Relationship governance
and learning in partnerships

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Abstract

Purpose – Relationship learning is a topic of considerable importance for industrial networks, yet a lack of empirical research on the impact of relationship governance structures on relationship learning remains. The purpose of this paper is to analyze the impact of relationship governance structures on learning in partnerships.

Design/methodology/approach – This paper contributes to the closure of the research gap by examining sample data drawn from 42 interviews on the subject of 199 customer-supplier relationships within the Finnish metal and electronics industries. As a method, the paper applies cluster analysis and analysis of variance mean-comparison.

Findings – The results of this paper show that balanced hybrid governance structures explain learning in partnerships, which suggests that certain combinations of relationship governance mechanisms (price, hierarchical, and social mechanism) produce the best learning outcomes in partnerships. Results suggest that managers should use hybrid relationship governance structures when governing their supplier partnerships.

Research limitations/implications – The paper has some limitations such as limited sample size, cross-sectional data, and difficulties due to measuring social phenomenon such as learning. Owing to the interview method being applied, research is bound to apply a sample data drawn from companies that operate in the west coast in Finland. These limitations need to be considered when applying the results.

Practical implications – The results encourage managers to use different governance mechanisms simultaneously when managing their company's supply chain partnerships. The result emphasizes the role of active relationship management.

Originality/value – The paper is one of the first to empirically show that relationship learning is best facilitated by using various relationship governance mechanisms simultaneously. Trust needs to be complemented by hierarchical and possibly by price mechanism.

Keywords Customer relations, Supplier relations, Learning, Partnership, Finland

Paper type Research paper

1. Introduction

The imperfect nature of industrial markets favors the use of more sophisticated mechanisms of relationship governance than mere competitive bidding to drive learning and innovation, within partnerships and business networks (Ahmadjian and Lincoln, 2001; Knight, 2002). Competitive bidding cannot foster learning, when supplier switching times are long. Thus, in partnerships, competition or, in particular, competitive bidding is inefficient in terms of learning (Krause *et al.*, 2000). Therefore, the interplay between price, hierarchical, and social governance mechanisms is particularly interesting in partnerships (Adler, 2001; Ghoshal and Moran, 1996). Following on Adler's (2001) model, the present study proposes that relationship

learning is best facilitated by the simultaneous use of different relationship governance mechanisms and that certain combinations of these mechanisms increase relationship learning more than others do.

This research contributes to the current knowledge of partnerships by increasing understanding about the impact of relationship governance structures on learning in partnerships, which previous literature contends to be an important research gap (Nooteboom and Gilsing, 2004). Indeed, the research on relationship governance (Adler, 2001) has neglected the relationship learning view, while the scholars focusing on relationship learning have overlooked the governance viewpoint. This paper addresses the research gap by combining these literature streams into a coherent research model that explains how different combinations of relationship governance mechanisms (price, hierarchical, and social) have an impact on relationship learning. This study will also contribute by increasing our knowledge as to how supply chain partnerships should be governed in order to facilitate learning. While a vast amount of previous literature contends that learning requires trust (Dodgson, 1993; Rousseau *et al.*, 1998), the present paper intends to study whether learning can be enhanced by combining trust (a social mechanism), relationship management (a hierarchical mechanism), and competition between the suppliers (a price mechanism; Adler, 2001).

2. Relationship governance and learning
Learning in partnerships
This study approaches relationship learning by applying organizational learning theory (Fiol and Lyles, 1985). Since learning is context dependent (Holmqvist, 2003; Knight, 2002), it needs to be studied in both partnerships and networks. The argument is that the level of organizational integration, e.g. trust, between the organizational members affects learning and, thus, learning is different in teams than it is in inter-organizational networks or partnerships.

Previous literature provides various definitions of relationship learning. The present study defines the relationship learning according to Selnes and Sallis (2003, p. 80) as:

> [...] a joint activity between a supplier and a customer in which the two parties share information, which is then jointly interpreted and integrated into a shared relationship-domain – specific memory [...]

This definition of relationship learning underlines knowledge sharing, shared interpretation and the development of activities in a partnership alongside other definitions (Håkansson *et al.*, 1999; Dyer and Hatch, 2004; Inkpen, 1996; Knight, 2002).

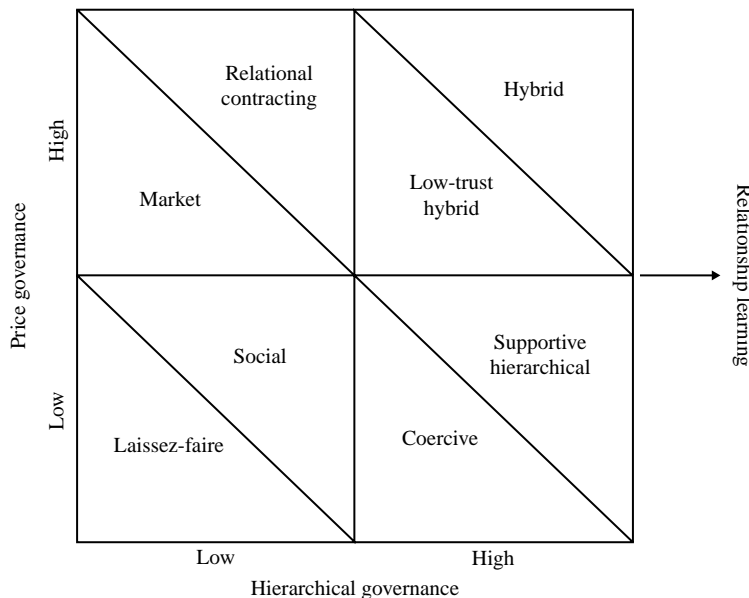### Relationship governance and learning
Following the previous definitions of partnerships, the present study defines partnerships and networks as an intermediate form between markets and hierarchies (Thorelli, 1986; Ritter, 2007; Williamson, 1985). In other words, a vertical partnership is a customer-supplier relationship, which is long, integrated, and deeply rooted in the social relationships between the individuals that are active in the relationship (Macaulay, 1963; Sako, 1992; Ritter, 2007).

Recent theory developments in the study of relationship governance argue that the most effective partnership governance structure is a hybrid, in which the customer employs several relationship governance mechanisms simultaneously to govern

a single supply relationship (Figure 1; Adler, 2001; Heide, 1994; Ritter, 2007; Kohtamäki *et al.*, 2006). The three relationship governance mechanisms that previous studies apply are termed price, hierarchical, and social mechanism (Adler, 2001; Powell, 1990; Bradach and Eccles, 1989; Hines, 1995; Heide, 1994).

Previous empirical research has commonly operationalized network governance in terms of sourcing policy, whether the customer applies single, dual, or multiple sourcing in their procurement policy (Dyer and Ouchi, 1993, pp. 55-8; Hines, 1995, 1996). This study adopts a more sophisticated approach and applies multiple indicators to define and measure each governance mechanism. In this study, relationship governance refers to a governance structure of a supplier relationship, which is constructed using a combination of price, hierarchical, and social mechanisms. The theory contends that a customer can steer the behavior of its suppliers by applying these mechanisms in different combinations (Adler, 2001). The following section describes the individual governance mechanisms in more detail, while the subsequent sections develop on their different combinations and their impact on relationship learning.

Price as a mechanism of relationship governance refers to utilizing the competition between suppliers in the market to steer the relationship. Competition is known as an efficient mechanism, which is utilized not only in markets, but also in hierarchies and networks (Dyer and Hatch, 2004; Krause *et al.*, 2000; Powell, 1990; Swedberg, 1994). However, when switching to an alternative partner becomes time-consuming and costly due to the unique resources and capabilities of the supplier, the market works

Note: Low social relationship governance in lower left triangles and high social relationship governance in upper right triangles
Source: Adler (2001)

Figure 1.
Effects of relationship governance structures on learning in partnerships

imperfectly and other governance mechanisms are required to ensure learning and development in the relationship (Kohtamäki and Kautonen, 2008). Various scholars describe Toyota's successful dual or multiple supplier policy within its supplier network, which utilizes competition without a constant need to change suppliers (Dyer and Hatch, 2004; Sako, 2004; Dyer and Nobeoka, 2000). Dual or multiple sourcing enables a customer to use competition without sacrificing the long-term relationship, which facilitates development and learning in the relationship (Hines, 1995). Competition can prove a catalyst for developmental work, while the partners' belief in the continuity of the relationship motivates the development.

Gerlach (1992) defines the hierarchical governance mechanism as the "visible hand" of the manager in the organization. In this study, hierarchical governance refers to mechanisms such as the customer's use of authority in the relationship and the hierarchical structures and processes that apply to the business relationship (Nishiguchi and Beaudet, 1998; Bensaou, 1999; Håkansson and Lind, 2004). Thus, when using hierarchical relationship governance, the customer steers, but also forces the development of the business relationship. Researchers have provided examples of customers' use of authority and hierarchical structures. For example, Dyer and Hatch (2004) describe three methods, which Toyota applies to support supplier development: supplier association, consulting groups, and learning teams. This means that Toyota facilitates supplier learning with conferences and smaller learning forums, e.g. learning teams, but also provides a consulting service to its suppliers (Sako, 2004; Dyer and Nobeoka, 2000). These results suggest that Toyota does not only try to develop trusting relationships with its suppliers, but seeks to actively facilitate learning in its partnerships and supplier network. Our study follows the view by analyzing the role of hierarchical relationship governance in partnership learning.

A whole stream of literature has examined trust and social governance in business relationships (Adler, 2001; Granovetter, 1985; Ouchi, 1980). In this context, social governance refers to trust (Zaheer *et al.*, 1998), open interaction and a feeling of shared destiny (Adler, 2001; Ghoshal and Moran, 1996). A number of studies emphasize the significance of these phenomena for learning in relationships (Håkansson *et al.*, 1999; Selnes and Sallis, 2003). However, as learning needs to be focused in order to create value for a particular business relationship, trust alone is an inadequate governance mechanism and needs to be supported by other mechanisms (Adler, 2001; Kohtamäki and Kautonen, 2008).

The role of relationship governance structures on learning

Based on Adler's (2001) model, the present study suggests that learning in relationships is best facilitated by a combination of price, hierarchy, and the social relationship governance mechanisms, rather than a sole reliance on any one of these single mechanisms. In the following discussion of the impact of different combinations of governance mechanisms on relationship learning, the degree of each governance mechanism in a particular governance structure is simply regarded as being either high or low. Figure 1 displays eight different combinations of the three governance mechanisms, that is, eight alternative relationship governance structures. This study proposes that they have a varying impact on learning in business relationships. Since, the conceptual evidence in previous literature is not clear enough to warrant a formal hypothesis, the following discussion declines to construct formal hypotheses but

instead presents preliminary conceptual evidence as a basis for the subsequent exploratory empirical analysis.

Figure 1 suggests that governance structures are constructed on the basis of price, hierarchical, and social mechanisms. Thus, the present study suggests there are basically four different combinations of relationship governance mechanisms, as in the remainder of the eight clusters the customer either applies a single mechanism (price, hierarchical, or social) or does not apply any of them (a *laissez-faire* approach). The four clusters, in which a customer uses two or three different mechanisms simultaneously, are here termed relational governance, supportive hierarchical governance, low-trust hybrid governance, and hybrid governance.

By relational governance, the model refers to a combination of price and social mechanism (Macaulay, 1963). Theory suggests that just as competitive bidding may force the supplier to develop the customer relationship (Krause *et al.*, 2000); trust could increase its partners' willingness to share knowledge within it (Håkansson *et al.*, 1999). On the other hand, unreasonable use of competitive bidding could lead to a decrease in a supplier's commitment to the relationship, and thus unwillingness to invest in relationship development. The findings of the previous studies recommend dual or multiple supplier policies, which are able to simultaneously produce competition, stability, and trust in the relationship (Dyer and Hatch, 2004; Hines, 1995; Dyer and Ouchi, 1993).

Previous studies also suggest that the combination of hierarchical and social mechanisms can be effective in terms of relationship learning (Adler, 2001; Kohtamäki *et al.*, 2006). Relationship learning may require an open and trusting atmosphere, but also a little pressure created by the customer. While previous scholars show that mutual learning requires trust between the partners (Takeuchi and Nonaka, 1995; Selnes and Sallis, 2003), Adler's (2001) model argues that partnerships should be managed and facilitated (Möller *et al.*, 2005). This suggests that hierarchical governance is fundamental in partnerships (van der Meer-Kooistra and Vosselman, 2000), but its use should be delicate, so that it will not cause distrust (Ghoshal and Moran, 1996). Hence, a customer should have sufficient competence to apply hierarchical steering without causing distrust.

The paper defines the third combination of governance mechanisms as a low-trust hybrid (Adler, 2001). In this alternative, the combination of price and hierarchical mechanism affects learning in partnerships. When talking of this low-trust hybrid relationship governance structure, the researcher is referring to a business relationship, which is governed by hierarchical structures and some competition, but not by trust, perhaps due to the loosely coupled organization of the relationship. This particular relationship governance structure might not be efficient in terms of new knowledge creation, because learning requires trust, but could well be efficient in terms of keeping the overall costs of the relationship down.

The fourth alternative relationship governance structure is here termed a hybrid (Heide, 1994; Hines, 1995; Håkansson and Lind, 2004; Sako, 2004). In a hybrid governance structure, the customer applies all three governance mechanisms simultaneously. The present study suspects that the hybrid governance structure facilitates relationship learning and relationship performance, by providing a moderate level of competition and hierarchical direction, as well as an open atmosphere in which to share and develop knowledge and learning within the partnership.

In summary, the present study focuses on the impact of relationship governance structures on relationship learning by applying Adler's (2001) model of relationship governance. The study explores which kinds of relationship governance structures can be discerned within 199 business relationships in order to see how various combinations of governance mechanisms affect relationship learning.

3. Research methodology and data

Data collection

The study uses cluster analysis to analyze sample data from 199 customer-supplier relationships. The data were collected from 26 (45 percent medium-sized/55 percent large) business units in the metal and electronics industries in Finland. Data were collected in interviews of 42 supply directors (three respondents), supply managers (26 respondents), or strategic buyers (13 respondents). Most of the respondents (39 of 42), analyzed five relationships each, while the rest (three respondents) analyzed a few individual relationships by using a web-based questionnaire. The researcher controlled for the potential effect of the respondent's role within the organization (director, supply manager, and strategic buyer) on their responses, by comparing the responses of directors, managers, and buyers on the key study variables by using *t*-test. However, the test yielded no statistically significant differences between the respondents in different roles. The companies were chosen from western Finland for research economic reasons, as the data was collected in personal interviews and the researcher had to travel to all the respondent companies.

Measures

Previous studies (Selnes and Sallis, 2003; Kohtamäki and Kautonen, 2008; Krause *et al.*, 2000) contributed to the development of the items in the questionnaire, which uses Likert-scale measures (1, fully disagree; 5, fully agree; Appendix 1). The researcher transferred items into four different composite variables (price, hierarchical, social governance mechanisms, and relationship learning) for the cluster analysis and mean comparisons. The study tested the items by using partial least squares approach. Researcher tests the constructs by using Cronbach's alpha, composite reliability and average variance extracted (AVE). The researcher also tests both item and construct discriminant validity, inspect skewness, and kurtosis values of all constructs as well as checks the data for possible common method bias and multicollinearity.

The main determinants of the price mechanism are internal competition within the network, potential suppliers in the market and the development of a competitive atmosphere among the suppliers (Hines, 1996). The four variables measuring the price mechanism were developed on the basis of Kohtamäki *et al.* (2008) (Krause *et al.*, 2000). Items measuring price were: frequency of bidding; number of potential suppliers in the market; number of suppliers for a given component; and development of a competitive atmosphere in the relationship.

Previous studies define hierarchical governance as consisting of several different variables, which measure both the customer's use of authority and hierarchical structures in the relationship (Hines, 1996; Ellram, 2002). Measures of this dimension were modified on the basis of Kohtamäki *et al.* (2008) (Krause *et al.*, 2000). This study measures hierarchical governance by using five variables: level of quality and management system requirements; urge to affect supplier's procedures; supplier's

involvement in customer's production and quality meetings; use of supplier auditing; and exactness of instructions given to supplier.

Previous empirical research has studied social governance extensively and scholars have used various scales to report their findings. This research applies the scale used by Selnes and Sallis (2003) (Kohtamäki *et al.*, 2008), which reflects the two dimensions of social governance defined as having a shared purpose and trust. Four variables measure social governance: development of shared understanding; level of strategic discussions with the supplier; customer's willingness to develop trust in the relationship; and willingness to seek a common understanding.

The present study measures learning with four items based on the conceptualizations of Selnes and Sallis (2003). The variables are: development of new ideas in the relationship; economic value of new ideas in the relationship; shared problem solving and knowledge sharing; and explication of the most conflicting problems.

The reliability of the constructs was measured by deriving values for Cronbach's alpha (threshold value 0.6), composite reliability (0.7), and AVE (0.5). Almost all the constructs show fairly satisfactory Cronbach's alpha, composite reliability and AVE values (Chin, 1998; Cool *et al.*, 1989), although AVE value for price governance were a little low and below the threshold (0.5). As all the items, except one measuring price, exceed the typical threshold value set for the item loading (0.6) and the loading of each item with their respective construct is statistically significant, researcher can safely conclude satisfactory item discriminant validity. As the price mechanism achieved fairly satisfactory Cronbach's alpha and composite reliability values, researcher decided to keep all the items in order to maintain the construct's theoretical consistency. All constructs showed satisfactory discriminant validity as AVE values exceeded the squared latent variable correlations (Cool *et al.*, 1989) even if the low AVE value of price governance suggest that those measures need development in future studies (Chin, 1998).

The researcher also decided to test the skewness and kurtosis of each construct and found every construct exceeding the typical threshold. The data were also tested for common method bias using Harman's (1976) one factor test, which the researcher conducted by using principal axis factoring and interpreting the unrotated factor solution (Podsakoff and Organ, 1986). The test showed that common method variance was not present in the data as the items loaded on four factors, which accounted for 61 percent of the total variance of which the first factor accounted for only 33 percent. Finally, researcher analyzed the data due to possible multicollinearity of the constructs, but the correlation matrix (Appendix 2) and vif-value shows that in this dataset multicollinearity does not create a problem. Vif-value for all the constructs remained well below 2, while the typical threshold is 10 (Tabachnick and Fidell, 2007). In summary, based on the statistical tests reported above, the items and constructs appear suitable for further analysis (Table I).

Methods and data analysis
The present study analyzes the data in two phases. The first phase of the analysis applies cluster analysis in order to find the clusters consisting of business relationships governed by similar relationship governance structures and, thus, differing from other clusters. In the second phase, these clusters of business relationships are mean

compared in terms of learning in order to discover which kinds of governance structures increase learning in business relationships.

This study applies non-hierarchical cluster analysis and the k-means method. In the k-means method the cases are grouped into homogenous groups (Ketchen and Shook, 1996), while the number of clusters is given by the researcher. In this study, cases are clustered by using the composite variables of the three governance mechanisms (price, hierarchy, and social). During the analysis, various cluster solutions were tested, but the researchers decided to apply a four-cluster solution, as it was the most informative and clear from the point of view of results.

As the cluster analysis recognizes some groups and ignores some potential ones, it means that the ones being found are interpreted as viable. According to the configurational contingency approach, only those forms which are viable can be identified in the empirical world (Gerdin and Greve, 2004). Thus, if some combination of governance structure is not found in the empirical world, the approach would suggest that such a combination is not viable.

After the cluster analysis, the study compares the resulting groups by using one-way analysis of variance (ANOVA) mean-comparison. Resulting groups are mean-compared in terms of learning by using both the four individual learning items and the respective composite variable, to study whether relationship learning varies statistically significantly between different clusters. The study uses also *post hoc* analysis (Scheffe's test) to test how learning varies between each recognized cluster (Tabachnick and Fidell, 2007). This analysis shows which clusters differ from each other in terms of relationship learning. During the analysis, the study applies SPSS (version 15) to conduct the cluster analysis and mean comparisons.

4. Results
Table II shows the results of the cluster analysis. In the analysis, researchers found four clusters, which clearly varied in terms of the relationship governance structures used in the cases. These clusters, which consist of relationships that are governed by

	Skewness	Kurtosis	Cronbach's alpha	Composite reliability	AVE
Price governance	0.12	0.26	0.67	0.71	0.41
Hierarchical governance	− 0.34	− 0.30	0.75	0.82	0.50
Social governance	− 0.64	0.11	0.77	0.86	0.60
Relationship learning	− 0.42	0.17	0.80	0.87	0.62

Table I.
Skewness, kurtosis, Cronbach's alpha and composite reliability values of all the constructs

Governance mechanisms	Relationship governance structure (clusters)			
	Social	Market	Supportive hierarchical	Hybrid
Price governance	2.17	3.68	2.43	3.74
Hierarchical governance	2.40	2.67	3.89	3.79
Social governance	2.94	2.57	4.15	4.09
Number of cases in a given cluster	31	30	81	54

Note: Figures are average scores of respondents' responses on a Likert scale of 1-5

Table II.
Average scores of relationship governance mechanisms of different clusters

various relationship governance structures, are here termed: social, market, supportive hierarchical, and hybrid. While clusters are reported in columns, rows present the three governance mechanisms, which were used as criteria when clustering the cases.

In the cluster of deep-rooted social governance, the relationships are governed only by using an intermediate social mechanism. The results show that in this cluster where the values of all the governance mechanisms stay below three, the value of the social mechanism is only very slightly below. It seems that in these relationships, the customer is either incapable or unwilling to use either price or hierarchical mechanisms to govern the supplier relationship. The second cluster includes market-governed supplier relationships. Customers govern these relationships by using a strong price mechanism, but the use of social and hierarchical relationship governance is at a low level. It seems that in these partnerships, the customer intends to use the threat of competition to force the supplier to develop the customer relationship. The third cluster consists of supplier relationships governed by using supportive hierarchical governance. By supportive hierarchical governance, the researcher means that the supplier relationships are governed by using strong hierarchical and social governance mechanisms. In these partnerships, customers seem to be able to use both structures and requirements simultaneously without causing distrust. Governance is two-dimensional, showing that companies use various mechanisms simultaneously. Finally, the fourth cluster consists of hybrid governed supplier relationships. In these relationships, customers are willing and able to apply all three mechanisms simultaneously in a balanced manner.

After the cluster analysis, the researcher mean-compared the four groups in terms of learning. In Table III, the last column on the right describes the value of the composite variable of learning formed from the four individual items. This study applies the ANOVA *post hoc* test (Scheffe) to analyze the differences between clusters. Scheffe's test enables researchers to compare learning between each cluster in order to interpret

Learning cluster	Development of new ideas	Economic value of new ideas	Shared problem solving and knowledge sharing	Explication of the most conflicting problems	Learning
1. Social	2.23	2.13	2.42	3.06	2.46
2. Hybrid	3.26	2.70	3.54	4.35	3.46
3. Market	2.03	1.93	2.27	3.20	2.36
4. Supportive hierarchical	2.92	2.77	3.71	4.17	3.39
Average	2.77	2.53	3.25	3.90	3.11
Scheffe's test	(a)	(b)	(a)	(a)	(a)

Notes: Scores are averages of the respondents' responses measured on a Likert scale from 1 to 5; (a) all the differences between relationships governed by social, market, hybrid, and supportive hierarchical relationship governance structures are statistically significant at a significance level of <0.05, except the difference between social and market-governed relationships and hybrid and supportive hierarchically governed relationships; (b) the difference between relationships governed by social and supportive hierarchical governance structures and between hybrid and market-type relationship governance structures are statistically significant at a significance level of <0.05, but the difference between social and market-governed, social and hybrid-governed, market and supportive hierarchically governed relationships is not

how learning differs between all the different clusters (i.e. between social and market, or hybrid and supportive hierarchical). Analysis based on the composite variable shows that learning does not vary statistically significantly between supportive hierarchical and hybrid governed clusters and between social and market governed clusters. However, learning does vary statistically significantly in all the other combinations, such as hybrid and social, hybrid and market, supportive hierarchical and social, and supportive hierarchical and market. These results support the interpretation that learning is highest in hybrid and supportive hierarchically governed clusters of relationships and lowest, in social and market-governed clusters of relationships. Interestingly, learning is actually higher in social than in market-governed relationships. However, this difference is not statistically significant. Observations are by far similar, whether one looks at results of the composite variable or three of the four single items (development of new ideas, shared problem solving and knowledge sharing and explication of the most conflicting problems). However, results slightly differ when looking at one of the learning items (economic value of new ideas). With this particular item, the results differ slightly from the other items, as the differences between social and hybrid and market and supportive hierarchically governed relationships are not statistically significant, while they are with the rest of the items. However, also with this item the differences between social and supportive hierarchically governed relationships and between hybrid and market-governed relationships are statistically significant, which supports researcher's interpretation of the results. Table III shows all the results of the mean-comparisons.

Finally, the analysis shows that in partnerships, companies often use various relationship governance structures to govern a partnership. The results provide evidence that supportive hierarchical and hybrid forms of governance are more effective in terms of learning than social or market governance. The results suggest that in order to support learning in the partnership, customers need to develop hierarchical structures, require developmental efforts from the suppliers and to maintain strong social relationships. In summary, Figure 2 shows the empirically found clusters (in italic) with the average scores of relationship learning.

5. Conclusions and discussion
The effect of governance structures on learning in partnerships
The present study stresses the impact of relationship governance on learning in partnerships. As, according to prior studies, learning is important for business performance, and as industrial networks cannot often be governed only by using competitive bidding due to long partner switching times, learning needs to be facilitated by using other forms of relationship governance, such as social and hierarchical governance (Adler, 2001). As some of the prior studies have emphasized the role of trust on learning (Håkansson *et al.*, 1999), the present study argues that trust needs to be complemented by the use of at least a hierarchical mechanism. The results emphasize the role of both relationship management and trust.

The empirical analysis shows that relationship governance structures have an impact on learning in the partnership. Learning is highest in partnerships governed by supportive hierarchical or hybrid governance structures in comparison to market and socially governed ones. Again, supportive hierarchical governance refers to supply relationships, in which the customer applies both hierarchical and social governance

Figure 2.
Effects of relationship
governance structures on
learning in partnerships
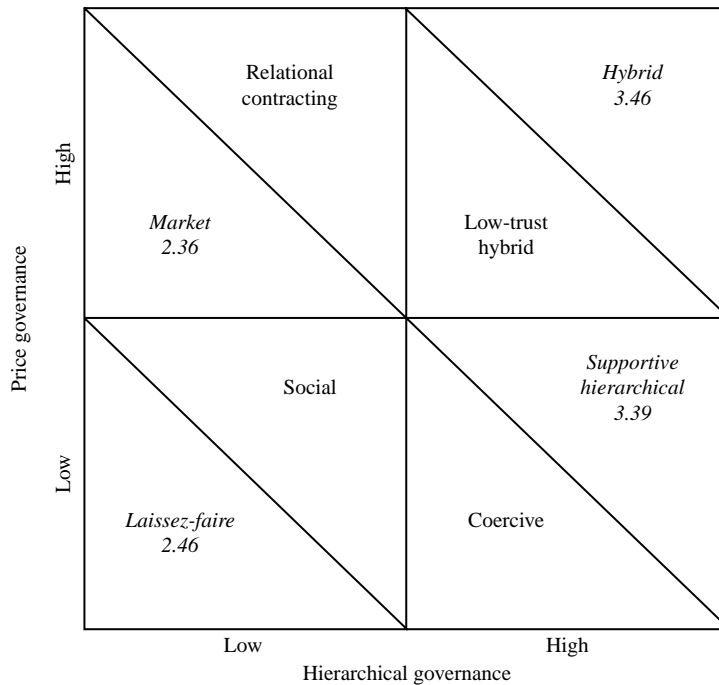
Notes: Empirically found clusters in italic, with the average scores of learning;
low social relationship governance in lower left triangles and high social
relationship governance in upper right triangles

mechanisms, while hybrid governance structures signify a relationship utilizing the
three mechanisms (namely price, hierarchical, and social). In contrast, in
market-governed relationships, the customer only uses the price mechanism, while
in the socially governed relationships, the customer applies only a social mechanism at
an intermediate level. This result parallels those of previous empirical studies. First,
the result supports Adler's (2001) model of organization of an economic system
indicating that parties often apply the various mechanisms simultaneously and, thus,
gain learning in their supply partnerships. This particularly contributive empirical
result suggests that customers need competencies to apply various mechanisms
simultaneously. Customers need to be able to balance different mechanisms in order to
utilize them simultaneously (Gustafsson, 2002; Kohtamäki *et al.*, 2006); according to
Barringer and Harrison (2000), managing partnerships is like "walking a tightrope."

The results seem to suggest placing emphasis on hierarchical and social
governance. However, the results do not preclude the advantages of the market
mechanism, when it is used in a balanced way, as in hybrid-governed relationships,
which were found to be the most efficient in terms of learning. However, these results
do question the efficacy of an extreme market mechanism in partnerships (Krause *et al.*,
2000). In partnerships, the threat of competition on its own is apparently not
sufficiently credible to increase development effort, but an unfair, unsystematic, and

implicit use of competitive bidding can cause distrust, which, in turn, can discourage information sharing and even prohibit learning.

These results seem to highlight the significance of social governance. Owing to the high instance of social governance in all the groups of high partnership learning, trust and the feeling of shared purpose seem to play a significant role in supporting learning. According to the results, an increase in the level of social governance leads to an increase in partnership learning. These results demonstrate support for the previous research results of, for example, Zaheer *et al.* (1998) (Håkansson *et al.*, 1999) who emphasized the significance of trust in business relationships.

The results place emphasis on network management by suggesting that social mechanisms should be complemented by the use of hierarchical mechanisms in order to gain learning. These results provide support for some prior studies (Krause *et al.*, 2000; Liker and Choi, 2004; Sako, 2004) that have also suggested a few practical tools to assist suppliers in their development (Dyer and Hatch, 2004; Sako, 2004). According to those studies, various methods, such as supplier associations, consulting groups, and learning teams can help to realize the development potential of suppliers.

The result of this study is particularly contributive to management and organizational learning theory, as it suggests that in the unique context of partnership, ability to manage relationship by applying various mechanisms simultaneously results in increased learning. Thus, learning should be facilitated by using various governance mechanisms simultaneously. This is one of the first studies that demonstrate this result by using empirical data in the context of partnership.

How to govern partnerships?

The present study suggests that the partnership governance structure should be balanced – utilizing at least the hierarchical and social governance mechanisms. The customer should be able to put pressure upon the supplier to develop relationship processes, without the suppliers feeling that the customer is only doing it for opportunistic reasons, in other words, a win-win outcome is available to both the customer and supplier.

These results mean that industrial customers need a management system which defines the goals, implementation, and follow-up processes of relationship development. This system needs to be built up together with the supplier. This shared planning and implementation of relationship management systems will support the development of trust and a feeling of shared purpose. These ideas seem to integrate the relationship governance approach that has been applied in this study and the ideas of the IMP group (Ford and Håkansson, 2006), which suggest that reciprocal interaction is the key to learning and development in a business relationship. Since this study suggests that a customer should be able to simultaneously manage the relationship and develop trust, and as the study suggests that this could be done by engaging the suppliers in a shared planning and development process, it seems that there is a call for theory that emphasizes shared relationship management and joint value co-creation.

Limitations and research implications

Although the results of this study are important, this research does have some limitations. First, the dataset is a sample from Finnish companies from the metal and

electronic industries that operate in the west coast in Finland. Larger and perhaps comparative international research data is needed to test the research model and the generalizability of these results. Second, the data is cross-sectional, which suggests that the results of this study should be tested with longitudinal data in order to capture the development of the relationships over time – and, indeed, the actual learning process. Third, as the measurement of these phenomena is difficult, qualitative research is needed to verify the findings, but also to create knowledge concerning the mechanisms of learning in partnerships. However, despite the limitations, the present study gives an interesting and theoretically contributive viewpoint and provides a basis for future studies of the relationship between partnership governance structures and learning.

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Appendix 1

Items and variables	Mean	SD	Loading
Price mechanism			
Bids from competitors of this supplier are frequently requested	2.58	0.98	0.67
There are numerous potentially substitutive suppliers	3.21	1.19	0.81
Similar or closely comparable components have several suppliers for us (multiple source)	2.78	1.37	0.33
Supplier is reminded of the highly competitive situation constantly, which is done in order to have a highly competitive atmosphere	3.16	1.16	0.72
Hierarchical mechanism			
We present very specific requirements for the supplier's quality and management systems	3.92	1.15	0.64
We intend to influence the supplier in a very active manner	3.88	0.99	0.64
Supplier's representatives actively participate in production or development meetings	3.20	1.26	0.79
We audit supplier's processes using a specific method	2.80	1.50	0.71
Supplier has been given very specific written instructions on how to react to delivery problems	3.43	1.22	0.68
Social mechanism			
Customer tries to develop trust and a feeling of community by systematically organizing different shared meetings and training in which the participants are urged to develop a shared understanding	3.12	1.19	0.77
Customer discusses all the relevant issues related to supplier's operations and strategies with the supplier	3.52	1.27	0.86
Customer attempts to develop trust by acting in a trustworthy manner themselves	4.18	0.86	0.69
Problems in the relationship are dealt with constructively, because the customer wants to seek a shared understanding	4.02	1.07	0.77
Learning			
In this relationship new ideas for development are often born	2.77	1.03	0.85
Some of these ideas have major economic significance for the customer's and/or supplier's business	2.53	1.06	0.78
In this relationship, we solve problems together and share knowledge actively	3.25	1.10	0.85
In this relationship we dare to discuss even the most contentious problems so that they can be solved	3.90	1.06	0.78

Note: All the variables were measure on a Likert scale from 1 to 5 (1, fully disagree; 5, fully agree)

Table AI.
List of variables used
in the study

Appendix 2

	Price governance	Hierarchical governance	Social governance	Relationship learning
Price governance	1			
Hierarchical governance	0.02	1		
Social governance	−0.10	0.67[*]	1	
Relationship learning	0.06	0.54[*]	0.64[*]	1

Note: [*]Correlation is significant at the 0.01 level (two-tailed)

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