

Research paper

Achieving high satisfaction in supplier-dealer working relationships

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Keywords

Supplier relations, Sweden, Trust

Abstract

Increased attention has been paid to the question of how to build stable and long-term working relationships between suppliers and dealers. This study proposes a conceptual model including behavioral dimensions of supplier-dealer relationships and presents hypotheses about how to achieve satisfactory inter-organizational relationships. Satisfaction is the consequence of working relationships focused upon in our model. The model is an empirical assessment of the relationship between Swedish lumber dealers and their suppliers. T-test evidence suggests that all proposed critical variables, with the exception of coercive power, are of significant importance for achieving a high rate of perceived relationship satisfaction, regardless of whether the relationship is characterized by a high or a low level of trust and commitment. A good reputation, close relationship and positive relationship benefits are key variables for the achievement of high satisfaction in a "high-trust and commitment relationship". Results also indicate that it is possible to achieve a high satisfaction level even when the supplier-dealer trust and commitment are lacking.

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Supply Chain Management: An International Journal
Volume 8 · Number 3 · 2003 · pp. 224-240
© MCB UP Limited · ISSN 1359-8546
DOI 10.1108/13598540310484627

1. Introduction

In most industries it is important to create successful working relationships between organizations. Several companies strive for economies of scale by outsourcing manufacturing and logistics activities to vendors, contract manufacturers and third-party service providers. This results in the development of supply chains with more intermediaries and inter-organizational relationships than before. The more complex the supply chain, the more critical are the efficient flows of information and materials between organizations within the chain. Therefore, it is important to understand how to achieve successful working relationships between the organizations involved. This is true for partnership as well as for transactional (arm's length) relationships.

The level of perceived satisfaction is an important measure of an inter-organizational relationship (Robicheaux and El-Ansary, 1975; Anderson and Narus, 1984).

Evaluating existing supplier relationships and determining the major factors that affect satisfaction could lead a manufacturer or dealer to question and change the method of working with suppliers, resulting in an increase in relationship satisfaction in the long term. Previous researchers have shown that there is a positive relationship between cooperation and satisfaction (e.g. Mallen, 1963; Dwyer, 1980; Schmitz Whipple and Gentry, 2000). The cooperative efforts of channel members should result in greater trust, commitment, channel efficiency and the achievement of goals, thus leading to higher levels of satisfaction. However, situations may exist where the supplier or customer is forced to cooperate with the other party, despite a lack of trust and/or commitment. Grönhaug and Gilly (1991), for example, argue that dissatisfied customers may remain loyal due to high switching costs. The switching costs could lead to dissatisfaction, but if the outcomes of the relationship are good, the parties may still be satisfied with the relationship.

Most of the published academic studies in the services sector have only looked at the link between service quality and satisfaction (e.g. Kelly and Davis, 1994; Parasuraman *et al.*, 1994; Bettencourt, 1997). Few studies have been conducted to investigate the link between other behavioral dimensions and the



level of satisfaction in inter-organizational relationships in manufacturing companies (Moorman *et al.*, 1992). None of the identified studies has empirically examined how dealers' evaluations of satisfaction might vary, depending on their strong or weak relational trust and commitment to a supplier. Jackson (1985) was one of the first to suggest that the application of transactional or relational marketing should depend on the customer's orientation to a relationship, but there remains a lack of studies in this area (e.g. Storbacka *et al.*, 1994).

We propose that all dealers, regardless of their relationship strength, will have similar variables influencing their overall satisfaction. Consequently, the overall objective is to explain the importance of relationship variables for dealers to achieve high levels of perceived relationship satisfaction with their main suppliers. We also attempt to compare the importance of the variables in high trust/commitment relationships and low trust/commitment relationships.

The study focuses on the Swedish wood sector. The conceptual part of the paper is general, but the empirical data come from lumber dealers and look at their relationships with their major suppliers. First, a conceptual model including behavioral dimensions of supplier-dealer relationships is proposed and hypotheses presented. Second, we empirically examine the major factors of the conceptual model affecting the satisfaction in the relationship. Third, we empirically segment the dealer firms in the Swedish wood industry into two groups (high/low trust and commitment) and test the extent to which each group evaluates the variables of the conceptual model. The results could be used as a benchmark for the suppliers to reengineer and redesign their business processes and the future direction of their supplier relationships.

2. A supplier-dealer working relationship

In general, partnerships, alliances, collaboration, and buyer/supplier relationships have received much attention during the 1990s. Industry reports of shorter cycle times, fewer quality defects, reduced costs, and streamlined processes resulting from closer working relationships with suppliers have suggested a clearer

understanding of the major factors affecting buyer/supplier relationships (e.g. Minahan, 1998). Establishing, developing and maintaining long-term business relationships is usually a very complex process (Håkansson, 1982; Zineldin, 1998). To establish effective relationships with suppliers, organizations may use supplier selection criteria (i.e. product quality, product availability, delivery reliability, and product performance), supplier involvement in product development activities and mutual continuous improvement efforts.

The vital point is that the outcome of a working relationship is a function of a number of factors or elements. These elements are, among others, communication, adaptation, coercive power, interdependence, innovation and improvements, internal cooperation, skills and performance of employees including managers, physical resources, promotion, quality, delivery and pricing of products/services, customer expectations and satisfaction, etc. (Zineldin, 1998).

2.1 Overall relationship satisfaction

Satisfaction is an emotional response to the difference between what customers expect and what they ultimately receive. Satisfaction, according to Liljander and Strandvik (1994), refers to an insider perspective, the customer's personal experience of a service where the outcome has been evaluated in terms of the value received. It can also be defined as customers' cognitive and affective evaluation based on personal experience across all service episodes within the relationship. Positive effects resulting from a satisfied customer could be the purchase of additional products/services, less price sensitivity, favorable comment about the company and its products or services, less attention paid to competing brands and advertising and long-term loyalty. It is also more cost effective to serve the existing loyal customer than new clients due to routinized transactions.

Consequently, the ability of an organization to develop and enhance long-term customer relationships and to satisfy existing customers should be central to a relationship management strategy. Indeed, there is a positive impact from customer satisfaction on customer loyalty, retention, and profitability (Liljander and Strandvik, 1994; Grönroos, 2000; Zineldin, 2000). Relationship

marketing is concerned with how customer loyalty and retention can be achieved by creating long-term customer loyalty and satisfaction. In other words, companies seek to create committed customers. A non-committed customer is unlikely to stay with a company if an alternative supplier makes a satisfactory offer.

Understanding and satisfying customers' needs and positive word-of-mouth or reputation are most likely the key factors in developing and retaining loyal customers. If the customer is satisfied, they are more likely to purchase from the same supplier in the future. Competitiveness also depends upon customer satisfaction. Customer satisfaction is created through a combination of responsiveness to the customer's views and needs, and continuous improvement of products or services, as well as continuous improvement of the overall customer relationship. Generally, a high satisfaction level will have positive consequences for the relationship (Frazier, 1983)

2.2 Trust, commitment and satisfaction

Commitment is a result of the development of collaborative relationships between two companies, which brings us to the issue of trust and time dimensions of the relationship. Trust is "a generalized expectancy held by an individual or an organization that the word of another individual or organization can be relied on" (Rotter, 1967).

Trust is a necessary condition for commitment but commitment also has a more distinct priority dimension. In many situations it is not enough to know that the other is trustworthy, but also that the other will actively support the commitment. It is imperative for a successful relationship to communicate and cooperate in an atmosphere of trust, frank debate, interdependence, and mutual positive expectations so that mutual benefits and satisfaction may be achieved (Lewicki and Bunker, 1995; Zineldin, 1998).

A mutually beneficial and committed relationship between suppliers and dealers in an integrated supply chain, where point-of-sale data and supplier schedules are distributed up-stream in the chain and collaborative planning is conducted, allows the supplier to plan and execute the production and distribution process on the basis of known demand rather than relying on

local forecasts (e.g. Barratt and Oliveira, 2001). Commitment can only be built on actions, not on promises. Actions such as adaptation, communication, bonds, degree of cooperation, length of relationship, and quality generate commitment (Zineldin and Jonsson, 2000).

Finally, trust and commitment grow when two parties share a variety of experiences over time, thereby improving each other's ability to predict the other's behavior (Doney and Cannon, 1997). Thus, each single relationship will have a specific history in terms of how the parties have treated each other and the degree of trust and commitment that has been build up over time. In fact, the supplier as well as the dealer may at times have to pass "tests" set by the other in order to establish credibility and gain the trust of the other (Håkansson, 1982).

2.3 Critical variables that influence satisfaction

Managers are frequently interested in knowing which variables are the "key drivers" of customer satisfaction (Mittal *et al.*, 1998). In supplier-dealer relationships, previous research identified the following variables as deserving consideration: communication, reputation, coercive and non-coercive power, cooperation, bonds, dependency, adaptation and relationship benefits. A model displaying these variables is presented in Figure 1.

This model depicts the main behavioral constructs that either directly or indirectly impact on the cumulative or overall relationship satisfaction. The distinction between high and low trust/commitment relationships is important, as it challenges the idea that customer satisfaction leads to long-lasting relationships. Sometimes, customer satisfaction is not a surrogate for customer retention. A literature review and discussion

Figure 1 Proposed model of determinants of cumulative relationship satisfaction



supporting the proposed relationships follows.

Communication

The essence of any relationship is communication and interaction between at least two parties who are in contact with each other. It is communication, in one form or another, which links individuals and companies together. It is the "factory" of human society. It is people and not accounting systems, computer terminals or trading agreements that can communicate effectively with each other in an exchange of values. Mohr and Nevin (1990), for example, argue that the role of channel communication as a moderator between structural/behavioral conditions and channel outcomes (e.g. satisfaction and commitment levels) has been largely ignored by researchers. The structure of the information systems and the functionality of the information technology are of course necessary for the success of supply chain collaboration (e.g. Korhonen *et al.*, 1998; Croom, 2001). However, the focus here is on the behavioral aspects of the relationships.

The frequency, duration and content of the contact between the partners involved in a relationship are some measure of the communication. Mohr and Nevin (1990) suggest that communication in a partnership relationship has higher frequency and more bidirectional flows, informal modes, and indirect content, than in a transactional relationship. The frequency and quality of information exchange (contents) are significant factors in determining the degree to which the parties understand each other's goals and coordinate their efforts to achieve those goals and attain a satisfactory relationship. If commitment/trust is absent, informational influence strategies may be viewed suspiciously by the target, who may inaccurately perceive or distort the message. Intensive communication should lead to better informed partners, which in turn should make each party more confident in the relationship and more willing to keep it alive. The net result will be an increased level of satisfaction. House and Stank (2001) report that periodic lapses in communication may encourage participants to dissociate themselves from the responsibility for partnership relationship objectives and follow their own agendas instead. Consequently,

communication should be a prerequisite for developing high trust relationships, which could be turned into high satisfaction relationships. Studies have shown that there is a significant relationship between satisfaction, relationship benefits, and communication (Anderson and Weitz, 1989; Ganesan, 1994). Therefore, we state the first hypothesis as:

- H1.* Higher perceived quality of communication among the participating parties will, at least indirectly, result in higher perception of satisfaction on the part of the dealer.

Adaptation

Adaptation is another important factor in collaborative relationship building (Axelsson and Easton, 1992). Both suppliers and dealers may modify their product, production processes or services and administrative procedures to suit the other. Many of the adaptations that each partner makes to their normal operations will be formally laid down in the contract between the supplier and dealer. Others will be informal adaptations and will be agreed upon to cope with a problem that arises or at the request of the other. The supplier could agree to reduce deliveries from the contractually agreed level for a short time in order to cope with a sales downturn at the dealer company, or the dealer company could change its own product design to cope with a production difficulty at its supplier. Adaptation or willingness to customize (Doney and Cannon, 1997) provides evidence that a supplier is trustworthy, cares about the relationship, and is willing to cooperate and make sacrifices (Ganesan, 1994). According to Ford *et al.* (1998), adaptations are the way in which a company shows that it can be trusted to respond to a partner's requirements. A supplier could make idiosyncratic investment in the relationship in the form of specialized equipment or adaptation of production processes to meet the dealer's needs (Williamson, 1991). Buyers trust suppliers whom they perceive as having made idiosyncratic investments on their behalf. More generally, it is the willingness to adapt that demonstrates the supplier's commitment to the development of the relationship and dealer satisfaction. Therefore, the following hypothesis should be relevant, at least in high trust/commitment relationships:

H2. The willingness of a supplier to customize for the dealer leads to a higher perception of satisfaction on the part of the dealer.

Reputation

There is empirical evidence that supports the link between supplier reputation/trust and buyer satisfaction. Supplier reputation is defined as the extent to which firms and people in the industry believe a supplier is honest and interested in its customers (Ganesan, 1994; Doney and Cannon, 1997). In other words, dealers infer supplier trustworthiness and expected satisfaction through the words and actions of other people and organizations. Reputation is probably one of the most powerful elements in creating and retaining customers (Dasgupta, 1988; Storbacka *et al.*, 1994). It can either damage an organization's image and customer relationships, or give it a boost in the market. The latter situation can lead to stronger and more binding customer relationships. A favorable reputation is easily transferable across firms and enhances the credibility of the vendor (Ganesan, 1994). Anderson and Weitz (1989) found that a channel member's trust in a manufacturer is positively related to the reputation of that manufacturer. Channel members are dissatisfied if the reputation of a supplier is perceived as poor. Therefore, we can predict a positive correlation between supplier reputation and trust and the satisfaction of the buying firm (e.g. Doney and Cannon, 1997) in at least high trust/commitment relationships. Hence, the following hypothesis is proposed:

H3. The good reputation of a supplier leads to a higher perception of satisfaction on the part of the dealer.

Bases of power

Power and justice are fundamentally social structural phenomena. People are basically compliant and will generally do as they are told. Changes are based on the exercise of authority and the imposition of sanctions. In channel relationships, power is typically defined as a channel member's ability to influence the perceptions, behavior, and/or decision making of another channel member. Skinner *et al.* (1992) suggest that bases of power define the resources available to the supplier in order to influence decisions. The amount of perceived power possessed by a channel member is a function of authority and

dependency. Typically, the authoritative basis of power arises in contractual channels through business agreements, such as a franchise channel system. These agreements give a channel member the right to demand that another channel member undertake an action. Moreover, these bases of power have been classified as coercive and non-coercive by several researchers. Coercive bases of power represent a power struggle driven by force (Mallen, 1963) This struggle may decrease the level of cooperation and satisfaction and increase the level of tension and conflict in a relationship (John, 1984; Skinner *et al.*, 1992). Non-coercive bases of power increase the value of the relationship through team support and common interests as well as promoting collective goals. The application of non-coercive bases of power is likely to increase the level of effective cooperation and in turn the level of perceived satisfaction, while the level of conflict may decrease. Based on the preceding discussions, the following hypotheses are proposed:

H4. Higher levels of manufacturers' non-coercive bases of power lead to a higher perception of satisfaction on the part of the dealer.

H5. Higher levels of manufacturers' coercive bases of power lead to a lower perception of satisfaction on the part of the dealer.

Cooperation

Skinner *et al.* (1992) argue that only a limited number of empirical studies have directly addressed the issue of cooperation. However, several studies have looked into the concept of collaborative planning (e.g. Barratt and Oliveira, 2001) and logistics partnerships (e.g. House and Stank, 2001). Most studies that have directly confronted the issue of cooperation have viewed the phenomenon as either a form of satisfaction (Anderson and Narus 1984), or the inverse of conflict (Gattorna, 1978). We suggest that neither conflict nor cooperation can be used in isolation to describe the dominant sentiments of supplier-dealer relationships. Cooperative activities represent a primary means for each firm to maintain, or improve on, its outcomes. Dwyer (1980) found satisfaction to be positively correlated with the channel member's level of autonomy and the perceived cooperativeness of the firms and expected rewards. Effective cooperative

actions are important for developing trust (e.g. Zineldin and Jonsson, 2000) and should, therefore, lead, at least indirectly, to higher satisfaction. Based on the foregoing discussion, the following hypothesis is suggested:

- H6.* Higher levels of supplier cooperation lead to a higher perception of satisfaction on the part of the dealer.

Bonds

The existence of bonds between the supplier and the dealer is another aspect of relationships. Bonds reflect and engender commitment in business relationships (Håkansson and Snehota, 1995). A bond can arise between any two interacting parties as they learn to deal with each other. Different types of bonds have been identified (Håkansson, 1982). These bonds are social, technical, timing, knowledge, planning, and legal/economic. The bonds can have two different impacts on the relationship. One is the generation of trust and commitment as the relationship develops, and the other is the creation of exit barriers. All bonds can act as exit barriers, but legal/economic, technical and timing bonds are perhaps the most important form of exit barriers. A committed relationship can be dependent on perceived or contextual bonds that function as exit barriers. It is important to note that the use of contextual barriers can generate latent dissatisfaction, which emerges as the importance of the contextual bonds (for instance legal bonds) decreases. These bonds can prevent the customer from switching suppliers. Social and knowledge bonds represent perceptual factors, which are difficult for a firm to measure and manage. Sometimes, bonds can be exit barriers and prevent the customer from ending the relationship even when the satisfaction with a relationship is at a low level. The argument that bonds lead to satisfaction is weaker than for the other variables, but we still hypothesize:

- H7.* Higher levels of relationship bonds with the supplier lead to a higher perception of satisfaction on the part of the dealer.

Dependency

Dependency indicates the extent to which the dealer depends upon their major supplier for service, product warranty, advertising,

response to emergency orders and timing of new product development. The dependency as well as the interaction process between the partners is influenced by the atmosphere of the specific environment in which they operate and co-operate (Robicheaux and El-Ansary, 1975; Ford *et al.*, 1998). In turn, the atmosphere is influenced by the characteristics of the partners involved and the nature of the interaction itself. The atmosphere can affect the relationship negatively or positively. This atmosphere can be described in terms of a power-dependence relationship that exists or emerges over the life cycle of a relationship and the state of cooperation/conflicts (Håkansson, 1982). Dependency theory (Emerson, 1962) predicts that the power of one firm in a two-firm relationship is based on the other's dependency. The dependent firm needs to maintain the relationship in order to achieve desired goals and satisfaction. The efforts required to maintain the relationship often come in the form of cooperation (Skinner *et al.*, 1992). Consequently, dependency is related to cooperation and should in most situations have a positive effect on satisfaction. An illustrative proposition drawn from this line of reasoning is:

- H8.* Higher levels of supplier dependency lead to a higher perception of satisfaction on the part of the dealer.

Relationship benefit

Competition requires that firms continually seek out products, processes, and technologies that add value to their own offerings. Relationship marketing and purchasing theory suggest that partner selection may be a critical element in competitive strategy (e.g. Kraljic, 1982; Shin, 2000). The economics literature (e.g. Dasgupta, 1988; Williamson, 1991) suggests that trust primarily involves a calculative process, as when an individual or organization calculates the rewards and benefits of a relationship. The more benefits a dealer receives, the more durable the relationship. Cooperation is a joint striving towards mutual goals and benefits. Manufacturers and dealers cooperate in order to achieve both political and economic benefits. Previous researchers have suggested that a positive relationship exists between cooperation, satisfaction and benefits (e.g. Anderson and Narus, 1984; Dwyer, 1989; Skinner *et al.*, 1992;

Goffin *et al.*, 1997; Schmitz Whipple and Gentry, 2000). Generally stated, the longer the cooperation lasts, the greater are the benefits and rewards for the dealer. In low trust and commitment relationships, the positive relationship benefits are even more important for achieving high satisfaction (Grønhaug and Gilly, 1991). Thus, we posit that relationship benefits generate satisfaction:

H9. Higher levels of perceived relationship benefits lead to a higher perception of satisfaction on the part of the dealer.

Most of the discussion and motivation for the proposed hypotheses are related to high trust/commitment relationships, but because there is a lack of studies about low trust/commitment relationships, we posit that *H1-H9* are valid both for the high and low trust/commitment groups. The main determinants, however, may vary between the two groups.

3. Methodology

Short descriptions of the research design, sample, scales, reliability and validity are presented.

3.1 Research design

It should be remembered that our hypothesized relationships are presumed to be relevant to any long-term inter-organizational relationship that is difficult to terminate quickly. Data were collected by means of a mail survey administered to purchasing managers at Swedish timber merchants (lumber dealers). Although the wood industry is one of the main strategic sectors in Sweden, there is a very limited amount of empirical research on the nature of supplier-dealer relationships in this area. The industry is characterized by a few very large and dominant saw mills and a great number of smaller mills. It is common for the dealers and the larger mills to agree on six-month delivery contracts. However, the switching costs are low. The dealers sell the goods both from stock and based on customer orders. It is often difficult for the dealers to forecast future demand. Therefore, the short-term ability of the supplier to adapt to changed delivery dates and requirements is very important. The quality of the goods delivered from the mills is sometimes low, which could damage

the reputation and trustworthiness of some mills. Thus, this industry provided an ideal setting in which to examine the determinants of the supplier-dealer relationships in high trust/commitment and low trust/commitment relationships.

3.2 The sample

The total population comprised 431 dealers registered in the membership directory of the National Association of Construction and Building Material/Product Dealers in Sweden. A two-wave mailing complemented by a reminding phone call (Dillman, 1978) was employed. Each purchasing manager of the member firms was sent an introductory letter, a questionnaire, and a postage-paid reply envelope. The introductory letter explained the purpose of the research, assured the anonymity of replies, and promised a summary of the results to all who returned their completed questionnaires. Of the 431 dealer firms, 20 returned the questionnaires, indicating the reason for not answering: two had gone out of business, 14 had their own timber plants and did not deal with wood suppliers, and four no longer dealt with wood articles/products. Therefore, the effective population number was reduced to a maximum of 411 firms. A total of 68 dealers responded to the first mailing, 61 of whom provided complete and usable responses.

To increase the response rate, a second mailing to non-respondents was undertaken three weeks after the first wave. A total of 45 dealers responded, 29 of whom provided complete, usable responses. Then two weeks after the second mailing, 100 randomly selected non-respondents were phoned, reminded of the survey, and encouraged to complete and return the questionnaire. The phone calls yielded 49 respondents, of whom 23 provided complete, usable responses, while 13 only provided background/descriptive information. The background information described the main characteristics of the non-respondents and, when compared to the respondent's characteristics, could be used to assess the potential non-response bias. The entire process yielded 162 (39.4 per cent) responses, 113 of which were complete, usable questionnaires (a 27.5 per cent response rate). This response rate is typical for such industrial surveys (Skinner *et al.*, 1992; Han *et al.*, 1993; McGinnis 1999).

Respondents were primarily male (97.5 per cent), with an average purchasing experience of 17 years. The relationship with the focal supplier averaged 15 years (7.5 years for the lower percentile; 12 years for the median; and 20 years for the upper percentile). The average purchasing manager was over 55 years old. The average percentage of purchases from the focal supplier was 50 per cent of the total purchase value of the identified wood lines (25 per cent for the lower percentile; 50 per cent for the median; and 70 per cent for the upper percentile). Respondents varied widely in terms of their educational level (lack of formal education 17 per cent, primary education 28 per cent, high school degree 46 per cent, and university degree 9 per cent). The firms represented in the investigation varied in size, but most were small or medium sized (as measured by the number of employees 1-10, 53 per cent; 11-50, 42 per cent; and > 100, 5 per cent). The focal supplier was identified as the supplier with the largest monetary purchasing volume

3.3 The scales

Scales consisting of multiple items were developed to measure each construct. Given our conceptualization of trust and commitment in the relationship, it was essential that the measures captured both the importance of the relationship to the respondents and their attitudes about working to maintain the collaborative relationship. As far as possible, we draw upon scales previously used in marketing and management literature to further the process of validation for established scales. The trust scale was developed from Larzelere and Huston (1980); the commitment scale from Mowday *et al.* (1979) and Morgan and Hunt (1994); the communication scale from Anderson *et al.* (1987); the co-operation scale from Childers and Ruekert (1982); and the relationship benefits scale from Skinner *et al.* (1982). As none of these scales were in Swedish, they had to be translated, and in addition, they were adjusted to better fit the industry-specific conditions relevant to the present study. The other scales were developed from the theoretical review (see Appendix). All constructs were measured through multiple-item scales and a seven-point Likert-type response format (Table I).

Table I Descriptive and reliability data for scales

Variables	Mean	Cronbach's alpha
Trust	5.07	0.90
Commitment	4.76	0.72
Satisfaction	5.23	0.83
Communication	3.48	0.86
Adaptation	4.01	0.90
Reputation	5.52	0.83
Coercive power	1.87	0.75
Non-coercive power	2.49	N/A ^a
Cooperation	3.84	0.80
Relationship bonds	3.12	0.62
Dependency	3.96	0.81
Relationship benefits	4.70	0.69

Note: Seven-point Likert scale from 1 to 7 (see Appendix);

^aScale based on two items

3.4 Reliability and validity

One of the major concerns that must be addressed is whether there is a systematic difference between individuals/companies who choose to respond to the survey and those who do not. Systematic differences between respondents and non-respondents may decrease the generalizability of the results (Flynn *et al.*, 1990). It is also necessary that the scales measure what they were designed to measure. As a result, three reliability tests and one validity test were conducted.

First, the reason why non-respondents chose not to complete the questionnaire was analyzed. This was done by telephone calls to a random selection of 50 non-respondents. Lack of time was the most frequent reason for not answering. Second, in line with Doney and Cannon (1997), we assessed potential non-response bias by comparing early versus late respondents. Chi-square tests were unable to reveal any statistically significant difference across the early (those who responded to the first mailing) and late respondents (those who responded subsequent to the first mailing). The two tests suggested that non-response bias is not a serious concern.

A second aspect of reliability that was tested concerned the degree of internal consistency, or degree of inter-correlation among several measures for the same construct. Cronbach's alpha coefficient was used to assess the degree of internal consistency within a particular scale. In general, alpha values of 0.70 or higher are considered to be acceptable, with 0.60 being acceptable for new scales

(Churchill, 1979). All scales exceeded this threshold (Table I).

Factor analysis was carried out for each scale to test the construct validity. All individual items within each tested scale had factor loadings that exceeded 0.5 on a single factor. This indicates that the scales were homogeneous and do not measure multiple constructs.

4. Analysis and findings

Analysis was conducted in several steps. First, the importance of the critical components (relationship variables) was compared (*t*-tests) between companies with high and low satisfaction relationships, regardless of commitment and trust. Second, the respondents were placed into two groups, based on their perceived level of trust and commitment in the relationship with their focal supplier. Third, the importance of the critical components for achieving high satisfaction in the “high trust/commitment” and “low trust/commitment” groups was analyzed with *t*-tests. The statistical results are reported together with discussion and interpretation.

4.1 Achieving high satisfaction regardless of trust and commitment

First, the importance attached to the critical components was compared between companies with high and low satisfaction relationships, regardless of the trust and commitment aspects of the relationship (Table II). Companies with high levels of satisfaction ($SATISF \geq 5$) were separated from those with low satisfaction ($SATISF < 5$). The demarcation point between high and low satisfaction was determined so that it was close to the mid-point (4) and allowed for the formation of groups of somewhat equal sizes. This analysis does not reveal anything about the relative importance of the critical variables in high and low trust/commitment relationships respectively. However, it shows that all critical variables, except for coercive power, are of significant importance for achieving perceived high relationship satisfaction in an average company. Coercive power is quite low, both in the high and low satisfaction relationships. In industries with higher average coercive power, we would have expected significantly less power among the

satisfied customers, as discussed for example by Mallen (1963). Companies with a high level of satisfaction perceive that their suppliers do better jobs of communicating, adapting and cooperating when compared with low satisfaction companies. Likewise, in high satisfaction relationships, the buying companies perceive that their suppliers have a better reputation, are more dependent on the dealer and have developed stronger relationship bonds when compared to low satisfaction relationships. Further, the buying companies apply higher levels of non-coercive power and receive larger benefits in high satisfaction relationships than in low satisfaction relationships. These findings are in line with the general theory review and all the hypotheses except for *H5* (coercive power). However, the emphasis on the individual variables may vary in high and low trust/commitment relationships respectively.

4.2 Defining trust/commitment and satisfaction groups

It was proposed that high satisfaction could be achieved in relationships characterized by high levels of trust and commitment, as well as in those characterized by low levels of trust and commitment. Two groups of companies were selected to analyze how the critical components, hypothesized as necessary for achieving high satisfaction, differed in importance between companies with various levels of trust and commitment relationships. The first group (upper right square in Figure 2) included companies with high levels of trust in and commitment to their focal supplier. The second group (lower left square in Figure 2) included companies with low levels of trust and commitment ($COMMIT < 4.5$ and $TRUST < 4.5$). These two groups of companies were studied because they were the two extremes of the four identified groups of companies; 4.5 was chosen as the demarcation point between high and low trust, and between high and low commitment, as it was close to the mid-point (4) and because it resulted in somewhat equal sized groups of companies.

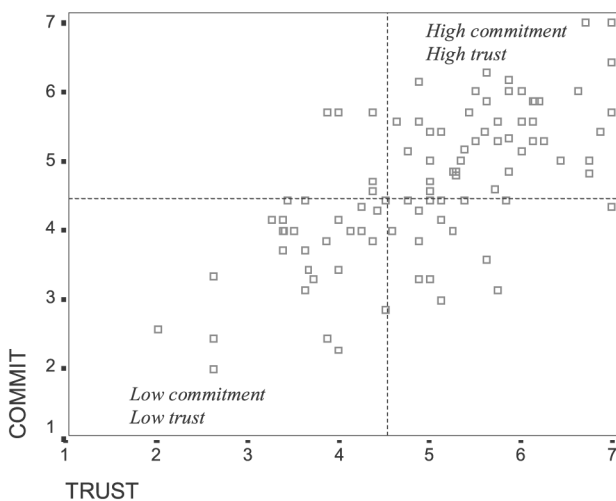
In total, 53 companies qualified for the first group and 29 for the second group; 31 companies did not qualify for either of these groups, because they had high trust and low commitment or low trust and high commitment relationships. These respondents were not included in the further

Table II Low vs high satisfaction

Variables	Low satisfaction (Group 1)		High satisfaction (Group 2)		Direction of hypothesis	t-value	p-value
	Mean n = 35	SD	Mean n = 72	SD			
Communication	2.95	1.24	3.74	1.29	+	3.02	0.004
Adaptation	3.20	1.30	4.40	1.44	+	4.23	0.001
Reputation	5.05	0.92	5.76	1.11	+	3.42	0.001
Coercive power	2.04	1.08	1.73	1.02	-	-1.39	0.17
Non-coercive power	2.54	0.94	2.98	1.24	+	2.02	0.05
Cooperation	2.91	1.22	4.31	1.48	+	5.04	0.001
Relationship bonds	2.79	0.85	3.29	1.51	+	2.12	0.04
Dependency	3.41	1.04	4.23	1.43	+	3.33	0.001
Relationship benefits	4.01	1.25	5.06	1.34	+	3.93	0.001

Note: Seven-point Likert scale from 1 to 7 (see Appendix)

Figure 2 Trust-commitment plot of the 113 respondents



analysis. The high trust and high commitment group showed higher average levels (mostly significant at the $p < 0.05$ level in t -tests) of all critical components compared to the low trust and commitment group. Overall satisfaction was also significantly higher in the high trust and high commitment group, although it should still be possible to find high satisfaction relationships in the low trust and low commitment group.

Further, the companies were regrouped, based on their perceived levels of relationship satisfaction. Companies with high levels of satisfaction ($SATISF \geq 5$) were separated from those with low satisfaction ($SATISF < 5$). The supplier relationships of five out of the 53 companies with high levels of trust and commitment were identified as “low satisfaction”. The remainder were “high satisfaction” relationships. For the low trust

and commitment group, 19 companies were deemed to be “low satisfaction” and ten as “high satisfaction” relationships. The small number of respondents in some of the identified groups led to somewhat distorted t -tests. Therefore, the findings cannot be considered as fully verified.

4.3 Achieving high satisfaction in high trust/commitment relationships

The results of the t -tests show that the mean values of the critical components differ somewhat between companies with high and low satisfaction. For companies with high trust and commitment relationships, the variables that differ most significantly between high and low satisfaction companies (Table III) are reputation (mean values of 6.18 and 5.20 respectively), cooperation (mean values of 4.79 and 3.42) and relationship benefits (mean values of 5.26 and 4.30). The empirical relationships are, however, quite weak (no relationship is significant at the $p < 0.05$ level). The differences are only significant at the $p < 0.08$, $p < 0.08$ and $p < 0.15$ levels respectively. A good reputation and ease and closeness of cooperation seem to be the key variables necessary to achieve high satisfaction. In the study of the lumber industry, the primary suppliers are often much larger and more dominant than the dealers. Therefore, it is reasonable to assume that a working cooperation is perceived as quite satisfactory. These findings are very much in line with previous research, where reputation and cooperation are identified as key variables for achieving relationship satisfaction (e.g.

Table III High T/C and high satisfaction vs high T/C and low satisfaction

Variables	High T/C low satisfaction (Group 3)		High T/C and high satisfaction (Group 4)		Direction of hypothesis	t-value	p-value
	Mean n = 5	SD	Mean n = 48	SD			
Communication	3.82	1.66	4.11	1.32	+	0.38	0.72
Adaptation	4.49	1.93	4.81	1.38	+	0.37	0.73
Reputation	5.20	0.96	6.18	0.81	+	2.20	0.08
Coercive power	2.03	1.23	1.82	1.16	-	-0.37	0.72
Non-coercive power	2.95	1.27	3.38	1.23	+	0.73	0.50
Cooperation	3.42	1.35	4.79	1.26	+	2.17	0.08
Relationship bonds	3.05	1.00	3.39	1.48	+	0.62	0.57
Dependency	3.75	1.54	4.46	1.47	+	0.99	0.37
Relationship benefits	4.30	1.20	5.26	1.33	+	1.67	0.15

Note: Seven-point Likert scale from 1 to 7 (see Appendix)

Anderson and Narus, 1984). However, these variables can never be the only driving forces. The potential benefits (i.e. “relationship benefits”) that the parties expect to obtain from the relationship must always appear clear and obvious (e.g. Goffin *et al.*, 1997; Schmitz Whipple and Gentry, 2000).

For six of the nine tested relationship variables (and hypotheses) the *p*-values were very low. A reason for this may be that the relationships are characterized by high trust and commitment, which have often been identified as the main constituents of relationship satisfaction (e.g. Ganesan, 1994). Communication builds a bridge between organizations and is a prerequisite for developing partnership relationships based on trust (House and Stank, 2001). In the industry studied, adaptation only concerns agreeing on and changing delivery contents, dates and quantities. Adaptation is also identified as one of the most important variables for achieving high trust and commitment (e.g. Zineldin and Jonsson, 2000). Consequently, communication and adaptation should at least have an indirect impact on relationship satisfaction. In high trust and commitment relationships, however, the communication and adaptation may have minor roles as satisfaction differentiators. The power variables are those with the lowest mean values. Consequently, the existence of power in the studied industry is low. Therefore, its impact on satisfaction may also be lower, in comparison with industries and relationships characterized by high power levels. Bonds and dependency are the two variables with the weakest theoretical

impact on satisfaction. Based on this study, their impact on satisfaction is much lower than that of trust and commitment.

4.4 Achieving high satisfaction in low trust/commitment relationships

Table IV shows that adaptation (mean values of 3.61 and 2.73 respectively), “negative” non-coercive power (mean values 1.86 and 2.32) and relationship benefits (mean values of 3.73 and 4.56) are the corresponding variables with most significant differences ($p < 0.02$, $p < 0.06$, $p < 0.10$) for companies with low trust and commitment relationships. Consequently, the willingness of the supplier to adjust to the dealer’s business requirements is important in relationships without trust and commitment. It is the formal adaptability laid down in the contract between the parties, rather than the informal adaptability, that should be important in relationships without high trust and commitment. Informal adaptability, on the other hand, is an activity with a strong effect on trust (Ford *et al.*, 1998; Zineldin and Jonsson, 2000). Therefore, it is somewhat surprising that adaptation is the variable with the most significant difference between the satisfied and dissatisfied low trust/commitment relationships. However, the study of the lumber industry revealed that dealers occasionally have to work with suppliers they do not fully trust, due to situations of short-term notice, a specific customer order, or the need for quantities or items other than those agreed on in the contract. The primary supplier, who is usually more powerful than the dealer, may not be able or willing to deliver. Therefore, the

Table IV Low T/C and high satisfaction vs Low T/C and low satisfaction

Variables	Low T/C low satisfaction (Group 1)		Low T/C and high satisfaction (Group 2)		Direction of hypothesis	t-value	p-value
	Mean n = 19	SD	Mean n = 10	SD			
Communication	2.54	0.90	2.59	0.87	+	0.12	0.90
Adaptation	2.73	0.98	3.61	0.84	+	2.52	0.02
Reputation	4.72	0.86	4.08	0.99	+	-1.58	0.14
Coercive power	2.01	1.05	1.50	0.82	-	-1.44	0.16
Non-coercive power	2.32	0.78	1.86	0.40	+	-2.01	0.06
Cooperation	2.60	1.17	2.28	1.06	+	-0.75	0.46
Relationship bonds	2.62	0.82	3.02	1.31	+	0.84	0.42
Dependency	3.11	0.99	3.39	1.02	+	0.67	0.51
Relationship benefits	3.73	1.11	4.56	1.19	+	1.74	0.10

Note: Seven-point Likert scale from 1 to 7 (see Appendix)

dealer must turn to whichever supplier can deliver. In these situations, it is important for the temporary supplier to be flexible and adapt to dealer requirements in terms of items, quantities and delivery dates.

Non-coercive power also differed significantly between satisfied and non-satisfied companies. Non-coercive power was higher in the group consisting of unsatisfied companies. At first sight, the fact that it is lower when the company is satisfied may appear confusing. If trust and commitment are absent, however, non-coercive power and other informal influence strategies may be viewed suspiciously and be deemed to have a negative impact on the relationship (Mohr and Nevin, 2000). The objective of the relationship is "pure business" (normally at "arms-length"). Close cooperation and non-coercive power are not the complete means of success. Therefore, it is also interesting to note that the mean values of reputation and cooperation are higher (although not significantly so) in the low satisfaction group compared to the high satisfaction group. The argumentation for this should be synonymous with that of non-coercive power. This indicates that these variables not only have low importance in relationships characterized by low trust and low commitment, but that investment in these variables could be an obstacle to achieving high relationship satisfaction.

The relationship benefits that were significant at the $p < 0.10$ level were expected to be even more important for achieving high satisfaction in a low trust and commitment relationship. According to previous research

and *H9*, it will most likely be very hard to feel satisfied in a low trust and commitment relationship if the potential benefits are not obvious to the participating parties (e.g. Skinner *et al.*, 1992).

5. Conclusions and final remarks

5.1 Conclusions

The proposed hypotheses developed and tested in this paper represent an initial attempt to explain the impact of communication, adaptation, reputation, non-coercive power, coercive power, cooperativeness, relationship bonds, dependency and objective relationship benefits on the level of perceived satisfaction in an inter-organizational relationship. Based on a theoretical review, this paper argues that the characteristics of these nine relationship variables, together with the levels of trust and commitment, are critical for the degree of perceived satisfaction in inter-organizational relationships. When not considering the level of trust and commitment, all variables, with the exception of coercive power, were emphasized to a greater extent in the high satisfaction relationships compared to the low satisfaction relationships. However, it was considered that the characteristics of trust and commitment have such a substantial influence on the relationships (e.g. Lewicki and Bunker, 1995) that in order to fully understand the impact of the relationship variables, the effects of trust and commitment should be controlled.

Therefore, the impact of the variables was studied in “high trust/commitment” and “low trust/commitment” relationships respectively. In the high trust/commitment relationships, the variables “reputation”, “cooperation” and “relationship benefits” were identified as those with the most significant difference between the high and the low satisfaction relationships. A good reputation and cooperation are identified as key success factors for partnership relationships in several studies (e.g. Anderson and Narus, 1984). In addition, relationship benefits are always considered important in a competitive business context (e.g. Goffin *et al.*, 1997). These findings are consistent with previous research. However, the explanation as to why the other six variables were not identified as important for achieving a high level of satisfaction in high trust and commitment relationships is weaker. However, our interpretations are that, while communication and adaptation are important for generating trust and commitment (e.g. Ganesan, 1994; House and Stank, 2001), they have only an indirect impact on satisfaction. The average coercive and non-coercive power was very low in the industry studied. Its impact on satisfaction is probably greater in other industries (Skinner *et al.*, 1992). Previous research has not identified any major impact of relationship bonds or the level of dependency on relationship satisfaction. These are most likely the variables which least affect satisfaction in high trust and commitment relationships. Nevertheless, these variables definitely affect the relationship, although this study was unable to reveal their impact on relationship satisfaction.

It has not been possible to identify any analysis similar to that of the low trust and commitment relationships from previous research. Therefore, we hypothesized that the same variables that were considered important in high trust and commitment relationships also were important in low trust and commitment relationships. However, some of the hypotheses were weaker. We expected the positive relationship benefits to be the single most important factor for achieving satisfaction. The adaptability of the supplier was, however, also important. Further, informal influence strategies (such as non-coercive power and reputation) were identified as possible negative factors for the

relationships. These findings are, however, quite weak, and should only be interpreted as hypotheses. The overall findings are presented in Table V. It is quite evident that the confirmation or rejection of the stated propositions and the general findings pertaining to low trust and commitment relationships must be expanded upon in future studies.

5.2 Managerial implications

The findings show that dealers apparently value cooperative suppliers who have a good reputation and consider the positive relationship benefits to be an important prerequisite for building trustworthy long-term relationships. A major determinant of future business opportunity is the extent to which dealers are satisfied with and trust the supplier firm. Therefore, it is important for suppliers to act on dealers' perception of satisfaction – perhaps through “satisfaction- and trust-enhancing” activities, such as adaptations, cooperation, benefits of long-term relationships and non-coercive power. The findings provide insights into the direction such an effort might take, one example being that marketing and sales should emphasize these aspects of satisfaction, perhaps including testimonials in their marketing communication.

In some situations, a dealer may have to cooperate with a supplier where there is no relationship based on trust. Such relationships could be considered satisfactory as long as the supplier is flexible and adapts to the requirements of the dealer, and the positive benefits are high.

5.3 Limitations and further research

The study was conducted in the wood industry, which is characterized by several small lumber dealers and large saw mills. Perhaps the results would be somewhat different in other industries. When conducting the analysis, the respondents were classified into sub-groups. Some of the groups only contained a few companies. More comprehensive data, with more respondents in each sub-group, would be necessary to fully verify the conclusions. Several of the identified relationships were not statistically significant at the $p < 0.05$ level and should, therefore, be interpreted as possible relationships or proposed hypotheses rather than verified relationships.

Table V The hypotheses and their outcomes

Hypothesis	Outcome
H1. Communication leads to higher perception of satisfaction	Not identified as a critical variable in any of the low trust/commitment or high trust/commitment groups, but critical when comparing companies regardless of trust and commitment
H2. Adaptation leads to higher perception of satisfaction	Critical variable in low trust/commitment relationships
H3. Good reputation leads to higher perception of satisfaction	Critical variable in high trust/commitment relationships
H4. Non-coercive bases of power lead to higher perception of satisfaction	Critical variable (i.e. low non-coercive power) in low trust/commitment relationships
H5. Coercive bases of power lead to lower perception of satisfaction	Not identified as a critical variable in either high or low trust/commitment relationship
H6. Cooperation leads to higher perception of satisfaction	Critical variable in high trust/commitment relationships
H7. Relationship bonds lead to higher perception of satisfaction	Not identified as a critical variable in any of the low trust/commitment or high trust/commitment groups, but critical when comparing companies regardless of trust and commitment
H8. Dependency leads to higher perception of satisfaction	Not identified as a critical variable in any of the low trust/commitment or high trust/commitment groups, but critical when comparing companies regardless of trust and commitment
H9. Relationship benefits lead to higher perception of satisfaction	Critical variable in high trust/commitment and low trust/commitment relationships

Further studies that highlight low trust and commitment relationships should be conducted. This study did not cover all the variables of interest in supplier-dealer relationships. The sample was rather small and focused on a quite delimited industry segment. A broader survey that compares various industries and environments would add knowledge to the findings in this article. Case studies aimed at improving the understanding of the impact of informal influence strategies on low trust and commitment relationships would also be of value.

References

- Anderson, E. and Weitz, B. (1989), "Determinants of continuity in conventional industrial channel dyads", *Marketing Science*, Vol. 8 No. 4, pp. 310-23.
- Anderson, E., Ledish, L. and Weitz, B. (1987), "Resource allocation behavior in conventional channels", *Journal of Marketing Research*, Vol. XXIV, February, pp. 85-97.
- Anderson, J. and Narus, A. (1984), "A model of distributor's perspective of distributor-manufacturer working relationships", *Journal of Marketing Research*, Vol. 22, November, pp. 365-76.
- Axelsson, B. and Easton, G. (1992), *Industrial Network: A New View of Reality*, Routledge, London.
- Barratt, M. and Oliveira, A. (2001), "Exploring the experiences of collaborative planning initiatives", *International Journal of Physical Distribution & Logistics Management*, Vol. 31 No. 4, pp. 266-89.
- Bettencourt, L. (1997), "Customer voluntary performance, customer as partners in service delivery", *Journal of Retailing*, Vol. 37, pp. 383-406.
- Childers, T.L. and Ruekert, R.W. (1982), "The meaning and determinants of cooperation within an interorganizational marketing network", in Hunt, S.D. and Bush, R.F. (Eds), *Proceedings of the 1982 Winter Educators' Conference, Marketing Theory: Philosophy of Science Perspectives*, American Marketing Association, Chicago, IL.
- Churchill, G.A. (1979), "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, Vol. 16 No. 2, pp. 64-73.
- Croom, S. (2001), "Restructuring supply chains through information channel innovation", *International Journal of Operations & Production Management*, Vol. 21 No. 4, pp. 504-15.
- Dasgupta, P. (1988), "Trust as a commodity", in Gambetta, D. (Ed.), *Trust: Making and Breaking Cooperative Relations*, Basil Blackwell, New York, NY.
- Dillman, D.A. (1978), *Mail and Telephone Surveys: The Total Design Method*, John Wiley & Sons, New York, NY.
- Doney, P.M. and Cannon, J.P. (1997), "An examination of the nature of trust in buyer-seller relationships", *Journal of Marketing*, Vol. 61, April, pp. 35-51.
- Dwyer, F.R. (1980), "Channel member satisfaction: laboratory insights", *Journal of Retailing*, Vol. 56, Summer, pp. 59-74.

- Emerson, R. (1962), "Power-dependence relationships", *American Sociological Review*, Vol. 27, November, pp. 31-41.
- Flynn, B.B., Sakakibara, S., Schroeder, R.G., Bates, K.A. and Flynn, E.J. (1990), "Empirical research methods in operations management", *Journal of Operations Management*, Vol. 9 No. 2, pp. 250-84.
- Ford, D., Gadde, L.-E., Håkansson, H., Lundgren, A., Snehota, I., Turnbull, P. and Wilson, D. (1998), *Managing Business Relationships*, Wiley & Sons, Chichester.
- Frazier, G. (1983), "Interorganizational exchange behavior in marketing channels: a broadened perspective", *Journal of Marketing*, Vol. 47, Fall, pp. 68-78.
- Ganesan, S. (1994), "Determinants of long-term orientation in buyer-seller relationships", *Journal of Marketing*, Vol. 58, April, pp. 1-19.
- Gattorna, J. (1978), "Channels of distribution conceptualizations: a state-of-the-art review", *European Journal of Marketing*, Vol. 12 No. 7, pp. 471-512.
- Goffin, K., Szejczewski, M. and New, C. (1997), "Managing suppliers: when fewer can mean more", *International Journal of Physical Distribution & Logistics Management*, Vol. 27 No. 7, pp. 422-36.
- Grønhaug, K. and Gilly, M.C. (1991), "Transaction cost approach to consumer dissatisfaction and complaint actions", *Journal of Economic Psychology*, Vol. 12, pp. 165-83.
- Grönroos, C. (2000), *Service Management and Marketing, A Customer Relationship Approach*, Wiley, New York, NY.
- Håkansson, H. (Ed.) IMP Group. (1982), *International Marketing and Purchasing of Industrial Goods – An Interaction Approach*, Wiley & Sons, Chichester.
- Håkansson, H. and Snehota, I. (Eds) (1995), *Developing Relationships in Business Networks*, International Thomson Business Press, London.
- Han, S.L., Wilson, D.T. and Dant, S.P. (1993), "Buyer-supplier relationships today", *Industrial Marketing Management*, Vol. 22, pp. 331-8.
- House, R.G. and Stank, T.P. (2001), "Insight from a logistics partnership", *Supply Chain Management: An International Journal*, Vol. 6 No. 1, pp. 16-20.
- Jackson, B. (1985), *Winning and Keeping Industrial Customers: The Dynamics of Customer Relationships*, D.C. Heath and Company, Lexington, MA.
- John, G. (1984), "An empirical investigation of some antecedents of opportunism in a marketing channel", *Journal of Marketing Research*, Vol. XXI, August, pp. 278-89.
- Kelley, S. and Davis, M. (1994), "Antecedents of customer expectations for service recovery", *Journal of the Academy of Marketing Science*, Vol. 22, Winter, pp. 52-61.
- Korhonen, P., Huttunen, K. and Eloranta, E. (1998), "Demand chain management in a global enterprise – information management view", *Production Planning & Control*, Vol. 9 No. 6, pp. 526-31.
- Kraljic, P. (1982), "Purchasing must become supply management", *Harvard Business Review*, September-October, pp. 109-17.
- Larzelere, R.E. and Huston, T.L. (1980), "The dyadic trust scale: toward understanding interpersonal trust in close relationships", *Journal of Marriage and the Family*, Vol. 42 No. 3, pp. 595-604.
- Lewicki, R.J. and Bunker, B.B. (1995), "Trust in relationships: a model of development and decline", in Bunker, B.B. and Rubin, J. Z. (Eds), *Conflict, Cooperation, and Justice*, Yale University Press, New Haven, CT.
- Liljander, V. and Strandvik, T. (1994), "The relationship between service quality, satisfaction and intentions", in Kunst, P. and Lemmink, J. (Eds), *Quality Management in Services II*, Van Gorcum, Assen/Maastricht.
- McGinnis, M. (1999), "Purchasing and supplier involvement: issues and insights regarding new product success", *The Journal of Supply Chain Management*, Summer, pp. 4-15.
- Mallen, B. (1963), "A theory of retailer-supplier conflict, control, and cooperation", *Journal of Retailing*, Vol. 39, Summer, pp. 24-32.
- Minahan, T. (1998), "Is partnering a shame?", *Purchasing*, 12 February, pp. 61-4.
- Mittal, V., Ross, T. and Baldasare, P. (1998), "The asymmetric impact of negative and positive attribute-level performance on overall satisfaction and repurchase intentions", *Journal of Marketing*, Vol. 62, January, pp. 33-47.
- Mohr, J. and Nevin, J.R. (1990), "Communication strategies in marketing channels: a theoretical perspective", *Journal of Marketing*, Vol. 54, October, pp. 36-51.
- Moorman, C., Zaltman, G. and Deshpandé, R. (1992), "Relationships between providers and users of marketing research: the dynamics of trust within and between organizations", *Journal of Marketing Research*, Vol. 29, August, pp. 314-29.
- Morgan, R. and Hunt, S. (1994), "The commitment-trust theory of relationship marketing", *Journal of Marketing*, Vol. 58 No. 3, pp. 20-38.
- Mowday, R.T., Steers, R.M. and Porter, L.W. (1979), "The measurement of organizational commitment", *Journal of Vocational Behavior*, Vol. 14, pp. 224-47.
- Parasuraman, A., Zeithaml, V. and Berry, L. (1994), "Reassessment of expectations as a comparison standard in measuring consumer perceptions of service quality: implications for future research", *Journal of Marketing*, Vol. 58, January, pp. 11-24.
- Robicheaux, R.A. and El-Ansary, A.I. (1975), "A general model for understanding channel member behavior", *Journal of Retailing*, Vol. 52, Winter, pp. 13-30.
- Rotter, J.B. (1967), "A new scale for the measurement of interpersonal trust", *Journal of Personality*, Vol. 35 No. 4, pp. 651-65.
- Schmitz Whipple, J. and Gentry, J. (2000), "A network comparison of alliance motives and achievements", *Journal of Business and Industrial Marketing*, Vol. 15 No. 5, pp. 301-22.
- Shin, H. (2000), "Supply management orientation and supplier/buyer performance", *Journal of Operations Management*, Vol. 18, pp. 317-33.
- Skinner, S.T., Gassenheimer, J.B. and Kelley, S.W. (1992), "Cooperation in supplier-dealer relations", *Journal of Retailing*, Vol. 68, Summer, pp. 174-93.
- Storbacka, K., Strandvik, T. and Grönroos, C. (1994), "Managing customer relationships for profit: the dynamic of relationship quality", *International*

- Journal of Service Industry Management*, Vol. 5 No. 5, pp. 21-38.
- Williamson, O.E. (1991), "Calculativeness, trust and economic organization", *Journal of Law and Economics*, Vol. 26, April, pp. 453-86.
- Zineldin, M. (1998), "Towards an ecological collaborative relationship management", *European Journal of Marketing*, Vol. 32 Nos 11/12, pp. 1138-64.
- Zineldin, M. (2000), *TRM*, Studentlitteratur, Lund, Sweden.
- Zineldin, M. and Jonsson, P. (2000), "An examination of the main factors affecting trust/commitment in supplier-dealer relationships: an empirical study of Swedish wood industry", *The TQM Magazine*, Vol. 12 No. 4, pp. 245-65.

Appendix. Sample items in measurement scales^a

1. Trust

- a. We can always trust the supplier
- b. The supplier has a high level of integrity
- c. The supplier keeps promises
- d. When the supplier makes important decisions our interests are also taken into consideration.
- e. The supplier is always honest with us
- f. A high level of trust has been developed between the personnel in our organization and the supplier
- g. The supplier considers it important that our company is successful
- h. There is no reason for us to be suspicious of the supplier

2. Commitment

- a. We have a strong commitment to this supplier
- b. We intend to maintain and develop this relationship
- c. This relationship requires maximum effort and involvement
- d. Our company is fully open and honest in its relationship with the supplier.
- e. The supplier devotes sufficient time and effort to our relationship
- f. We often feel very happy about the cooperation with the supplier
- g. Deciding to work with this supplier was a definite success for my firm

3. Satisfaction

- a. I would recommend that other dealers do business with this supplier
- b. I feel this supplier provides the services necessary for the performance of my business operations

- c. I would not stop buying products manufactured by this supplier even if I had the opportunity to buy from other suppliers

4. Communication

- a. The supplier keeps us informed of new developments (R&D)
- b. The supplier informs us about delivery problems as soon as they occur
- c. The supplier's sales personnel frequently visit our place of business
- d. The supplier devotes a lot of time in getting to know our staff
- e. The supplier frequently discusses new possibilities with us
- f. The supplier gives us opportunities to participate in goal setting to enhance performance

5. Adaptations

- a. This supplier is willing to customize products for us
- b. This supplier is willing to adjust production processes to meet our needs
- c. This supplier is willing to change inventory procedures for us
- d. This supplier is willing to adjust distribution/delivery procedures to suit us
- e. This supplier is willing to invest in tools/equipment in order to be better able to adjust to our processes

6. Reputation

- a. The supplier has a reputation for being honest
- b. It is well-known that the supplier cares about customers
- c. The supplier has a good reputation in the market

7. Coercive power

- a. The supplier could have made the deal worse for us if we hadn't accepted their proposal
- b. The supplier will make changes that affect us negatively
- c. The supplier has threatened not to renew their contract with us
- d. The supplier has hinted that our requirements will not be considered in the future
- e. We are forced to adjust to the supplier's requirements

8. Non-coercive power

- a. We admire the way the supplier does business, and therefore adapt to their requirements
- b. By adapting to the requirements of the supplier we expect to reap the benefits later on

9. *Cooperation*

- a. If we contribute to improving the supplier's performance, this supplier will better assist and look after our needs in the future
- b. Our future goals are best reached by working with rather than against this supplier
- c. Our future profits are dependent on maintaining a good working relationship with this supplier
- d. The supplier will support us in our marketing activities

10. *Relationship bonds*

- a. Technical bonds – the design of our manufacturing equipment is based on material purchased from a specific supplier
- b. Timing bonds – Administrative routines are coordinated (e.g. EDI)
- c. Knowledge bonds – Knowledge and confidence are mutually built up.
- d. Social bonds – personal contacts and confidence exist between employees.
- e. Economic and legal bonds – long-term general agreements exist

11. *Dependency*

To what extent are you dependent upon the major supplier regarding (anchors: 1 = not at all dependent, 4 = neither dependent nor independent, 7 = completely dependent):

- a. Product warranties
- b. Marketing activities
- c. Fulfillment of "rush orders"
- d. Short and timely "time-to-market"

12. *Relationship benefits*

If you could not buy your wood stock from your present major supplier, you would be likely to purchase from some other supplier (alternative supplier). Please compare your major supplier with this alternative supplier concerning the following items (anchors: 1 = present supplier is much worse; 7 = present supplier is much better):

- a. Transaction costs
- b. Administrative lead time
- c. Tied-up capital
- d. Delivery time
- e. Delivery reliability
- f. Delivery security
- g. Delay in receiving information
- h. Product quality
- i. Flexibility

^a All scales are measured on seven-point Likert scales; scales 1 to 10 are defined as "Please indicate your level of agreement or disagreement with the following statements about your focal supplier" (1 = Strongly disagree, 4 = Neither disagree nor agree, 7 = Strongly agree).