- They don't have much contact with their company's management. (R)
- Management there stays very well informed of key contact's activities
- They are subject to very little direction from our company's management. (R)

Relationship Equity (new scale)

Relationship Equity: The firm's assessment of the value of a bond that exists with an exchange partner including tangible benefits (e.g., from basic transactions) and extending to intangible benefits (e.g., reputation, market information, network position, collaborative advantages).

Firm Value

- The relationship with this firm/person is worth a lot to my organization.
- My firm highly values its relationship with this firm/person
- The relationship with the firm/person is particularly valuable for us.

- The bond we have developed with this firm/person is strong.
- Our relationship with this firm/person is beyond basic procurements.
- The relationship I have with this firm/person is very productive
- This firm/person is very easy to work with.

Individual value

- The relationship with the key contact is worth a lot to my organization.
- My firm highly values its relationship with the key contact.
- The relationship with the key contact is particularly valuable for us.
- The bond we have developed with the key contact is strong.
- Our relationship with this key contact is beyond basic procurements.
- The relationship I have with this key contact is very productive
- The key contact is very easy to work with.

Relationship Lifecycle

Relationship Lifecycle: The distinct, predicable behaviors, processes and orientations that occur between firms over time.

Jap, Sandy D. and Shankar Ganesan (2000), "Control mechanisms and the relationship life cycle: Implications for safeguarding specific investments and developing commitment," *Journal of Marketing Research*, 37 (2), 227.

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

Business relationships typically evolve through a number of phases. Which of the following best describes the overall relationship between your FIRM and the vending FIRM?

Exploration: You both are discovering and evaluating goal compatibility, integrity, and performance of the other, as well as potential obligations, benefits, and burdens involved with working together on a long-term basis.

Buildup: You both are receiving increasing benefits from the relationships, and the level of trust and satisfaction is growing in such a way that you are increasingly willing to commit to a long-term relationship

Maturity: You both have an ongoing, long-term relationship in which both parties receive acceptable levels of satisfaction and benefits from the relationship

Decline: One of both of you have begun to experience dissatisfaction and are considering alternative, contemplating relationship termination, or beginning to end the relationship

Deterioration: One or both of you have begun to negotiate terms of ending the relationship and/or are currently in the process of dissolving the relationship

Likelihood to Leave (new scale)

- My main contact leaves for a competitor
- My main contact leaves and goes outside the industry
- My main contact begins to "drop the ball" on the account

Control Variables

Buying Experience (in years)