

Supplier performance improvements in relational exchanges

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Abstract

Purpose – This study aims to test both customer and supplier performance benefits associated with closer relational exchanges in light of both resource and technological environmental contingencies.

Design/methodology/approach – The research involved a survey of 1,170 managers in the pulp and paper industry to understand their relationship with their primary supplier of process control equipment (PCE). Each respondent was asked to provide their views on the closeness of their supplier relationship, the performance gains realized from their supplier relationships, and the linkage between their performance gains and improvements in supplier performance.

Findings – The results indicate that although customers may be achieving better performance through closer relationships, suppliers may not always be reaping reciprocal benefits. Specifically, improvements in customer purchasing performance did not result in improved supplier performance, but customer improvements in production performance resulted in supplier performance gains.

Research limitations/implications – The study focused on the exchange of one product line, PCE, within one industry. Further research is necessary to investigate customer-supplier relationships involving other products such as parts and material incorporated into the customer's end product and crossing multiple industries. In addition, further research is needed to develop and test other potential performance outcomes and environment contingencies.

Originality/value – Since mutual performance improvements may not always be achieved in relational exchanges, this study suggests some critical considerations for suppliers making decisions to pursue closer customer relationships. These important considerations include the competitive nature of the supplier's market, the customer's desired performance improvement, the customer's level of internal expertise or knowledge, and the supplier's ability to provide differentiated products, services and knowledge.

Keywords Relationship marketing, Channel relationships, Sales strategies

Paper type Research paper

An executive summary for managers and executive readers can be found at the end of this article.

Introduction

Interest in close customer-supplier relationships or relational governance has increased since the late 1980s due to the professed linkage between closer relationships and improved customer performance. Customers have attributed reduced costs, faster time-to-market, increased productivity and enhanced product quality to closer relationships with suppliers (Bertrand, 1986; Cusumano and Takeishi, 1991; Tonkin, 1989; Ellram and Edis, 1996; Wong and Fung, 1999; Ulaga, 2003). Some have advocated that customers establish long-term relationships and take part in joint research, design

and development activities with their partners in the interest of enhanced mutual benefits. More recently, Morgan and Hunt (1999) have advocated the need to improve the understanding of the linkage between relational exchanges and a firm's sustainable competitive advantage.

While prior research has addressed customer performance benefits, there has been relatively little research on whether suppliers' performance improves with these closer relationships. Many academics and practitioners suggest that suppliers can improve their performance by enhancing their customers' performance (Cannon and Homburg, 2001); however, others have suggested that customers may demand closer relations to gain certain advantages without any corresponding improvement in supplier performance objectives. Some companies have expressed concerns about the increasing potential of dominant partners to use their power over dependent partners to maximize individual firm performance at the expense of weaker supply chain partners. For example, customers may seek closer supplier relations to gain knowledge that may eventually be used to either eliminate or reduce supplier power. This suggests that improving one party's performance may not lead to improvements in the other's or the system's performance in the exchange

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The variations in customer and supplier performance outcomes and risks becomes more problematic when each party considers the potential increased costs associated with relational exchanges due to the expanded commitments of individuals and business functions in managing closer relationships. Relational exchanges often expand customer-supplier interactions from sales and purchasing personnel to include individuals in such diverse areas as engineering, manufacturing, finance, and research and development.

While some academic research has addressed performance gains of one partner in close relationships (Reinartz and Kumar, 2003; Cusumano and Takeishi, 1991; Noorderwier *et al.*, 1990), there has been a lack of research on whether both customers and suppliers gain from relational exchanges. The research reported here will assist in filling a significant gap in the existing literature by examining both customer and supplier performance gains achieved through relational exchanges and the linkages between each party's performance improvements. The current study provides insight into the issue by first understanding what customer purchasing and production performance improvements are achieved through closer supplier relationships. Second, this research examines what, if any of these customer purchasing and production performance improvements are linked to supplier performance gains such as increased total purchases, share of purchases and relationship commitment. Third, since technological and resource uncertainty have been associated with both closeness of customer-supplier relationships and individual firm performance, this research also analyzes the role of customer environmental uncertainty in the exchange relationship and performance outcomes.

This study examines the above issues within a setting of customer-supplier relationships between the pulp, paper, and paperboard mills (the customer organizations) and their process control equipment (PCE) suppliers. These relationships provide an appropriate context for this research because of the range of dyadic power variations present within this setting. The pulp, paper, and paperboard industry is comprised of over 270 firms that have mills in approximately 526 locations. These mills are extremely heterogeneous (Table I), and based on mill employment, approximately 291 mills can be classified as large, and the remaining 235 as small. Each of these mills uses PCE in its production operation. The equipment is purchased from approximately 25 process control equipment suppliers across the USA. In the pulp, paper and paperboard industry, PCE purchases are capital equipment purchases and are highly salient decisions because this equipment is used to maintain product quality, manage product variety, control costs, and to comply with the Environmental Protection Agency (EPA) regulations. Hence, given the critical nature of PCE to firms' operations and profitability, decisions regarding the number

of PCE vendors to use, a single versus multi-vendor sourcing policy, the specific vendors with whom to conduct business, and the nature of customer-supplier relationships to forge and cultivate (i.e. discrete or relational exchange) are considered crucial strategic decisions.

Theoretical foundations and literature review

Since this study examines the environmental context of both customer and supplier performance gains achieved through relational exchanges, this study is mounted at the nexus of four divergent research streams on the general question of governance forms' links to performance, namely, the literatures within the domains of organization theory, marketing, strategic management and law. The organizational theory and marketing empirical customer-supplier literature has utilized a set of environmental variables such as technological uncertainty, resource uncertainty, and power-dependency to describe the context of customer/supplier relationships (e.g. Pfeffer and Salancik, 1978; Williamson, 1985; Jackson, 1985; Shapiro, 1988; Ganesan, 1994; Wathne *et al.*, 2001; Wathne and Heide, 2000; Wathne and Heide, 2004). Other marketing and strategic management research has focused on performance outcomes associated with relational exchanges including planned price decreases, longer term commitments, reduced costs, improved quality, faster time-to-market and increased profitability (Ulaga, 2003; Buckley and Casson, 1976; Reinartz and Kumar, 2003). Finally, the marketing and strategic management literature has defined customer-supplier relationships based on the existence of common characteristics such as fewer suppliers, joint development, joint problem solving, and contract length (e.g. Cusumano and Takeishi, 1991; Dant and Schul, 1992; Landers and Monczka, 1989; Lascelles and Dale, 1989; Cannon and Homburg, 2001) while other marketing researchers have drawn on Macneil's (1978, 1980) work in the law literature to define customer-supplier relationships based on behavior norms.

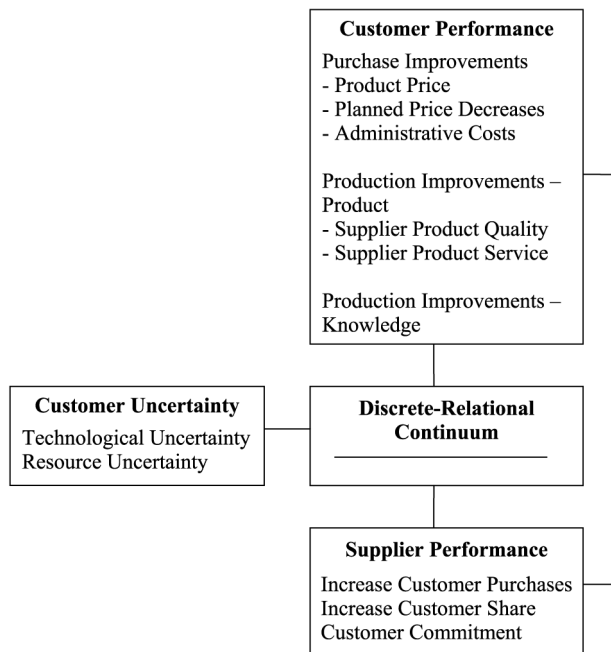
Unfortunately, while conceptually rich, these studies have employed diverse theoretical and operational definitions of the key variables used to analyze the customer-supplier relationships, thereby converting subsequent attempts to build a consistent and cumulative knowledge base into a complicated enterprise. Hence, the present study addresses this concern by offering a research framework that organizes and builds upon variables used in these four diverse research streams.

Figure 1 illustrates the research framework and how it incorporates relevant theories and literature in understanding both customer and supplier performance gains within the context of environmental uncertainty. The discussion of the

Table I The paper industry

| Category | Number of firms | Number of sites | Small mills | |
|------------------|-----------------|-----------------|-----------------------|--------------------------------------|
| | | | Less than 250 workers | Large mills More than 250 workers |
| Pulp mills | 29 | 39 | 15 | 24 |
| Paper mills | 136 | 282 | 136 | 146 |
| Paperboard mills | 105 | 205 | 140 | 65 |
| Total | 270 | 526 | 291 | 235 |

Figure 1 The research framework



research framework will initially summarize customer and supplier performance and environment uncertainty concepts. This discussion will be followed by a review of the use of behavior norms in defining exchange relationships.

Customer and supplier performance and relational exchanges

The research framework identifies both customer purchasing and production performance improvements that have been attributed to closer supplier relations in prior studies (Cusumano and Takeishi, 1991). Customer purchasing performance benefits have been suggested by Berggren (1992) who associated closer relationships with reductions in the cost of the product obtained from the focal supplier and by Harrigan (1988) and Kogut (1988) who described the reduction in administrative costs realized by customers working more closely with specific suppliers. Customer production performance improvements defined as the amount of improvement in the production process realized from forging closer relationships has been shown to improve due to either the focal suppliers' extant products and services or to utilizing supplier knowledge (Buckley and Casson, 1976; Lewis, 1990; Kogut, 1988; Ulaga, 2003).

Prior research has mostly focused on improving customer performance with limited attention given to supplier performance. Since improving customer value or performance is the essence of relational exchanges, many suppliers assume they will be rewarded as customers improve their performance. The research framework overcomes this limitation by identifying three potential supplier performance improvements based on prior studies – increased customer purchases, customer share and customer commitment. Several researchers including Sriram and Munnalaneni (1990) and Heide and John (1990) have identified positive relationships between dependence and supplier continuity, and Cannon and Homburg (2001) found a linkage between lower customer costs

and increased supplier purchases. Poppo *et al.* (2004) discovered a positive linkage between customer commitments to suppliers and closer relationships.

Environmental uncertainty and relational exchanges

The role of environmental uncertainty as defined by technological uncertainty and resource availability uncertainty in influencing closer customer-supplier relationships and related performance gains has been extensively researched and therefore included in the research framework. Monteverde and Teece (1982) found a positive relationship between hierarchies, asset specificity and technological uncertainty in their work on the automotive industry. Poppo and Zenger (2002) investigated the relationship between IT managers and their suppliers of outsourced IT services and discovered the interaction of technological uncertainty and asset specificity was significantly related to closer relationships.

Other researchers have used resource dependency or uncertainty as a proxy for environmental uncertainty in studying customer-supplier relationships. Noordewier *et al.*'s (1990) operationalized uncertainty as a composite resource variable that encompassed resource volatility, resource availability, resource uncertainty and resource stability and found relational exchanges improved customer performance under conditions of high resource uncertainty but no parallel improvements in customer performance were uncovered in more certain environments. Resource dependency theory (Pfeffer and Salancik, 1978) suggests when resource uncertainty increases firms establish collective structures or closer relationships to manage interorganization actions. The intent is to stabilize exchanges through some form of interfirm interaction such as cooptation, reciprocal agreements and social norms.

As indicated by these prior studies, the research framework defines environmental uncertainty based on both technological and resource uncertainty that were shown to influence governance forms and performance. In addition, this study employs both definitions of environmental uncertainty to understand a broader range of potential customer and supplier performance outcomes and the linkages between them. Since these prior studies have been conducted across four diverse research streams with varying measures of close relationships, the current research framework attempts to offer a further contribution by studying the linkages between these variables based on a consistent definition of relational exchange using behavioral norms.

Behavioral norms and relational exchanges

The legal contract literature views exchange as an economic and social event as well as a strategy through which customer wants and supplier offerings are matched. Accordingly, exchange strategies have been conceptualized on a continuum, with discrete, arms-length relationships at one end, and close, relational exchanges at the other (Macneil, 1978, 1980). At the discrete end of the continuum, exchange is defined as a single transfer of goods based on economic considerations. Here, the typical objects of exchange are easily monetized commodities or money, and transactions are completed with minimal or no social interaction (Bagozzi, 1978). In discrete transactions, the normative behavioral expectations are that individual actors will pursue strategies

which are aimed at the attainment of their individual goals without deference to their partners' goals (Heide and John, 1990; Kaufmann and Stern, 1988; Kaufmann and Dant, 1992).

At the other end of the continuum are relational exchanges in which customers and suppliers forge long-term cooperative relationships. Firms which do so as a part of their exchange and governance strategy recognize that most economic exchanges are nested within the context of social relationships (Macaulay, 1963; Granovetter, 1985). And, within a relational setting, inter-firm relationships are characterized by a greater degree of exchange measurement and specificity, increased mutual trust and obligation, the planning of exchange structures and processes (e.g. for conflict resolution), the sharing of benefits and burdens, the planning for relations among current and new participants, and a consistent awareness of mutual interests (Kaufmann and Dant, 1992). In other words, the notion of relational governance or relationalism conceives of exchange relationships functioning within a context of socialized contractual norms of behavior (Macneil, 1978, 1980; Kaufmann and Stern, 1988). These contracting norms, in turn, become credible disincentives to opportunistic behavior, and project the expectations of continued transactions into the future. Williamson (1985) credits Macneil's relational exchange theory for providing a finer cut to understanding such hybrid (i.e. neither market nor hierarchy) systems. Following Williamson, therefore, in this study the extent to which various contracting norms manifest themselves within focal exchange relationships is conceptualized as a discriminating measure of the level of relationalism achieved in those relationships.

Typically, researchers focused on exchange synergy, have used a small subset of Macneil's (1978, 1980) contracting norms to distinguish between relationship exchange types across industries. However, Kaufmann and Dant (1992) formally proposed and validated a multidimensional measurement instrument for classifying relationships along a discrete-relational continuum based on Macneil's original conceptualization of relationalism identifying six normative dimensions as useful descriptors of this continuum. Consistent with the theoretical conception of the relational exchange theory (Macneil, 1978, 1980), these are the contracting norms of:

- 1 relational focus;
- 2 restraint on power use;
- 3 solidarity;
- 4 role integrity;
- 5 mutuality; and
- 6 flexibility (Table II).

The present investigation follows Kaufmann and Dant (1992) in employing this multi-dimensional representation of relationalism.

Within the pulp, paper, and paperboard industry, some firms have chosen to continue with discrete exchanges while others have switched to a relational exchange strategy, creating a distribution structure best described along a continuum (Figure 1). Two processes have been noticed. For many firms, relationships with PCE suppliers started at price-driven, discrete levels, but evolved over time to more relational ones stressing product quality, knowledge transfer and customer satisfaction. Yet, other firms have chosen to

Table II Relational exchange and norms

| Norm | Description |
|-------------------------------|---|
| Relational focus | Reflects the extent to which the exchange relationship is perceived as relatively more important to the parties than the individual transaction |
| Restraint on power use | Reflects the extent to which the parties will exercise their legal rights under the contract. In relational exchanges, the expectation is that restraint will be exercised |
| Solidarity | The process by which an exchange relationship is created and sustained. Complex relational exchanges rely on trust |
| Role integrity | Relational exchanges involve highly complex, multi-dimensional roles which participants must keep fairly stable |
| Mutuality | Implies the requirement of a positive incentive to exchange for both parties. In relational exchanges, the parties expect generalized reciprocity emanating from the ongoing relationship |
| Flexibility | Change in the contract must be permitted within the existing relationship or it must be possible for the outdated transaction to be renegotiated |

utilize multiple PCE vendors and customize their own internal process control systems, instead. This latter group, hence, pursues a strategy emphasizing price and cost considerations over the more intangible benefits of relationalism.

In summary, prior research has provided valuable insight into customer-supplier relationships based on diverse theoretical perspectives and construct measures. The current research integrates these diverse streams of research by incorporating multiple views of environmental contingency influences on organization governance and performance into a more comprehensive framework with a richer definition of relational governance.

Research hypotheses

As illustrated by the research framework, the primary research questions addressing customer and supplier performance gains achieved through relational exchanges within the context of environmental uncertainty provide the basis for the specific hypotheses tested in the current study. The following section separately identifies the environmental uncertainty, customer performance and supplier performance research hypotheses and summarizes their justification based on the previous theory and literature review.

Environmental uncertainty

Environmental uncertainty, defined as the degree to which future events and states can not be anticipated or predicted (Pfeffer and Salancik, 1978), has been identified as a pervasive and salient construct within the literature because of its direct implications for firm-level risk. The firm's perception of environmental uncertainty has been attributed to its perception of the level of control it exerts over its environment (Perrow, 1967). Research evidence suggests that firms operating in highly uncertain environments are more likely to form exchange relationships that mitigate their

organizational risk-levels; conversely, firms that perceive that they have a greater degree of control over their current and future process technologies (i.e. more certain environment) are less likely to forge relational customer-supplier exchange relationships (Pfeffer and Salancik, 1978, Williamson, 1985, 1996).

As noted previously, prior customer-supplier research (i.e. Heide and John, 1990; Poppo and Zenger, 2002; Noordewier *et al.*, 1990) has employed technological uncertainty and resource availability uncertainty as the befitting proxy for estimating environmental uncertainty. Technological uncertainty refers to the technical level of future product changes, and customers' inability to forecast such future technical requirements and changes (Perrow, 1967). Resource availability uncertainty, on the other hand, refers to the predictability of future resource supplies, supplier market complexity, and product price volatility (Pfeffer and Salancik, 1978). The present study accepts these traditions and employs both technological and resource uncertainty to represent environmental uncertainty in developing the following hypotheses:

- H1. Relational exchanges will be positively related to high resource availability uncertainty.
- H2. Relational exchanges will be positively related to high technological uncertainty.

Customer performance

Customer performance can be assessed based on the purchasing improvements incurred by the customers (labeled purchase improvements), and the level of improvement in the customers' production processes (or production improvements). Customers' purchasing improvement is defined as the price of the product obtained from the focal supplier (Berggren, 1992), planned price decreases and the reduction in administrative costs realized by the customer resulting from working with specific suppliers (Harrigan, 1988; Kogut, 1988) (see Table III). Customers' production improvements are defined as the amount of improvement in the production quality or efficiency realized from the forging of close relationships with specific suppliers, either first, due to supplier product quality and service (production improvements – product), or second, by utilizing suppliers' specific knowledge (production improvements – knowledge) (Buckley and Casson, 1976; Lewis, 1990; Ulaga, 2003) (Table III). The following hypotheses were tested based on these prior studies:

- H3. Customer purchase improvements will be positively related to relational exchanges.
- H4. Customer production improvements – product will be positively related to relational exchanges.
- H5. Customer production improvements – knowledge will be positively related to relational exchanges.

Supplier performance

Supplier performance is analyzed based on a composite measure of three potential benefits. Specifically, supplier performance improvement is defined based on customers purchasing more from a supplier, a supplier obtaining an increasing share of customer purchases, and customer expectations of future supplier relationships. This is consistent with suggestions of Reeder *et al.* (1991), Jackson *et al.* (1982), Cannon and Homburg (2001), Heide and John

(1990) and Poppo *et al.* (2004) and provides the basis for the following hypotheses:

- H6. Supplier performance improvements will be positively related to customer purchase improvements.
- H7. Supplier performance improvements will be positively related to customer production improvements – product.
- H8. Supplier performance improvements will be positively related to customer improvements – knowledge.

Method

Data collection

In an industrial survey, it is considered prudent to sample all corporate entities in the population to ensure representativeness (Lehman, 1985). Therefore, we initially compiled comprehensive national lists of firms belonging to the pulp, paper and paperboard industry, and individuals most qualified (i.e. key informants) to discuss their firms' relationships with their primary supplier of process control equipment. Our exploratory research suggested that, in this industry, individuals from three key departments (i.e. purchasing, technical support, and engineering) had significant interactions with the process control equipment suppliers. Hence, we developed our list of potential respondents with the help of the Lockwood-Post Directory of Pulp, Paper and Allied Trades and the rosters of the Paper Industry Management Association (PIMA). The initial list described a potential population of approximately 1,800 names, representing 270 firms operating in 526 plant sites.

Follow-up telephone calls, attempting to verify the existing listings, identify key informants and update the names and addresses of prospective respondents prior to questionnaire mail-out, however, reduced the population and sample to 1,170 names. At least two telephone calls were placed to each plant site, one to the purchasing department, and the other to the engineering and/or technical support departments for this purpose. These verification phone calls were also used to extract promises of cooperation in completing the forthcoming questionnaire. In sum, our pre-survey sampling frame consisted of 1,170 addresses.

Each of the 1,170 prospective respondents received a cross-sectional, self-administered, four-page questionnaire to complete, together with a cover note of appeal on university letterhead, a pre-addressed business reply envelope, and a one-dollar bill as a token financial incentive. Moreover, the questionnaires were mailed in October to avoid the pressures of the holiday season and fourth quarter targets. Finally, a reminder card was sent ten days after the initial mailing to all 1,170 respondents. The questionnaire itself was composed of four logical parts, and sought to ascertain:

- 1 contextual details of firms' product applications and their primary process control equipment suppliers;
- 2 respondents' perceptions of their customer-supplier relationship, environmental uncertainty, and performance;
- 3 objective sales and financial performance data; and
- 4 responses to several demographic questions.

The survey resulted in 372 completed, usable questionnaires, or a realized response rate of 32 percent. The questions were framed in terms of individual respondent's perceptions of the relationship between his/her department and its primary

Table III Final scale items

| Construct | Indicators |
|------------------------------------|--|
| Relational focus | Maintaining a relationship with them is more important to us than individual outcomes We will maintain the relationship with them only if each transaction produces a positive outcome Payoffs from individual transactions are more important to us than maintaining the relationship with them Our relationship with them is important only because it facilitates individual transactions |
| Restraint on power use | When they try to influence us, they put pressure on us When we try to influence each other, we use whatever leverage we have over the other We rarely use pressure tactics to influence each other Even when we have leverage, we are reluctant to use it |
| Solidarity | Our relationship with them is best described as "arm's length" Our relationship with them is a long-term venture Our relationship with them is a series of one shot dealings Our relationship with them is best described as a "cooperative effort" |
| Role integrity | They routinely discuss issues which go beyond buying/selling What we expect from each other is quite complex, since it covers both business and non-business issues Our roles are simple: we are the buyer, and they are the seller All we are concerned with is that they meet our requirements for quantity, delivery schedule and price |
| Mutuality | In our relationship, one of us benefits more than one deserves We each benefit in proportion to the efforts we put in We do more to help them than they do to help us Even if costs and benefits are not evenly shared between us in a given time period, they balance out over time |
| Flexibility | When circumstances change, we can easily make adjustments to current transactions The terms of the current transaction are hard to change, even when unexpected events occur In something unforeseen happens, we can work out new terms of the transaction The terms of the current transaction are difficult to renegotiate |
| Purchase improvement | We have obtained the lowest price for the primary product We have obtained planned price decreases for the primary product We have improved the ease and efficiency in placing and receiving orders |
| Production improvement – products | We have improved our production efficiency based on our supplier's product, ordering, delivery, inventory or service process We have improved our production quality based on our supplier's product, ordering, delivery, inventory or service process We have improved our production quality based on our supplier's ability to deliver product based on specifications without defects We have reduced the time to install the product based on our supplier's product, ordering, delivery, inventory or service process |
| Production improvement – knowledge | We have improved our production efficiency based on our supplier's ability to provide unique knowledge We have improved our production quality based on our supplier's ability to provide unique knowledge We have reduced the time to install the product based on our supplier's ability to provide unique information or expertise We have improved our end market products/services based on primary supplier's ability to provide unique information or expertise |
| Technological uncertainty | There is a high probability of product improvements in the next two years We are often able to predict the nature of product improvements There have been many changes in the product over the past five years |
| Resource availability uncertainty | Product availability in the market is highly uncertain Uncertainties in supplier product production or distribution are a problem The market in which we buy the product is complex Supplier product prices are volatile |

Notes: All scales were anchored with Strongly agree (coded 5) to Strongly disagree (coded 1) response categories with a defined neutral point

supplier. A variety of diagnostics were performed to check for both response and non-response biases. MANOVA comparisons contrasted the responses of purchasing department personnel with those of technical support and engineering departments, and the answers of larger plant sites

with smaller and medium size plants. In both cases, MANOVA yielded non-significant results ($p = 0.427$ and $p = 0.241$, respectively), suggesting the absence of systematic response biases. In a similar vein, the non-response bias was evaluated by comparing early and late respondents (see

Armstrong and Overton, 1977), again using MANOVA, across a series of constructs. All MANOVA runs were again statistically non-significant (p values ranged from 0.13 to 0.92). Finally, additional checks for non-response bias were carried out by random, follow-up telephone interviews. The non-respondents pointed to a range of reasons for not responding, such as insufficient time, receipt of too many surveys, inability to recall receiving the survey and feeling unqualified to respond. However, no systematic pattern of reasons for non-response could be uncovered.

Measures

The measurement models employed in this study follow the latent measures approach to tapping relationalism and performance variables. Approximately four questions were asked for each dimension measured to ensure the identification (i.e. specification) of the measurement models; subsequently, composite measures (based on means) were derived for each variable once the reliability and psychometric properties of the measures had been ascertained. Table III presents the full battery of scale items utilized in the study, while Tables IV and V present the psychometric assessment of relationalism, performance, and uncertainty variables.

Relational exchange norms

The relational exchange norms measures used in this study, as explained earlier, are based on Macneil's (1978, 1980) definitions of discrete and relational exchange, and their subsequent use by other researchers (e.g. Kaufmann and Stern, 1988; Noordewier *et al.*, 1990; Dant and Schul, 1992). As already noted, the specific scales employed herein were operationalized and validated by Kaufmann and Dant (1992) and Li (1994). All relational exchange measures were provided with five-point response anchors of Strongly agree to Strongly disagree, with a defined neutral point. In all cases, Strongly agree was numerically coded as 5.0 while Strongly disagree anchor was coded as 1.0. Four items were utilized for measuring each of the six norms so that relationalism was operationalized by a battery of 24 questions (Table III).

Performance

As evident from the hypotheses, performance was operationally measured in terms of:

- Purchase improvement, which reflects functional gains due to a supplier or exchange with the focal supplier as opposed to other potential sources of such improvement (e.g., capital investment, employee training, and corporate restructuring).
- Production performance – product: the improvement in the production process realized by the customer as a result of forming a relationship with particular suppliers with unique product/services offerings.
- Production performance – knowledge: the improvements in customers' operations stemming from the superior knowledge of the suppliers selected.

Measures of efficiency suggested by earlier researchers (Buckley and Casson, 1976; Harrigan, 1988; Richardson, 1972), quality (Buckley and Casson, 1976; Lewis, 1990), and downtime (Kogut, 1988) were developed in the operationalization of production performance – product, whereas production performance – knowledge measures were derived from previous research on joint ventures (Harrigan, 1988), international strategic alliances (Haldik, 1988), partnerships (Lewis, 1990), and organizational combinations (Borus and Jemison, 1989). Supplier performance measures included improved customer revenue, customer share and customer expectation about future of relationship. These measures were consistent with generally accepted performance objectives of marketing and sales functions. Reliable performance measures for the performance constructs could not be identified; therefore, new questions and measures for these constructs were developed for this study. The questions were pre-tested with both industry practitioners and academic researchers and deemed clear and appropriate.

Environmental uncertainty

Following Heide and John (1990) and Walker and Weber (1984) technological uncertainty, as defined by Perrow (1967) was employed as a proxy for environmental

Table IV Psychometric evaluation of relationalism measures: single factor structure tests (LISREL)

| Relationalism dimension | Cronbach's alpha | Chi-square | df | p -values | AGFI |
|-------------------------------------|------------------|------------|----|-------------|------|
| Relational focus (four items) | 0.64 | 2.97 | 2 | 0.23 | 0.96 |
| Restraint on power use (four items) | 0.68 | 42.05 | 2 | 0.00 | 0.92 |
| Solidarity (four items) | 0.68 | 0.38 | 2 | 0.83 | 0.99 |
| Role integrity (four items) | 0.61 | 10.54 | 2 | 0.01 | 0.98 |
| Mutuality (four items) | 0.70 | 17.33 | 2 | 0.00 | 0.96 |
| Flexibility (four items) | 0.77 | 0.60 | 2 | 0.74 | 0.99 |

Table V Psychometric evaluation of performance and uncertainty measures: single factor structure tests (LISREL)

| Construct | Cronbach's alpha | Chi-square | df | p -values | AGFI |
|---|------------------|------------|----|-------------|------|
| Purchase improvement (three items) | 0.63 | N/A | | N/A | N/A |
| Production performance – product (four items) | 0.80 | 15.7 | 2 | 0.00 | 0.97 |
| Production performance – knowledge (four items) | 0.80 | 24.26 | 2 | 0.00 | 0.95 |
| Supplier performance (three items) | 0.68 | N/A | | N/A | N/A |
| Resource availability (four items) | 0.70 | 21.74 | | 0.00 | 0.96 |
| Technological uncertainty (three items) | 0.64 | N/A | | N/A | N/A |

uncertainty in the present investigation. The measures of resource availability uncertainty were based on Noordewier *et al.*'s (1990) research of performance outcomes in industrial customer-supplier relations.

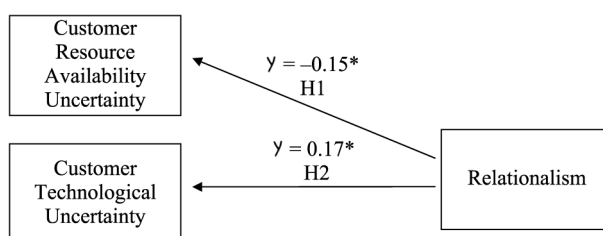
As indicated in Tables IV and V, these operational measures have performed well from a reliability- validity perspective. Relationalism dimensions had reliabilities (as measured by Cronbach's alpha) ranging from 0.61 to 0.77 (Table IV), while the reliabilities for performance and uncertainty ranged from 0.63 to 0.80 (Table V). More rigorous LISREL diagnostics aimed at the validation of measurement models by single factor structure tests were also supportive. This is evident from the consistently high AGFI estimates (i.e. scores of 0.90 or higher) that point to psychometrically cohesive measures (Tables IV and V). Though the chi-squares were significant with $p < 0.05$ in some tests, the artificial sensitivity of chi squares to large sample size is well documented and typically ignored in the face of contrary evidence from indices such as AGFI (see Bagozzi and Yi, 1988). Note, though, that three scale items were deleted in this measure purification process (i.e. one each from the purchasing expense performance, technological uncertainty measures and supplier performance); however, no items were eliminated from relationalism measures. Therefore, based on the above psychometric evaluation, and given the pedigree of the scales, individual scale items under each construct were collapsed and combined to create single composite indices corresponding to the respective theoretical constructs. These indices were used for all subsequent analyses and hypothesis testing.

Results and discussion

The results of the analysis examining the linkage between customer uncertainty and relational exchange are shown in Figure 2 and indicate support for *H2* but no support for *H1*. The significant role of technological uncertainty in explaining relational exchange strategies is consistent with prior research and follow-up interviews with paper industry managers. Several managers in post-survey interviews emphasized the role of relational exchange strategies in managing technology and transferring knowledge. Some felt that if technology was to become a source of competitive advantage, relational exchanges would be needed.

H2 stated that resource availability uncertainty would be positively related to relational exchanges but the results indicate a significant negative linkage between resource uncertainty and relationalism. These results are not consistent with resource dependency theory or prior studies.

Figure 2 Test of relationalism – customer uncertainty linkage



Note: * $p < 0.05$

There are several possible explanations for these results – supplier choice, construct definition, and customer choice.

First, the negative resource uncertainty effect on relationalism may be a sign of suppliers' choice not to participate. In highly uncertain environments, customers may increase dependence on suppliers and desire relational exchanges, but suppliers have the ability to take advantage of customer uncertainty by increasing prices. As a result, suppliers are able to improve their performance without incurring the incremental costs associated with relational exchanges.

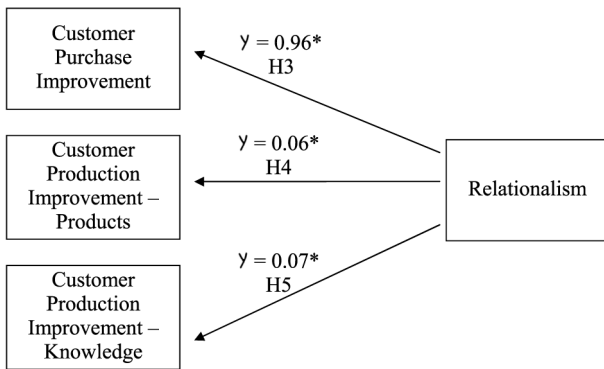
The second explanation for the negative relationship between resource uncertainty and relationalism might lie in construct definition of relationalism and resource uncertainty, although it is certainly not due to errors in measurement or scoring of the data. As mentioned previously, the Cronbach alphas for these constructs were tested for reliability and the measurements have been used and tested in prior studies. However, note that resource uncertainty is defined as the predictability of supplier products, supplier market complexity and supplier price volatility while relationalism is defined as a governance structure designed to create certainty. Thus, customers that have already entered into closer relational exchanges may have created an environment where they now feel resource availability is relatively certain. If this is correct, the significant negative relationship between resource uncertainty and relationalism is evidence that customer supply relationships may be characterized by endogeneity where initial conditions affect later choices.

The last explanation for the unexpected linkage resource certainty and relationalism might relate to the customer's conscious choice to enter into closer relationships only in environments where they can manage potential supplier opportunism. Post-survey interviews suggested some customer concerns about this issue. Some paper industry managers stated that they periodically remind their close partners about mutually agreed on performance requirements and about the wide availability of other suppliers if requirements are not satisfied. Other managers talked about monitoring the supplier market for technological advances and talking to their single source supplier about the need to maintain technological leadership. These interviews suggest that managers might be using the availability of alternative suppliers as a means to manage the short-term risk and dependency of relational exchanges with long-term options and flexibility. Further, these comments might indicate that customers are willing to enter into short-term relational exchanges only in environments where they still have long-term flexibility that allows them some control or power over potential supplier opportunism.

Figure 3 shows relational exchange strategies are significantly related to all performance variables and provides support for *H3*, *H4* and *H5*. These results are consistent with prior studies but add value by demonstrating the range of performance benefits obtainable through relational exchanges. This study indicates that customers achieve both purchasing and production performance improvements through relational exchanges and reveals how relational exchanges are used by customers to leverage their supplier product, service and knowledge capabilities in the improving production.

While customers improved the performance of all variables tested, it is important to note that suppliers do not always

Figure 3 Path analysis (LISREL) results: test of relationalism – customer performance linkage



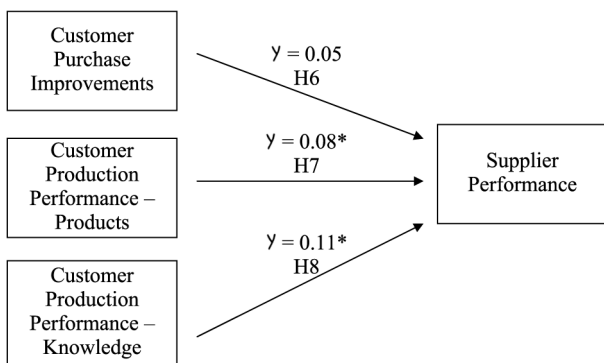
Note: * $p < 0.05$

achieve performance gains as reflected in Figure 4. Specifically, supplier performance improvement is linked only to customer production performance improvement, not to customer purchasing improvements. Customers are using relational exchanges to achieve lower prices, planned price decreases and lower administrative costs, but they are not rewarding their suppliers with increased purchases, a greater share of their purchases, or future relationship commitments. Suppliers are only realizing reciprocal performance improvements if relational exchanges are linked to improving customer production performance. These results provide support for H7 and H8 but do not support H6.

Managerial implications

The results reported here indicate suppliers should be extremely cautious in developing relational exchanges. As noted previously, customers are entering into closer relationships in environments characterized by resource certainty thus suggesting competitive supplier markets. In these types of markets, customers may be using their power to force suppliers into entering relational exchanges to maintain their existing level of business without a corresponding improvement in supplier performance. This would suggest that suppliers could be offering lower prices or incurring

Figure 4 Path analysis (LISREL) results test of customer performance – supplier performance linkage



Note: * $p < 0.05$

additional personnel and administrative expenses without a reciprocal improvement in performance. While the competitive market may dictate supplier relational investments to retain customer business, it should be done with the full understanding that their performance may not improve.

The results also suggest that suppliers should consider being very proactive in developing differentiated product, service and knowledge capabilities to effectively leverage the potential of relational exchanges in improving their performance. Suppliers must be able to link their value added capabilities directly to their customer’s production performance improvement to generate a reciprocal improvement in their own performance. Customers may view improvements in primary value chain activities as being more important or beneficial than improvement in secondary or procurement value chain activities and therefore rewarding suppliers for these improvements, or alternatively, improvement in customer production may create higher switching costs and thereby give suppliers more power over customers to improve their performance.

These results would also suggest that suppliers need to very selective in targeting customers for relational exchange strategies, and that they need to develop production support programs for these customers. The most appropriate customers would be companies with limited internal expertise that are implementing highly complex, technologically sophisticated process control equipment. These customers would have the greatest need for supplier product, service and knowledge capabilities designed to improve their production performance. Suppliers targeting these opportunities may also need to develop customer specific production improvement programs with dedicated resources and to establish individual and organizational goals linked to customer production improvements.

Future research

The empirical results of the present investigation offer insights for further research into relational exchanges. First, this research clearly isolates knowledge as an important contingency variable to include in further explorations of the relationalism performance assumption. While environmental uncertainty has been extensively studied, there is little research to define or understand the influence of internal organizational uncertainty on relational exchange and performance. The issues of customer and supplier knowledge, capabilities and reputation and how they influence relational exchanges have also been suggested by other researchers (Pillai and Sharma, 2003; Sheth and Shah, 2003). In addition, the exploratory post-survey interviews point to other contingency variables to consider (e.g. organizational readiness of the prospective partners; concerns about opportunism counter-balancing). These too are commended to future investigators.

Further research is also necessary to understand the linkages between additional risk, reduced power, increased dependency, relational governance and supplier performance. The potential of customers to use relational exchanges to receive unilateral performance improvements suggests further studies on the supplier’s cost versus the supplier’s benefit should be conducted to help practitioners in making these important decisions.

This study also investigated the relationship between only two firms in the supply chain. Most supply chains involve multiple firms along the value chain that are attempting to balance investments required by relational exchanges along with the potential increased risk of dependence and negative impacts on their individual performance goals. Much has been written about optimizing the supply chain. But, this study raises the contingency that some supply chain optimization efforts may not yield performance gains for all participants and may result in an uneven distribution of performance improvements between suppliers and customers. The question deserving future study is how should customers and suppliers manage their business relationships and gains to achieving closer cooperation and a reciprocal improvement in performance?

Finally, the current research focused on the exchange of one product line, PCE that is capital equipment purchased to monitor and control manufacturing processes in one industry. Future research needs to investigate the linkages between internal and external uncertainty, performance and relational exchange constructs for other products such as spare parts and product and materials incorporated into customer end products.

References

- Armstrong, J.S. and Overton, T.S. (1977), "Estimating nonresponse bias in mail surveys", *Journal of Marketing Research*, Vol. 14 No. 3, pp. 396-402.
- Bagozzi, R.P. (1978), *Causal Models in Marketing*, Wiley, New York, NY.
- Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", *Journal of the Academy of Marketing Science*, Vol. 16, Spring, pp. 74-94.
- Berggren, C. (1992), *Changing Buyer-Seller Relations in the Australian Automotive Industry: Innovative Partnership or Intensified Control?*, Center for Corporate Change, Australian Graduate School of Management, Sydney.
- Bertrand, K. (1986), "Crafting 'win-win situations' in buyer-supplier relationships", *Business Marketing*, Vol. 71 No. 6, pp. 42-50.
- Borus, B. and Jemison, D.B. (1989), "Hybrid arrangements a strategic alliances: theoretical issues in organizational combinations", *Academy of Management Review*, Vol. 14 No. 2, pp. 243-9.
- Buckley, P.J. and Casson, M. (1976), *The Future of the Multinational Enterprise*, Holmes & Heier, New York, NY.
- Cannon, J.P. and Homburg, C. (2001), "Buyer-seller relationships and customer firm costs", *Journal of Marketing*, Vol. 65 No. 1, pp. 29-43.
- Cusumano, M.A. and Takeishi, A. (1991), "Supplier relations and management: a survey of Japanese, Japanese-transplant, and US auto plants", *Strategic Management Journal*, Vol. 12 No. 8, pp. 563-88.
- Dant, R.P. and Schul, P. (1992), "Conflict resolution processing in contractual channels of distribution", *Journal of Marketing*, Vol. 56 No. 1, pp. 38-54.
- Ellram, L.M. and Edis, O.R.V. (1996), "A case study of successful partnering implementations", *International Journal of Physical Distribution and Material Management*, Vol. 32 No. 4, pp. 20-8.
- Ganesan, S. (1994), "Determinants of long-term orientation in buyer-seller relationships", *Journal of Marketing*, Vol. 58 No. 2, pp. 1-19.
- Granovetter, M. (1985), "Economic action and social structure: the problem of embeddedness", *American Journal of Sociology*, Vol. 91 No. 3, pp. 481-510.
- Haldik, K.J. (1988), "R&D and international joint ventures", in Contractor, F.J. and Lorange, P. (Eds), *Cooperative Strategies in International Business*, Lexington Books, Lexington, MA.
- Harrigan, K.R. (1988), "Strategic alliances and partner asymmetries", in Contractor, F.J. and Lorange, P. (Eds), *Cooperative Strategies in International Business*, Lexington Books, Lexington, MA.
- Heide, J.B. and John, G. (1990), "Alliances in industrial purchasing: the determinants of joint action in buyer-supplier relationships", *Journal of Marketing Research*, Vol. 27 No. 1, pp. 24-36.
- Jackson, B.B. (1985), "Build customer relationships that last", *Harvard Business Review*, November-December, pp. 120-8.
- Jackson, D.W., Ostrom, L.L. and Evans, K.R. (1982), *Industrial Marketing Management*, Elsevier Science Publishing, New York, NY.
- Kaufmann, P.J. and Dant, R.P. (1992), "The dimensions of commercial exchange", *Marketing Letters*, Vol. 3 No. 2, pp. 171-85.
- Kaufmann, P.J. and Stern, L.W. (1988), "Relational exchange norms, perceptions of unfairness and retained hostility in commercial litigation", *Journal of Conflict Resolution*, Vol. 32 No. 3, pp. 534-52.
- Kogut, B. (1988), "Joint ventures: theoretical and empirical perspectives", *Strategic Management Journal*, Vol. 9 No. 4, pp. 319-32.
- Landers, R. and Monczka, R.M. (1989), "Cooperative buyer/seller relationships and a firm's competitive posture", *Journal of Purchasing and Materials Management*, Vol. 25 No. 3, pp. 9-18.
- Lascelles, D.M. and Dale, B.G. (1989), "The buyer-supplier relationship in total quality management", *Journal of Purchasing and Materials Management*, Vol. 25 No. 2, pp. 10-19.
- Lehman, D. (1985), *Market Research and Analysis*, 2nd ed., Irwin Publishing, Homewood, IL.
- Lewis, F.D. (1990), *Partnerships for Profit: Structuring and Managing Strategic Alliances*, The Free Press, New York, NY.
- Li, Z.G. (1994), "Antecedents of relationalism in manufacturer-distributor relationships: an empirical study", unpublished doctoral dissertation, Boston University, Boston, MA.
- Macaulay, S. (1963), "Non-contractual relations in business: a preliminary study", *American Sociological Review*, Vol. 28 No. 1, pp. 55-67.
- Macneil, I.R. (1978), "Contracts: adjustments of long-term economic relations under classical, neo-classical and relational contract law", *Northwestern University Law Review*, Vol. 72 No. 5, pp. 854-905.
- Macneil, I.R. (1980), *The New Social Contract: An Inquiry into Modern Contractual Relations*, University Press, New Haven, CT.
- Monteverde, K. and Teece, D. (1982), "Supplier switching costs and vertical integration in the automotive industry", *Bell Journal of Economics*, Vol. 13 No. 1, pp. 206-13.
- Morgan, R. and Hunt, S. (1999), "Relationship-based competitive advantage: the role of relationship marketing in marketing strategy", *Journal of Business Research*, Vol. 46 No. 3, pp. 281-90.

- Noordewier, T.G., John, G. and Nevin, J.R. (1990), "Performance outcomes of purchasing arrangements in industrial buyer-vendor relationships", *Journal of Marketing*, Vol. 54 No. 4, pp. 80-93.
- Perrow, C. (1967), "A framework for the comparative analysis of organizations", *Administrative Science Quarterly*, Vol. 21, pp. 398-419.
- Pfeffer, J. and Salancik, G. (1978), *The External Control of Organizations: A Resource Dependence Perspective*, Harper & Row, New York, NY.
- Pillai, K.G. and Sharma, A. (2003), "Mature relationships: why does relational orientation turn into transaction orientation", *Industrial Marketing Management*, Vol. 32 No. 8, pp. 643-51.
- Poppo, L. and Zenger, T. (2002), "Do formal contracts and relational governance function as substitutes or compliments?", *Strategic Management Journal*, Vol. 23, pp. 707-25.
- Poppo, L., Zhou, K.Z. and Zenger, T. (2004), "Exploring constraints to effective inter-organizational exchange: a focus on stable ties, relational norms, and exchange hazards", unpublished working paper.
- Reeder, R.R., Brierty, E.G. and Reeder, B.H. (1991), *Industrial Marketing Analysis*, Prentice-Hall, Englewood Cliffs, NJ.
- Reinartz, W.J. and Kumar, V. (2003), "The impact of customer relationship characteristics on profitable lifetime duration", *Journal of Marketing*, Vol. 67 No. 1, pp. 77-99.
- Richardson, G.B. (1972), "The organization of industry", *The Economic Journal*, September, pp. 883-96.
- Shapiro, B.P. (1988), *Close Encounters of the Four Kinds: Managing Customers in a Rapidly Changing Environment*, Harvard Business School Case 9-589-015, Harvard Business School, Boston, MA.
- Sheth, J.N. and Shah, R.H. (2003), "Till death do us part . . . but not always: six antecedents to a customer's relational preference in buyer-seller exchanges", *Industrial Marketing Management*, Vol. 32 No. 8, pp. 627-31.
- Sriram, L.W. and Munnalane, V. (1990), "Determinants of source loyalty in buyer-seller relationships", *Journal of Purchasing and Materials Management*, Vol. 7 No. 4, pp. 21-6.
- Tonkin, L. (1989), "Changing the rules in the supplier-buyer game", *Manufacturing Systems*, October, pp. 28-32.
- Ullaga, W. (2003), "Capturing value creation in business relationships: a customer perspective", *Industrial Marketing Management*, Vol. 32 No. 8, pp. 677-93.
- Walker, G. and Weber, D. (1984), "A transaction cost approach to make-or-buy decisions", *Administrative Science Quarterly*, Vol. 29 No. 3, pp. 373-91.
- Wathne, K. and Heide, J.B. (2000), "Opportunism in interfirm relationship forms, outcomes, and solutions", *Journal of Marketing*, Vol. 64 No. 4, pp. 36-51.
- Wathne, K. and Heide, J.B. (2004), "Relationship governance in a supply chain network", *Journal of Marketing*, Vol. 68 No. 1, pp. 73-89.
- Wathne, K., Biong, H. and Heide, J.B. (2001), "Choice of supplier in embedded markets: relationship marketing and marketing program effects", *Journal of Marketing*, Vol. 65 No. 2, pp. 54-66.
- Williamson, O.E. (1985), *The Economic Institutions of Capitalism*, The Free Press, New York, NY.
- Williamson, O.E. (1996), *The Mechanisms of Governance*, Oxford University Press, Oxford.
- Wong, A. and Fung, P. (1999), "Total quality management in the construction industry in Hong Kong: a supply chain

management perspective", *Total Quality Management*, Vol. 10 No. 2, pp. 191-200.

Further reading

- Poppo, L. and Zenger, T. (1995), "Opportunism routines and boundary choices: a comparative test of transaction cost and resource based explanations for make-or-buy decisions", *Academy of Management Conference Proceedings*, pp. 42-6.

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Executive summary and implications for managers and executives

This summary has been provided to allow managers and executives a rapid appreciation of the content of this article. Those with a particular interest in the topic covered may then read the article in toto to take advantage of the more comprehensive description of the research undertaken and its results to get the full benefit of the material present.

Supplier performance improvements in relational exchanges

So you are unhappy in a relationship. You are not alone. You feel you are putting 100 per cent into making it work, but doubt if your partner is anywhere near as committed to the arrangement. It seems that you are making all the effort; that you are always the “giver” and, as for your partner, it always seems to be a case of “take, take, take.” Then there is the money. How come you are in this together but the financial benefits seem to go just one way?

Time for some advice? There is plenty around, ranging from suggestions about how to make the relationship work, to the “told you so” kind of reaction from those who reckon you should have given it more thought before getting yourself involved.

Of course, it is not the boy-meets-girl relationship we are talking out here, but customer-supplier liaisons. Nevertheless, the sort of things which go wrong in human relationships have a bearing on how business relationships can falter. For instance, the amount of commitment you give to preserving a relationship, even if there are hitches along the way, has to be considered in both business and personal relationships.

Working out how to react to what might seem unreasonable demands from a dominant partner holds true for both. As do matters of trust, respect and willingness to compromise. And not least an acceptance that a point might have been arrived at where the relationship must be severed.

While customers have benefited from closer relationships with suppliers through better quality of product, faster time-to-market times, increased productivity and reduced costs, and while long-term associations including joint research, design and development projects with partners can be of mutual benefit, whether or not suppliers’ performance improves with these closer relationships has been uncertain.

Robert C. Fink *et al.* say: “Some companies have expressed concerns about the increasing potential of dominant partners to use their power over dependent partners to maximize individual firm performance at the expense of weaker supply chain partners. For example, customers may seek closer supplier relations to gain knowledge that may eventually be used to either eliminated or reduce supplier power. This suggests that improving one party’s performance may not lead to improvements in the other’s or the system’s performance in the exchange.”

The variations in customer and supplier performance outcomes and risks becomes more problematic when each party considers the potential increased costs associated with relational exchanges due to the expanded commitments of

individuals and business functions in managing closer relationships. Relational exchanges often expand customer-supplier interactions from sales and purchasing personnel to include individuals in such diverse areas as engineering, manufacturing, finances and research and development.

In a study of customer-supplier relationships between pulp, paper and paperboard mills (the customer organizations) and their process control equipment suppliers, the authors discovered that supplier performance improvement was linked only to customer production performance improvement, not to customer purchasing improvements. Customers were using relational exchanges to achieve lower prices, planned price decreases and lower administrative costs, but not rewarding their suppliers with increased purchases, a greater share of their purchases, or future relationship commitments. Suppliers were only realizing reciprocal performance improvements if relational exchanges were linked to improving customer production performance.

Consequently they recommend managers be extremely cautious in developing relational exchanges, suggesting that suppliers need to be very selective in targeting customers for relational exchange strategies and that they need to develop production support programs for these customers. The most appropriate customers would be companies with limited expertise that are implementing highly complex, technologically sophisticated process control equipment.

These customers would have the greatest need for supplier product, service and knowledge capabilities designed to improve their production performance. Suppliers targeting these opportunities may also need to develop customer specific production improvement programs with dedicated resources and to establish individual and organizational goals linked to customer production improvements.

The study results also suggest that suppliers should consider being very proactive in developing differentiated product, service and knowledge capabilities to effectively leverage the potential of relational exchanges in improving their performance. Suppliers must be able to link their value added capabilities directly to their customer’s production performance improvement to generate a reciprocal improvement in their own performance.

Customers may view improvements in primary value chain activities as being more important or beneficial than improvement in secondary or procurement value chain activities and therefore rewarding suppliers for these improvements, or alternatively, improvement in customer production may create higher switching costs and thereby give suppliers more power over customers to improve their performance.

The authors note: “The potential of customers to use relational exchanges to receive unilateral performance improvements suggests further studies on the supplier’s cost versus the supplier’s benefit should be conducted to help practitioners in making these important decisions.”

(A précis of the article “Supplier performance improvements in relational exchanges”. Supplied by Marketing Consultants for Emerald.)

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