DRIVERS OF INTER-ORGANISATIONAL TRUST IN EXCHANGE RELATIONSHIPS

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Abstract

Purpose: This paper examines the drivers of inter-organisational trust in exchange relationships. Despite the recognised importance of inter-organisational trust, there are few examples of research addressing this topic in long-term buyer-seller arrangements (except for strategic alliances).

Methodology: The paper presents structural equation modelling (SEM) analysis of survey data from 181 buyer-seller relationships in the seafood industry. Various drivers of interorganisational trust are examined.

Findings: Relational investments, relationship length and sharing of strategic information are identified as the key drivers of inter-organisational trust. Contrary to common assumptions, international experience and sharing of logistical (operational) information show no association with inter-organisational trust.

Implications: In order to increase inter-organisational trust, managers should prioritise the nurturing of long-term relationships, sharing strategic (confidential) information and investing time and resources in the buyer-seller relationship. The key to success remains in the continuous hard work which is required for building and keeping successful inter-organisational relationships. Previous successes are no guarantee that exchange relationships will work well in the future, and do not permit managers to rest on their laurels. As the nature of business changes and new challenges arise, managers must always be alert to new approaches and develop new recipes to be successful.

Limitations: Cross-sectional data is used, collected from exporters only. Future studies could use longitudinal data collected from both exporters and importers, in different countries, industries and business cultures.

Originality: The present study makes empirical and theoretical contributions to the literature by investigating the antecedents of inter-organisational trust by applying SEM techniques. A measure of relational investments is proposed. Contrary to previous studies in the export-marketing literature, inter-organisational trust is measured for the whole exchange relationship and not as either buyer- or supplier trust.

Keywords: Buyer-seller relationships, Trust, Exports

INTRODUCTION

Many managers add value to their company by developing exchange relationships with other firms (Håkansson and Snehota, 1995). As Håkansson (2006, p. 152) has observed, exchange relationships "... are one of the most important resources that any company has". Competition in the global marketplace is increasing, and especially firms in the business to business (B2B) marketing sector must strive to initiate, develop and maintain beneficial exchange relationships with their foreign counterparts (Day, 2000).

Various explanations of successful exchange relationships have been proposed (Blankenburg et al., 1999; Borys and Jemison, 1989; Heide and John, 1990), but beyond the general observation that inter-organisational trust is a key antecedent to inter-organisational cooperation and value-creation (Wilson, 1995; Smith et al., 1995), the extant literature in this area has provided few insights into the drivers of inter-organisational trust (Doney and Cannon, 1997; Seppänen et al., 2007). Zucker (1986) noted that a deeper understanding of the development of trust in exchange relationships requires further research attention, and recently, other authors have repeated this quest for more study (Bello et al., 1999; Lindgreen and Wynstra, 2005; Ulaga and Eggert, 2006).

Given this need to learn more about the drivers of inter-organisational trust, an empirical study of the drivers of inter-organisational trust represents a useful undertaking. The research questions of this study are: what are the drivers of inter-organisational trust and how productive is this inter-organisational trust in creating value for both the buyer and the seller?

From an academic point of view, attention among marketing scholars has been devoted to how either the buying or the selling firm trusts its exchange partner. In this paper an interorganisational perspective is adopted, and the exchange relationship per see is considered to be the appropriate unit of analysis, justifying using the notion of inter-organisational trust.

The remaining part of this paper is organised as follows: First, the paper presents a review of the relevant literature on drivers of inter-organisational trust and value creation in buyer-seller relationships. The research model and hypotheses are then presented. The methodology and results of the empirical study of the relationships between exporters and importers then follow. Finally, the paper presents a summary of the major findings and some implications for management and theory as well as suggestions future research.

CONCEPTUAL FRAMEWORK

Inter-organisational Trust

In the literature on B2B marketing, trust is seen to consist of two essential elements: credibility and benevolence (Anderson and Narus, 1990; Doney and Cannon, 1997; Dwyer et al., 1987). Doney and Cannon (1997, p. 36) proposes that trust in B2B relationships can be defined as 'the perceived credibility and benevolence of a target of trust'. Following these lines, perceived credibility of an exchange partner means that the exchange partner is believed to be sincere and acts as promised, while perceived benevolence means that the exchange partner is believed to be interested in the firm's well-being and that it will not undertake actions that could have negative consequences for the firm.

Inter-organisational trust plays a key role in long-term buyer-seller relationships due to large investments in the relationship and the overlapping roles and responsibilities of the parties involved (Coote et al., 2003). The role of inter-organisational trust is even more critical when

products are transcending national boundaries, due to spatial, time, cultural and other differences between buyers and sellers (Raven et al., 1993).

In their review of the empirical research on inter-organisational trust, Seppänen et al. (2007) identify major inconsistencies in its conceptualisation, operationalisation and measurement. It is common to refer to trust in exchange relationships as inter-organisational trust (cf. Seppänen et al., 2007), even if it only concerns the perceptions, expectations or experiences of a single firm. The scales developed, e.g. by Aulakh et al. (1996), Sako and Helper (1998), Robson et al. (2008), Doney and Cannon (1997) and Zaheer et al. (1998) measure how one firm trusts another. However, there appears to be no readily available scale that has been validated by previous research on inter-organisational trust as an exchange relationship characteristic capturing both the buyer's and the seller's trust in each other. This focus on a specific focal firm is, to some degree, understandable, but there is an increasing recognition that understanding the exchange relationship is the key to effective buyer-seller relationships (Chen and Paulraj, 2004; Lu, 2009). It is therefore the contention of the present study that an ambition of contemporary research should be to understand the construct of interorganisational trust at the exchange relationship level. Building on the definition of trust as suggested by Doney and Cannon (1997), we define inter-organisational trust as the exchange partners' mutually perceived credibility and benevolence of each other.

There are three basic forms of inter-organisational trust in exchange relationships: institutional, calculative and relational (Rousseau et al., 1998). Institutional trust is the foundation for the other forms of trust, as institutional factors more or less support the emergence of trust. The second form of trust, calculative trust, is based on rational choice, and assumes that the trustee intends to perform a specific action. As the parties interact over time, the third form, relational trust, develops. Such trust enables the development of shared norms, values and objectives, based on their experience with the exchange partner.

It is the third type of trust that we consider in this paper. In sociological studies on exchange relationships, relational trust is simply referred to as 'trust' (Bradach and Eccles, 1989), but in marketing literature on inter-organisation relationships, relational trust has been referred to as relational norms of governance (Heide, 1994). We take the latter perspective, and this approach allows us to rely on measurement scales that have been developed and validated in previous research in marketing.

In brief, this conceptualisation of inter-organisational trust emphasises a social and organisational vehicle of control in exchange that motivates performance through shared values. The exchange parties rely on bilaterally developed social norms to guide their joint efforts, and a mutual desire to preserve the relationship (MacNeil, 1980). Examples of such norms in exchange relationships include flexibility and solidarity (Heide and John, 1992; Haugland and Reve, 1996). In exporter-importer relationships, the relational norm of solidarity has been found to be especially important (Lusch and Brown, 1996; Haugland and Reve, 1996). According to MacNeil (1980, p. 92), solidarity remains a norm "... as long as each party in a relationship can give an affirmative answer to the following question: 'Do I think conditions will continue to exist whereby each of us will desire to and be able to depend on the other?"". Finally, inter-organisational trust has been found to be closely associated with lower transaction costs and better information sharing (Dyer and Chu, 2000; Dyer and Singh, 1998; Dwyer et al., 1987; Morgan and Hunt, 1994; Seppänen et al., 2007; Zaheer et al., 1998).

Drivers of inter-organisational trust

1. Relationship Length

With regard to the duration of exchange relationship, it has been noted that it takes time for exchange partners to develop the personal relations necessary to generate inter-organisational trust (Granovetter, 1985; Gulati, 1995; Håkansson et al., 1999). In-depth social knowledge facilitates coordination of transactions as it makes an exchange partner's behaviour understandable and predictable (Sohn, 1994). Following Douglas and Craig (1989), exporters learn from previous experiences (mistakes, trials, etc.). The interaction in such exchange relationship provides insights into the moral character of exchange partners (Barney and Hansen, 1994). According to Narus and Anderson (1986), two to three years of familiarity are required to establish such norms. Accordingly, inter-organisational trust can emerge when the two parties share a variety of experiences, predict one another's behaviour, and understand one another's goals (Doney and Cannon, 1997). Also, Dyer and Chu (2000) found that relationship length was a predictor of inter-organisational trust, but only in Japan – not in Korea and the U.S.

2. Information Sharing

Information sharing can be defined as the "formal and informal sharing of meaningful and timely information between firms" (Anderson and Narus, 1990, p. 44). The shared information enables the parties to learn more about each other, to adapt their internal processes and to cope better with external market conditions (Aulakh et al., 1996).

Information sharing is a major determinant of value creation in exchange relationships (Powers and Reagan, 2007), and most studies have found a positive relationship (Doney et al., 2007; Jennings et al., 2000; Lancastre and Lages, 2006; Sharif et al., 2005). Two notable exemptions, though, are Doney and Cannon (1997) and Dyer and Chu (2000), who fail to find empirical support for such a relationship. Information sharing is, however, a somewhat broad concept, and different applications of the concept could explain the different findings. Therefore, we have chosen to use a more nuanced approach, by distinguishing between two forms of information sharing in this study.

On one hand, in order to optimise the benefits that accrue from their collaboration, the parties in a relationship coordinate their efforts on the basis of shared information to achieve what Borys and Jemison (1989, p. 246) have termed 'boundary permeability', which ensures that each party has knowledge about the other party and its plans (Lorenzoni and Lipparini, 1999; Marchington and Vincent, 2004; Williams, 2002). This aspect of information sharing arguably enables the parties to achieve effective technical and administrative coordination in logistical operations—such as the sharing of sales forecasts, production plans, inventory status and promotional plans (Borys and Jemison, 1989; Lee, 2000). In the absence of such information sharing, the relationships is vulnerable to the so-called 'bullwhip effect' and reduced effectiveness (Lee et al., 1997).

On the other hand the shared information can be more strategic in nature, and hence not related to the day-to-day logistical operations (Dyer and Singh, 1998). When sensitive strategic knowledge is shared with an exchange partner, communication is critical (Carr and Pearson, 1999; Dyer and Singh, 1998). Such interactions are associated with higher levels of inter-organisational trust (Håkansson et al., 1999).

3. Commitment

Commitment has been somewhat confounded with inter-organisational trust or relational governance in previous research. In this research, we investigate commitment in terms of the invested time and resources in an exchange relationship and the willingness to make the effort required for the exchange relationship to function well (Gundlach et al., 1995; Kim and Frazier, 1997; Leonidou et al., 2008; Morgan and Hunt, 1994). We rely on the notion of relational investment (Ghosh and John, 1999) to describe such commitment in the following.

Conceiving inter-organisational trust to develop as the exchange relationship matures, this research differs somewhat in regard to the established wisdom that trust leads to commitment (Morgan and Hunt, 1994; Anderson and Narus, 1984). On the other hand, Jennings et al. (2000) and Lu (2009) found that commitment influences trust. By committing sufficient resources to its export exchange relationships, a firm strengthens its export marketing infrastructure (Leonidou and Katsikeas, 1996), which in turn can lead to more commitment towards exporting (Lu, 2009).

The discussion above suggests that due to social interactions between exchange partners, as bonds of attraction develop and social sanctions become more effective, the following hypotheses can be formulated:

H₁: Relationship length is positively associated with inter-organisational trust.

H_{2A}: Logistics information is positively associated with inter-organisational trust.

H_{2B}: Strategic information is positively associated with inter-organisational trust.

H₃: Commitment in terms of relational investment is positively associated with interorganisational trust.

4. International Experience

The duration of experience in exporting could affect a firm's competence in developing exchange relationships and governance structures (Gulati, 1995). The average duration of experience in the present study was 25–26 years. This variable was measured from the supplier side in this study, as has been done in earlier research (Cadogan et al., 2006; Fang et al., 2007), indicating a positive relationship between international experience and interorganisational trust. Accordingly, we propose to investigate the following hypothesis:

H₄: International experience is positively associated with inter-organisational trust.

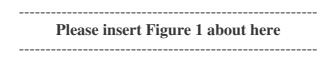
Inter-organisational Performance

Inter-organisational performance is affected by the efficiency and effectiveness of logistical arrangements, which translates to logistical costs and service (Borys and Jemison, 1989; Mentzer and Konrad, 1991; Walters, 2006). Inter-organisational trust enables the parties to achieve effective technical and administrative coordination in logistical operations—such as the sharing of sales forecasts, production plans, inventory status and promotional plans (Borys and Jemison, 1989; Lee, 2000). Previous research on buyer-seller relationships suggests that inter-organisational trust increases such inter-organisational performance (Closs and Savitskie, 2003; Knill, 1998; Sashittal and Wilemon, 1994; Seppänen et al., 2007).

This review of the literature suggests the following hypothesis:

H₅: Inter-organisational trust is positively associated with inter-organisational performance.

The conceptual model for the present study can be illustrated as in Figure 1.



METHODOLOGY

Context and Sample

To test the hypotheses, this present study collected data on exchange relationships that exist between Norwegian seafood exporters and their customer firms. This industry consists in general of a number of small- and medium-sized firms. These firms are internationally oriented and undertake rather complex operations, as perishable products are moved across national borders. As intermediaries in supply chains, exporters are expected to constantly consider building (and breaking) exchange relationships with other members in the supply chain. In addition, exporters are known to work hard to establish and to maintain interorganisational trust, because it is essential in international relationships in order to overcome cultural differences (Doney and Cannon, 1997). While the unit of measurement is the exchange relationships, there has been some controversy regarding the collection of dyadic data. Ideally, it is suggested that multiple informants should be used to reduce the risk of ending up with biased information (Philips, 1981). The costs associated with administrating and effectuating such an approach is larger however, and we choose to use a single key informant for each exchange relationship. (For what concerns the exporter firms, there is often a single person that has the knowledge of interest, but multiple informants could have been implemented by using a key informant in the buyer firm.) While relying on a single key informant representing the exporting firm may introduce informant bias, the exchange partners' perceptions appear to be consistent (Anderson and Narus, 1990; Heide and John, 1990; 1992). Therefore, the sample was judged appropriate for the purpose of this study.

The Norwegian Seafood Export Council provided a list of all 505 Norwegian seafood exporters which were contacted by telephone and asked: (i) whether they currently operated as exporters of seafood; and (ii) if so, the name(s) of the person(s) responsible for the company's exports. Because the establishment of relational governance requires interaction over an extended period of time (Narus and Anderson, 1986), newly established firms were excluded from the study. This initial survey revealed that 207 companies on the list were not currently engaged in exporting and that 15 companies were not reachable by phone, leaving a total of 283 exporters in the initial population.

Data Collection

The 283 exporters were assigned to two groups: (i) firms in easily accessible geographical locations (which were contacted personally); and (ii) less-accessible firms (which received a mailed survey). The first group consisted of 80 companies located in areas with a high-density

of seafood exporters. A letter of introduction encouraging participation in the study was sent to those persons responsible for exports in the company, or persons that they indicated to be most knowledgeable about the day-to-day activities in the company's exchange relationships. These informants were followed up by telephone one to two weeks later. Those who agreed to participate were sent a questionnaire (details below) by post, fax or e-mail; a personal meeting was also scheduled. Most respondents had completed the questionnaire before the meeting started; otherwise they completed it during the meeting. Of the 80 initial respondents, 52 completed the questionnaire (providing a response rate of 65%).

The second group consisted of 203 companies located in a number of geographical areas with a low density of seafood exporters. These respondents received the same introductory letter, together with the same questionnaire and a pre-paid return envelope. Of the 203 firms, 45 completed the questionnaire (providing a response rate of 22%).

The overall response rate was thus 97 of 283 (34%), which is acceptable for this kind of research (Baker, 1992). Three exporters reported relationships to customer firms that were owned by the exporter, or vice versa. Following the recommendations of Achrol et al. (1990), these three cases were omitted from further data analysis, and not included in the calculations of response rate. A dichotomised t-test of several variables did not reveal any significant differences between the two groups in the data set, apart from larger sales and exports in the first group (see Table 1). It should be noted that 182 observations were obtained across the 97 respondents but that 1 of these observations was deleted from the analysis due to missing information.

Please insert Table 1 about here

Respondents in Groups 1 and 2 compared, t-test for equality of means

Variables and Measures

The questionnaire consisted of items that had been validated in previous studies, supplemented with new items. The items were developed as shown in Table 2. Participants were asked to respond to all items on a 7-point Likert-type scale (1 = 'strongly disagree; 7 = 'strongly agree').

Please insert Table 2 about hereReliability and convergent validity report

Relationship length. According to Narus and Anderson (1986), two to three years of familiarity are required to establish inter-organisational trust. In this current study the average duration of the exchange relationship was six to seven years, and hence relevant for the study of inter-organisational trust.

Information sharing. For the scale on logistics information, a new scale was developed based on Borys and Jemison (1989). The scale on strategic knowledge sharing is based on items developed by Cannon and Homburg (2001).

Commitment. One attempt to measure commitment is, for example Richey et al. (2005). The problem with Richey et al.'s (2005) reflective scale is that it is made up by three formative items. The three items directly assess the level of technological, managerial and financial resource commitment, respectively.

Commitment has been somewhat confounded with inter-organisational trust or relational governance. For example, based on Gundlach et al. (1995), Kim and Frazier (1997) and Morgan and Hunt (1994), Leonidou et al. (2008) measure commitment in terms of: a) feeling of loyalty/commitment, b) preservation of a long-lasting relationship, c) investment of time in learning 'ins and outs', d) willingness to make the effort to function well, and e) dedication of necessary people/resources. The a) and b) above are covered by our definition of interorganisational trust. In this research, we investigate commitment in terms of c), d) and e), which we label relational investment (in accordance with Ghosh and John, 1999). Hence, in this study we aim to develop an improved reflective scale more apt to be analysed by means of structural equation modelling software.

International experience. In this present study, international experience is measured by two reflective items (number of years engaged in exporting and number of years engaged in exporting the current product). The main advantage in treating these items as elements in a reflective scale is that the scale accounts for measurement error.

The questionnaire was pilot tested in personal interviews with eight exporters to ensure that the items were adequate for the chosen population; no particular problems with the measures were detected. In the substantive study, for the purposes of structural equation modelling analysis, it was decided to seek two sets of observations from each respondent company. The informants were asked to choose two important foreign customer firms that they knew well and that had been buying from them for several years. Of the 97 respondents, 85 provided data from two relationships with buyers, whereas 12 (all smaller firms) provided data from only one relationship (that is, the only customer firm with whom these smaller firms had a deep relationship). In total we obtained, as previously noted, 182 observations.

Attempting to increase the heterogeneity of the sample, respondents were asked to choose two relationships that differed in their performances. This was checked after collection of the data by testing the difference in scores for all variables from these two (supposedly different) relationships. Application of t-tests for means indicated that respondents on the average did not supply two identical cases. All reported relationships are therefore treated as independent cases in the subsequent analyses.

In Table 2 the items and their basis are shown. In order to preliminary test the reliability and validity of the reflective scales, as recommended by Churchill (1979), each reflective scale was subjected to a Cronbach's alpha reliability test (alphas ranged from .70-92, i.e. these scales meet the generally accepted required level 0.7), and in a principal factor analysis the scales factored as expected (loadings in excess of .5), demonstrating convergent validity as well.

RESULTS

Analysis

Partial least squares (PLS) can be a useful tool to analyse data sets where the requirements for using traditional structural equation modelling tools are not fully met (Chin and Newsted, 1999. In this study the following requirements are not met for traditional structural equation modelling tools, but are met for PLS; the observations are not independent (two observations from most respondents), the measurement scale for inter-organisational performance is formative in nature and the sample size is low for the relatively complex model).

There were missing values in the data set (up to eight missing values for some items), but all measures exceeded the minimum of 60 observations needed for PLS analysis when there are six independent constructs directly influencing a dependent construct (Wixom and Watson, 2001). The missing values were replaced with the mean before the data was analysed, as suggested by Chin and Newsted (1999).

First, the measurement models are tested (see Tables 2 and 3). Reliability is tested by means of internal consistency (.7 generally required), and convergent validity by assessing the average variance extracted (AVE) (.5 or higher required). All measurement scales are found to have satisfactory internal consistency. Discriminant validity is demonstrated by diagonal (AVE) elements being larger than off-diagonal elements in the latent variable correlation matrix (see Table 3).

Please insert Table 3 about here The latent variable correlation matrix: discriminant validity

Findings

The predictive ability of the independent variables is tested by means of path coefficients and R^2 values, as reported in Table 4. Relationship length, relational investments and strategic information sharing are positively associated with inter-organisational trust. All these associations are significant at the p=.05 level. Accordingly, H_1 , H_{2B} and H_3 cannot be rejected. On the other hand, logistics information sharing and international experience fail to show statistically significant associations with inter-organisational trust. Therefore, H_{2A} and H_4 are rejected. Inter-organisational trust is strongly associated with inter-organisational performance (.33, significant at the p=.05 level). Accordingly, H_5 cannot be rejected. In sum the model accounts for a substantive portion of the variation in sharing of inter-organisational trust (40%) and inter-organisational performance (11%).

Please insert Table 4 about here
Path coefficients (t-values) and R²-values

Relational investments has the highest path coefficient, and stands out as the main managerial tool to develop inter-organisational trust.

DISCUSSION

Due to the large number of potential drivers investigated in this large scale research, it is an interesting finding that neither sharing of logistical information, nor international experience, affects inter-organisational trust. Sharing of information has been treated in slightly different ways in previous research, which lead us to distinguish between information sharing for operational, day-to-day logistical purposes, and sharing of confidential information for strategic purposes. We interpret the results such that this distinction might be required when studying inter-organisational trust in buyer-seller relationships, as it might explain the contradictory findings in previous research. While strategic information sharing is a driver of inter-organisational trust, logistics information sharing is not. These findings represent empirical support for Borys and Jemison's (1989) claim that inter-organisational trust is an important vehicle for value-creation in complex buyer-seller cooperation (involving reciprocal interdependence among the buyer and seller), but not in merely 'repeated transactions' situations (entailing sequential interdependence). Hence, future research on buyer-seller relationships should measure sharing of strategic information in studies of inter-organisational trust.

On the basis of earlier research (Cadogan et al., 2006; Fang et al., 2007; Gulati, 1995), international experience was expected to show a positive association with inter-organisational trust, but no such statistically significant association was found. One possible explanation for this lack of finding is that, contrary to previous research, this present study employed a crude measurement scale of international experience. Still, the lack of association between the length of experience in exportation and inter-organisational trust should stimulate some debate. One interpretation is that the successful development of inter-organisational trust in buyer-seller relationships in export markets is not a capability that can be learnt once and for all. Rather, the successful way to build inter-organisational trust may change. Another interpretation is that suppliers fail to devote sufficient time and other resources (become less dedicated) to developing inter-organisational trust-building competences over time.

CONCLUSION

Main Conclusion

This study answers Doney and Cannon's (1997) call for research that takes into account a broader range of determinants of inter-organisational trust in exchange relationships. The empirical analysis enriches our understanding of drivers of inter-organisational trust. The empirical results also show that successfully developing and implementing inter-organisational trust significantly enhances inter-organisational performance.

The significant determinants of inter-organisational trust, as identified in this study, are; relational investments, strategic information sharing and relationship length. The findings echo findings in earlier studies (Doney and Cannon, 1997; Doney et al., 2007; Jennings et al., 2000; Lancastre and Lages, 2006; Lu, 2009; Sharif et al., 2005). Since earlier research has adopted a different definition of inter-organisational trust (defined either as buyer or supplier trust), the findings enriche the existing body of knowledge. However, the finding that relationship length shows a positive association with inter-organisational trust is not in accordance with Dyer and Chu (2000). These authors only found a similar relationship for

buyer-seller relationships with Japanese firms. In this current sample, buyers are spread all over the world, and the finding that relationship length is a driver of inter-organisational trust is hence a general phenomenon. This finding might be due to a different definition of inter-organisational trust, but more importantly, it provides empirical support for the argument that it takes time to develop insights into each others' behaviour and moral character, and hence develop mutual understandings of expectations (Barney and Hansen, 1994; Doney and Cannon, 1997; Granovetter, 1985; Gulati, 1995; Håkansson et al., 1999).

Theoretical Implications

This study enriches the literature on export marketing as it provides a large-scale empirical study adopting the inter-organisational relationship perspective. While the importance of various drivers to inter-organisational trust has been emphasised by authors previously, there have been few large scale empirical studies that have provided empirical evidence on these drivers. Beyond measuring inter-organisational trust as an inter-organisational construct, this study contributes to the export marketing literature as it fails to find empirical support for key variables identified as drivers of inter-organisational trust in previous studies. In particular the role of sharing of logistical (operational) information and international experience for building inter-organisational trust should be revised. Also, the length of the buyer-supplier relationship is important in order to learn from previous experiences (mistakes, trials, etc.), and to successfully develop inter-organisational trust.

In addition, this study contributes to the literature by introducing a new variable – relational investments – which, although closely linked to 'commitment', significantly contributes to explaining inter-organisational trust. In previous studies, commitment (in addition to inter-organisational trust) has been approached with a variety of measurement strategies, resulting in a heterogeneous mass of little integrated or even discernable knowledge. This research has brought empirical evidence that suggests that this variable deserves better treatment in theoretical models and in future research. Not only does relational investment stand out as the most important driver of inter-organisational trust, but such investments strengthen the supplier's marketing infrastructure (Leonidou and Katsikeas, 1996), which in turn can lead to even more commitment towards exporting (Lu, 2009).

Managerial Implications

From a practitioner's standpoint, this research has investigated how suppliers can build interorganisational trust in their buyer-seller relationships. The findings provide exporters with an understanding on how to foster inter-organisational trust by nurturing long-term relationships, investing time and resources in the buyer-seller relationship, and sharing strategic (confidential) information. Typically, strategic information sharing concerns future strategic plans and thoughts, and other business secrets. On the other hand, sharing of logistical information enhances the day-to-day operation between buyer and seller, and such information relates to delivery plans, production capacities in the short term, and other technical- and administrative coordination between buyer and seller.

While the sharing of logistical information is paramount for achieving effective logistics in inter-organisational relationships, such information sharing has little bearings on the development of inter-organisational trust. This makes sense because good working relationships at the operational level do not automatically translate into good working relationships at the managerial level – and inter-organisational trust is built among key decision makers in the collaborating firms.

The nature of international business is such that long experience does not automatically produce inter-organisational trust in buyer-seller relationships. The key to success remains in the continuous hard work which is required for building and keeping successful inter-organisational relationships, and does not allow managers to rest on their laurels. As the nature of business changes and new challenges arise, managers must always be alert to new approaches and develop new recipes to be successful.

Limitations and Future Research

Although appropriate statistical methods have been applied to the data, the generalisability of the findings would be strengthened if it were to be replicated with other samples and extended to other industries, countries and business cultures. This study is based on cross-sectional data, collected from exporters only. In particular it seems natural to call for future studies that rely on longitudinal data collected from both exporters and importers aimed at investigating the surprising findings that information sharing of logistical information and international experience are not important drivers for inter-organisational trust.

For further research on inter-organisational trust, this research is useful because it has introduced two new variables, relationship investments and inter-organisational trust, and has made a distinction between sharing of logistical and strategic information. These new variable definitions (and measurement approach) should be considered for future studies of inter-organisational trust and its drivers.

The sharing of strategic information also needs to be addressed in future research. In a recent study, Paulraj et al. (2008) have examined the relationship between inter-organisational communication and performance outcomes. The findings in this current study suggest that communication (and performance) should be studied with emphasis on whether it's meant for sharing strategic or logistical information. Hence, future research should build on this insight and critically investigate its implications.

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Table 1 Respondents in Groups 1 and 2 compared, t-test for equality of means

	Group	Mean	Standard deviation	N	tc	df	Significance (2-tailed) ^c
Relationship							
characteristics							
$(N_{\text{max}}=181)$:							
Relationship length ^a	1	6.3	7.2	110	-,46	178	.65
	2	6.9	9.0	70			
	1+2	6.5	7.9	180			
Turnover (relationship) ^b	1	18	30	110	.53	169	.59
	2	15	29	61			
	1+2	16.6	29	171			
Importer characteristics							
$(N_{\text{max}}=97)$:							
Employees	1	1400	3492	46	.52	74	.61
	2	1012	2621	30			
	1+2	1247	3164	76			
Exporter characteristics							
$(N_{\text{max}}=97)$:							
Employees	1	78	190	51	1.41	84	.16
	2	32	38	35			
	1+2	61	149	86			
Total product sales ^b	1	183	367	51	1.75	85	.09
	2	70	165	36			
	1+2	140	304	87			
Total export sales ^b	1	160	313	51	1.70	85	.09
	2	63	166	36			
	1+2	121	264	88			
Exporting experience ^a	1	28	37	52	.54	87	.59
(years)	2	24	30	37			
	1+2	26	34	89			
Product export experience ^a	1	16	28	52	.12	87	.91
	2	16	27	37			
	1+2	16	27	89			

^aYears

bMNOK= Million(s) Norwegian Kroner
Equal variances (between groups) is assumed. The results are similar when equal variances between groups are not assumed.

Table 2 Reliability and convergent validity report.

	Mean	S.D.	Loading	
Relationship length (years)	6.5	7.9	-	
International experience				
(Composite reliability= .93, Chronbach's alpha:= .86) (AVE= .87)				
1. Exporting (years)	26	34	.93	
2. Exporting this product (years)	16	27	.94	
Information logistics (new items)				
(Composite reliability= .86, Chronbach's alpha:= .77) (AVE= .68)				
1. At any point in time we know this customer's future need for deliveries	4.4	1.0	0.2	
from us.	4.4	1.8	.82	
2. Both parties undertake considerable efforts to understand the other	3.6	1.6	.81	
party's way of performing logistical operations. 3. We communicate well on matters related to logistical operations in	3.0	1.0	.01	
this relationship.	4.8	1.5	.85	
uns relationship.	4.0	1.5	.03	
Information strategic refers to knowledge that allows the parties				
to engage in joint problem solving. Items from Cannon and Homburg (2001).				
(Composite reliability= .95, Chronbach's alpha:= .92) (AVE= .81)				
1. We talk with this customer about our business strategy	4.2	2.1	.93	
2. We discuss strategic issues with this customer	3.8	2.0	.93	
3. This customer talks with us about its business strategy	3.7	2.0	.85	
4. It happens that we share confidential information	3.8	1.9	.89	
Relational investments				
(Composite reliability= .87, Chronbach's alpha:= .78) (AVE= .69)				
1. We both have used time and resources to build this relationship	4.8	1.5	.85	
2. In this relationship both firms have adapted to the other	3.3	1.8	.78	
3. We both regard this relationship as an investment that will yield	5.0	1.6	.86	
future benefits				
Inter-organisational trust				
Items adapted from Lusch and Brown (1996); Antia				
and Frazier (2001); and Kaufmann and Stern (1988).				
(Composite reliability= .88, Chronbach's alpha:= .79) (AVE= .70)	6.2	1.0	70	
1. We emphasise the maintenance of this buyer-seller relationship.	6.3	1.2	.79	
2.In our contact with this customer we plan how this buyer-seller relationship might be further developed.	5.5	1.7	.88	
3. If this customer has problems, we are ready to help.	5.7	1.5	.84	
2. If the customer has problems, we are rough to help.	5.7	1.5	.01	
Inter-organisational performance (new items)				
1. In this relationship we have managed to achieve effective logistics.	3.8	1.9		
2. We are always capable of supplying this customer with sufficient				
quantities.	3.2	1.8		
3. The deliveries to this customer are performed in a satisfactory way.	4.7	1.6		

Table 3
The latent variable correlation matrix: discriminant validity

	Info logistics	Info Strategic	International experience
Info	.68		
Logistics			
Info	.65	.81	
strategic			
International	09	.00	.87
experience			
Inter-	.28	.26	.15
organisational			
performance			
Relational	.60	.59	06
investments			
Relationship	.02	02	.18
length	45	7.0	0.7
Inter-	.47	.52	07
organisational			
trust			

	Inter- organisational performance	Relational investments	Relationship length	Inter- organisational trust
Info logistics Info strategic International experience Inter- organisational performance	-			
Relational investments	.19	.69		
Relationship length	.08	10	-	
Inter- organisational trust	.33	.53	.13	.70

Table 4
Path coefficients (t-values) and R²-values

	Inter-organisational trust	Inter-organisational performance
Direct Effects:		
Info logistics	.07 (.7)	
Info strategic	.22 (2.1) ***	
International experience	08 (1.0)	
Relational investments	.28 (2.3) ***	
Relationship length	.16 (2.0)***	
Inter-organisational trust		.33 (3.7)***
\mathbb{R}^2	40%	11%

^{***} Indicates significance at the P<.05 level

Fig.1: Research model.

