

INTRODUCTION

To provide a solid picture of the factors affecting the managerial success of an inter-organizational strategic relationship there are three key theoretical areas that this paper examines. Firstly, it appears to be important to understand why companies prefer collaboration in areas requiring knowledge exchange, secondly to identify the factors affecting the inter-organizational knowledge exchange, and thirdly to establish how such relationships can be managed. Hence, the literature review of the paper examines the latest articles published in top management and strategic management journals regarding these three key theoretical areas. In addition, to support the creation of a holistic picture, the paper introduces findings of a qualitative empirical study from the Finnish technology industry.

During the recent decades, the Resource-Based View as a strategic management approach has become increasingly popular way of searching competitiveness (Maritan and Peteraf, 2011, pp.1374), and even though, the Resource-Based Theory does not directly refer to inter-organizational business networks, specialization in core competences increase the need for the strategic networking (Vesalainen, 2006, pp.35; Squire et al., 2008, pp.463).

Gaining expected value from the relationship, however, has proved to be more challenging than thought and in many cases it has led into dissatisfaction and failure of alliances (Deeds and Rothaermel, 2003; Teng, 2007; Walter, Lechner and Kellermanns, 2008; Phelps, 2010, pp.907). The issue appears to be in attaining the value rather than lacking the potential value (Madhok and Tallman, 1998, pp.326). Therefore, the factors affecting to managerial success of an inter-organizational strategic relationship appears to be an attractive area to examine. Hence, the motivation for this paper lies on the aspiration to provide an insight into some of the key factors that affect the successful management of an inter-organizational strategic relationship.

Literature review

In aspiration to provide a solid picture of the factors affecting the managerial success of a strategic inter-organizational relationship there are three key theoretical areas that this paper examines. Firstly it appears to be important to understand why companies prefer collaboration in areas that require knowledge exchange with each other, secondly what are the factors affecting to the inter-organizational knowledge exchange, and thirdly how can one manage such relationship. Therefore, the literature review of this paper consists of three main areas: drivers for strategic relationships; main factors affecting to the inter-organizational knowledge exchange; and the management of an inter-firm relationship. In the **Table 1** is a list of the key articles contributing to the content of the literature review.

Table 1. The main articles.

<i>Area of the literature review</i>	<i>Authors</i>
Drivers for strategic relationships	Teng (2007); Squire et al. (2008); Mitsuhashi and Greve (2009); Pangarkar (2009); Ramaswamy and Gouillart (2010); Wassmer (2010); Maritan and Peteraf (2011); Parmigiani and Rivera-Santos (2011)
Inter-organizational knowledge exchange	Gottschalg and Zollo (2007); Lazer and Friedman (2007); Teng (2007); Becerra et al. (2008); Easterby-Smith et al. (2008); Harryson, Dudkowski and Stern (2008); Mason and Leek (2008); Pérez-Nordtvedt, Kedia, Datta, and Rasheed (2008); Samarra and Biggiero (2008); Squire et al. (2008); Van Wijk, Jansen and Lyles (2008); Walter et al. (2008) Khoja and Maranville 2009); Makadok and Coff (2009); Mitsuhashi and Greve (2009); Becht (2010); Grimpe and Kaiser (2010); Martin (2010); Phelps (2010); Ramaswamy and Gouillart (2010); Wassmer (2010); Lindenberg and Foss (2011); Phelps et al. (2011)
Management of an inter-organizational relationship	Heimeriks and Duyster (2007); Teng (2007); Esterby-Smith et al. (2008); Pugh and Dixon (2008); Squire et al. (2008); Walter et al. (2008); Dimitratos, Lioukas, Ibeh and Wheeler (2009); Dirks, Lewicki and Zaheer (2009); Janowicz-Panjaitan and Khrisnan (2009); Mitsuhashi and Greve (2009); Pangarkar (2009); Greve, Mitsuhashi and Rowley (2010); Grimpe and Kaiser (2010); Martin and Eisenhardt (2010); Phelps (2010); Schilke and Goerzen (2010); Wassmer (2010); Das and Kumar (2011); Phelps et al. (2011)

Strategic relationship

In outlining the framework of the paper, the starting point has been in the Kraljic's four-field model of the strategic purchasing. The model is adapted to define what is meant by the inter-organizational strategic relationship. Kraljic's model has two dimensions: profit impact of the item and the complexity of supply market. Profit impact refers to the measuring instruments such as purchasing volume, share of total costs, impact on quality, or impact on business growth generation of the item. The complexity of purchasing, for one, considers the risk of not being able to purchase the item through the markets in the future and it can be evaluated in terms of availability, substitutability, quantity of suppliers, total market demand for the item, make or buy decision possibility and storage risk. (Kraljic, 1983, pp.112-113.) As represented in the **Figure 1**, strategic items or strategic relationships have high impact on profit and they are complex to attain through the markets. Items that may be put into remaining three classes lack either or both, the profit impact or purchasing complexity.

In this paper the focus is on strategic items or in more specifically on the strategic resources that involve knowledge exchange. Hence, the definition of strategic item and Kraljic's four category logics are here extended to cover all the resources – not just materials and items – affecting to the processes of an organization. Thereby, Kraljic's model for purchasing strategy development is here applied to define a strategic relationship. Accordingly the authors define the strategic relationship as: “a

relationship in which the object of the exchange has both high impacts on total profit and is complex to purchase through markets resulting of its knowledge intensity”.

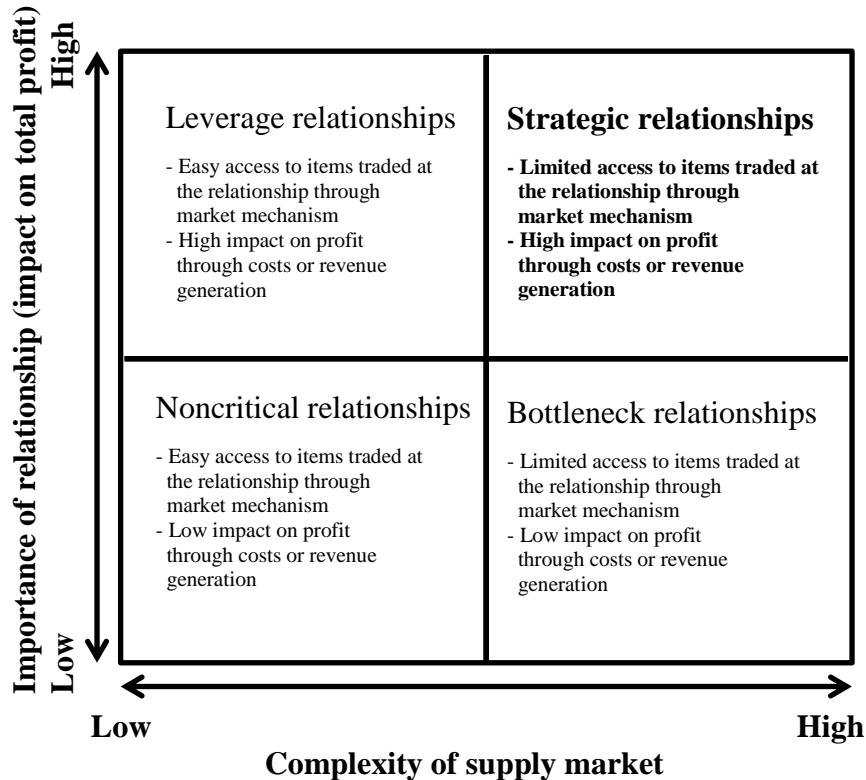


Figure 1. The four fields of strategic purchasing. (Adapted from Kraljic, 1983: 111)

Knowledge

By emphasizing Khoja and Maranville (2009, pp.54) knowledge in this paper refers to any information, skill or belief that can be exploited in running organization's activities. Knowledge may be further divided into explicit and tacit knowledge based on the nature of the knowledge. According to several authors (Becerra, Lunnan and Huemer, 2008; Easterby-Smith, Lyles and Tsang, 2008, pp.682; Khoja and Maranville, 2009) explicit knowledge may be defined to be something that can be written down and taught and it is easy to codify and transfer; whereas tacit knowledge cannot be codified, it is difficult to formalize and transfer, tend to be experiential, and therefore, is embedded in routines and practices of an organization.

Von Hippel (1994) refers to characteristics of knowledge that is difficult to transfer with term "stickiness". Szulanski (1996) classified three factors contributing to the stickiness; characteristics of the donor, characteristics of the recipient and the context where the knowledge is transferred. This paper aspires to discover factors affecting especially to the inter-organizational exchange characterized with sticky (implicit/tacit) knowledge.

Drivers for an inter-organizational strategic relationship

Firstly it is beneficial to consider the drivers for a relationship. The review discovered that inter-organizational relationships (IORs) may consist of a relatively rich variety of drivers and possible collaborative forms. Drivers for collaboration may vary from gaining access to valuable resources, developing innovations, reducing transaction costs, learning from the partner, minimizing risk, moving into a more favorable competitive position at the market, or to ease completely new market penetration (Pangarkar, 2009, pp.982; Wassmer, 2010, pp.148). Hence, collaboration forms that are often discussed include strategic alliances, joint ventures, buyer-supplier agreements, licensing, joint R&D, co-branding, franchising, cross-sectors partnerships, networks, trade associations and consortia (Teng, 2007, pp.120; Parmigiani and Rivera-Santos, 2011, pp.1109).

Even though, the drivers and collaboration forms vary, one may aspire to seek commonalities among the drivers and forms. Based on the findings regarding the literature review, one may identify at least two ways to approach the drivers: industry-related strategic management point of view; and co-exploration & co-exploitation point of view. From the industry-related strategic management point of view, IORs may be formed to respond to the changes at the industry structure or to use alliances to proactively reform an industry by providing unforeseen value propositions. Therefore, strategic IORs may be seen as defensive or offensive depending on the driver of the relationship. (Wassmer, 2010, pp.149-150.) For many industries there are incredible restructuring possibilities by exploiting the latest technologies and other resources not traditionally deployed at the industry (Teng, 2007, pp.135).

Both drivers, defensive and offensive, may be seen to seek competitive advantage through resource portfolio configuration. In order to achieve sustainable competitive advantage, the resource portfolio must be heterogeneous and consist of valuable, rare, imperfectly imitable and imperfectly substitutable resources. One should not match singular resources to these conditions, but rather examine the entire resource portfolio of the firm as an entity including external sources as well. (Teng, 2007, pp.127-128.) Organizations may reach the portfolio heterogeneity by acquiring resources from strategic factor markets or through strategic relationships (resource acquisition) or by generating the resources internally (resource accumulation). Maritan and Peteraf (2011, pp.1374) argue that both of these mechanisms are to be examined and exploited to achieve the heterogeneous resource position most efficiently (see **Figure 2**).

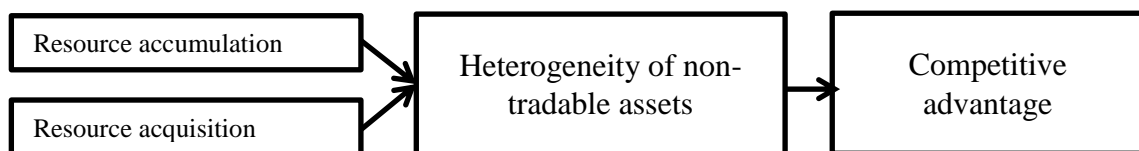


Figure 2. Heterogeneity of resources affecting sustainable competitive advantage. (Adapted from Maritan and Peteraf 2011: 1374)

Another approach examining the collaboration drivers focuses on the goal setting of the relationship. Many of the inter-organizational collaboration forms have been under examination by scholars, but only seldom are the forms discussed in the same academic paper. Parmigiani and Rivera-Santos (2011) represent an approach to point out commonalities between different forms. They argue that there are two pure forms that indicate the relationship goal setting. The main idea is that the relationships may be aligned based on the purpose that the relationship stands for. Similarly to the strategic management reasoning discussed above, Parmigiani and Rivera-Santos (2011, pp.1109) suggest that every inter-organizational relationship may be divided into two key groups, which they call co-exploitation and co-exploration.

Co-exploitation as a pure form refers to the relationship where the main objective is to execute existing knowledge, tasks, and functions through a strategically important cooperative relationship. March (1991, pp.71) argue that exploitation includes activities aiming mainly to efficiency. Hence, exploitation emphasizes the effort of expanding the usage of the existing knowledge, and streamlining processes to exploit the assets efficiently. The knowledge exchanged is often explicit and from the perspective of time, the exchange is ongoing (Parmigiani and Rivera-Santos, 2011, pp.1122-1123).

Co-exploration, in contrast, refers to strategically important cooperation creating new knowledge, tasks, functions or activities. The main focus is on learning and innovation by attaining and mixing new knowledge. Learning can relate to learning from the counterpart, learning about the counterpart or learning to manage the relationship with the counterpart, and the entire process may be continuous or it may be executed in an agreed time frame. (Parmigiani and Rivera-Santos, 2011, pp.1122-1123.)

Co-exploration is also closely related to the concept of corporate entrepreneurship (CE), which refers to organizational characteristic that are peculiar to firms mixing internal and external resources in a new way. It also may be seen as a process in which a company innovates, establishes new businesses and transforms itself (Guth and Ginsberg, 1990). Entrepreneurial firms are constantly alert for new interesting opportunities and, therefore, pursuing of opportunities may not be only seen as the objective, but as the business approach (Kaish and Gilad, 1991). Entrepreneurial activities of an organization also tend to create resource gaps that the organization must fill (Teng, 2007, pp.121). An alliance focusing on joint research may be seen more like co-explorative, whereas joint manufacturing exploits the specialties of both organizations and stands for co-exploitation of existing capabilities. The reality often combines these two distinct pure forms. (Parmigiani and Rivera-Santos, 2011, pp.1123.)

By bringing both approaches (industry-related strategic management and co-exploitation & co-exploration) together, the authors suggest that it is possible to place relationships into a four-field-tool in a way that indicates the combined driver for the cooperation (see **Figure**). Depending on the key drivers of the relationship, the type of knowledge that is exchanged in the relationship appears to vary. Especially co-explorative and offensive efforts appear to require the exchange of tacit knowledge. As the focus of this paper is on the knowledge intensive strategic relationships, in next chapter the authors briefly discuss knowledge exchange in inter-organizational context.

Industry-related drivers	Offensive	Developing efficiency by exploiting complementary resources and competences to beat the industry standards.	Developing new heterogeneous resources and competences which are unforeseen at the industry.
	Defensive	Developing efficiency by exploiting complementary resources and competences to match industry standards.	Developing resources and competences which are new to both parties in relationship to match industry standards.
		Co-exploitation	Co-exploration
Goal setting drivers			

Figure 3. The four fields of strategic drivers for inter-organizational relationship.

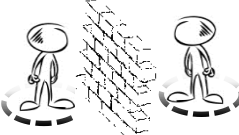
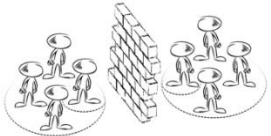

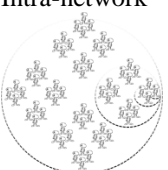

Inter-organizational knowledge exchange

In the latest management literature knowledge exchange (Phelps et al., 2011) is also discussed under the terms of knowledge transfer (Squire et al., 2008) and knowledge sharing (Van Wijk et al., 2008). Despite the term that is used, one must notice that the knowledge exchange is always carried out through a relationship established by two parties. Hence, the success of the transfer is dependent on the characteristics of the knowledge itself and the characteristics of both the sender and the recipient (Esterby-Smith et al., 2008, pp.685). In addition, the context in which the exchange is occurring affects the success of the exchange (Esterby-Smith et al., 2008, pp.685). The literature review show that the context can be examined at various levels (see Even though, knowledge transfer can be analyzed at various levels, knowledge exchange may be always tracked down to the individual level as the individuals eventually are the basic learning units of an organization (Deeds, 2003, pp.40). As the level of analysis change from the inter-individual level to the higher levels, the number of possible hindering or facilitating factors increases as all the factors at lower levels affect to the highest level of analysis. This means that the factors at the inter-individual and intra-organizational levels affect directly to the inter-organizational level of knowledge exchange and thereby influence the success of a strategic relationship. Hence, nodal (intra-firm) and dyadic (inter-firm) knowledge exchange appears to be tightly bounded (Esterby-Smith et al., 2008, pp.687).

Table 2 at page 6). Recent management literature recognizes five levels: inter-personal, intra-organizational, inter-organizational, intra-network and inter-network levels (Squire et al., 2008, pp.463; Phelps et al., 2011, pp.1).

Even though, knowledge transfer can be analyzed at various levels, knowledge exchange may be always tracked down to the individual level as the individuals eventually are the basic learning units of an organization (Deeds, 2003, pp.40). As the level of analysis change from the inter-individual level to the higher levels, the number of possible hindering or facilitating factors increases as all the factors at lower levels affect to the highest level of analysis. This means that the factors at the inter-individual and intra-organizational levels affect directly to the inter-organizational level of knowledge exchange and thereby influence the success of a strategic relationship. Hence, nodal (intra-firm) and dyadic (inter-firm) knowledge exchange appears to be tightly bounded (Esterby-Smith et al., 2008, pp.687).

Table 2. Factors affecting to inter-organizational knowledge transfer.

Level of analysis	Donor / sender characteristics	Contextual factors	Receiver / Recipient characteristics
Inter-personal 	<ul style="list-style-type: none"> • Expertise • Status • Personality • Possessed knowledge • Attractiveness as a knowledge source 	<ul style="list-style-type: none"> • Direction of knowledge flow (vertical/horizontal/hierarchical) • Interest alignment • Distance in professional cultures • Distance in national cultures • Cognitive distance • Geographical distance • Industry specific policies • Structure of the inter-personal network • Network density • Tie strength • Trust • Difference in knowledge base 	<ul style="list-style-type: none"> • Expertise • Status • Personality • Formal power
Intra-organizational 	<ul style="list-style-type: none"> • Transmission capacity • Teaching capability • Collaboration capacity • Innovation capability 	<ul style="list-style-type: none"> • Interest alignment • Governance forms • Distance in culture among units or groups • Position in the intra-organizational network (Network centrality) • Network density • Tie strength • Trust • Difference in collective knowledge base 	<ul style="list-style-type: none"> • Learning intent • Absorptive capacity • Collaboration capacity
Inter-organizational 	<ul style="list-style-type: none"> • Company size • Performance 	<ul style="list-style-type: none"> • Interest alignment • Power imbalance • Distance in organization cultures • Tie strength • Trust • Relation specific investments • Difference in collective knowledge base 	<ul style="list-style-type: none"> • Company size
Intra-network 		<ul style="list-style-type: none"> • Position in the organization network (Network centrality) • Network density • Cluster boundaries 	
Inter-network 			

In practice the interdependency may be easily observed. After bringing the ideas inside the organization, intra-organizational knowledge transfer mechanisms are used in facilitating the exploitation and commercialization of new ideas (Grimpe and Kaiser, 2010, pp.1501-1502). Hence, the internal knowledge exchange mechanisms are required to be able to actually exploit the externally received knowledge (Pugh and Dixon, 2008, pp.21-22; Van Wijk et al., 2008) and therefore intra-organizational knowledge sharing seems to be necessity to successful inter-organizational knowledge transfer (Van Wijk et al., 2008).

In addition, one can also question the definition of the internal and the external knowledge. Khoja and Maranville (2009) approach the concept of internal knowledge from the intra-organizational collective point of view and consider knowledge as external if it is not possessed by the focal collective. This means that they define the knowledge as external even though it is possessed by another unit inside the company's own hierarchy leading to conclusion that the legal boundaries do not determine whether the knowledge is external or internal. (Khoja and Maranville, 2009, pp.53.) Pugh and Dixon (2008, pp.21-22) point out that knowledge captured by one part of the organization hardly ever benefit other departments with its full potential. This supports the idea that one should not even try to outline intra-organizational knowledge transfer when trying to holistically understand the inter-organizational knowledge exchange. Even though the definition of the internal and the external knowledge is not commonly agreed, in this paper the external knowledge refers to the knowledge received from other organization.

As a conclusion, argumentation above suggests that the legal boundaries may not be the only barrier to the knowledge transfer or not even the greatest factor. When analyzing knowledge transfer at the inter-organizational level, one should not ignore the factors at lower levels as the success appear to be dependent on all the levels simultaneously.

Management of inter-organizational relationships

The third part of the literature review focus on the findings regarding management of an inter-organizational relationship. According to Schilke and Goerzen (2010, pp.1212) organizations differ in terms of their ability to create value through alliances. Especially relationships involving transfer of complex knowledge appear to be challenging for managers to handle and despite all the effort, eventually the majority of alliances fail (Walter et al., 2008, pp.530). However, managerial routines tend to have significant impact on the success of an inter-organizational relationship (Schilke and Goerzen, 2010, pp.1212). Therefore, it is beneficial to also examine the management of a strategic relationship.

The latest management literature recognizes several concepts aspiring to explain and model the successful management of inter-organizational relationships. Heimeriks and Duyster (2007) discuss about alliance capability, Schilke and Goerzen (2010) emphasize alliance management capability and Wassmer (2010) examined alliance portfolio management but equally Mason and Leek's (2008) dynamic knowledge transfer capability may be seen as a relevant approach to examine the managerial practices affecting alliance performance.

These concepts have some similarities, overlapping ideas and interrelated suggestions. Despite the concept, the majority of scholars (Heimeriks and Duyster, 2007; Dimitratos et al., 2009; Mitsuhashi and Greve, 2009; Wassmer, 2010) emphasize the idea that alliances may be analyzed at two basic levels: single relationship; and portfolio level. Relationship level analysis focus on dyadic tie referring to relationship between two organizations (Dimitratos et al., 2009; Mitsuhashi and Greve, 2009). Whereas the portfolio level analysis consider all the relationships owned by one organization (Heimeriks and Duyster, 2007; Wassmer, 2010).

Another idea connecting these capabilities is the dual emphasis on (1) clearly identified routines to manage alliances and (2) ability to learn from experience to improve these routines (see **Figure 4**). For example according to Wassmer (2010, pp.159) alliance capability involves mechanisms to learn from experience in prior alliances and routines that are developed through learning. Similarly, Schilke and Goerzen (2010, pp.1198) argue that organization possessing strong alliance management capability is continuously improving their alliance management routines. Moreover, Wassmer (2010, pp.161) state that holistic approach to alliance portfolio management includes formalized processes to analyze both singular alliances and portfolio, but also facilitated knowledge transfer to share alliance related knowledge and best practices of how to manage alliances.

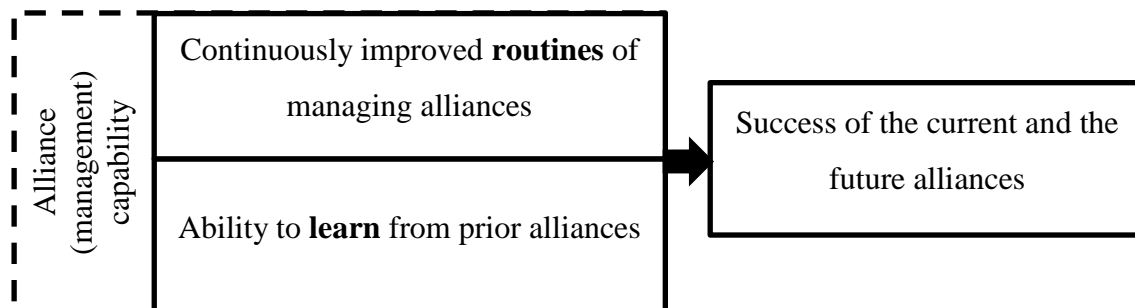


Figure 4. Alliance (management) capability. (Adapted from Wassmer 2010: 159)

METHODOLOGY

To be able to draw as unbiased conclusions as possible regarding research question, this study examines multiple separate cases experienced by several organizations (Yin, 2009, pp.27) and it uses personal thematic interviews. Data of this study was analyzed through three tools: cross-case synthesis, explanation building and pattern matching. Firstly, all the interviews were littered and examined to identify commonalities and patterns in order to find factors affecting to the successful management of the inter-organizational relationships. Then the findings of the separate cases were brought together for cross-case synthesis to analyze the entire data simultaneously. Lastly, the explanation provided by the empirical data was matched to patterns found from prior research papers.

Context

The empirical data was collected from Finnish technology industry. As an economic influencer, the Finnish technology industry is responsible for 60 % of the export of Finland and consists of five large branches (Teknologiateollisuus, 2013).

Even though the direct generalization of the results of this paper may not be applied to other industries, the findings of this study touch directly or indirectly a significant share of the Finnish workforce and companies.

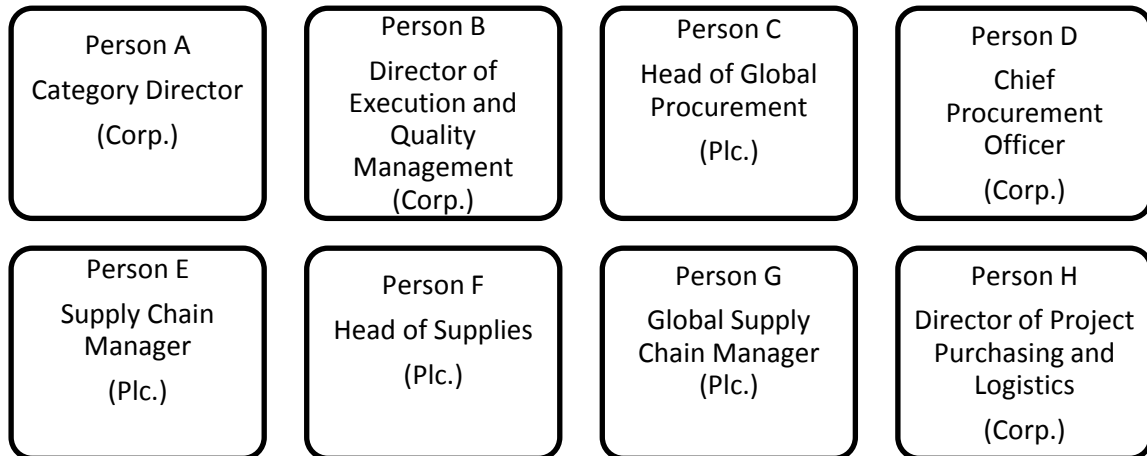


Figure 5. Interviewees.

The primary research data consists of eight (8) interviews of 90 minutes each. The interviews were recorded and completely littered to increase the reliability of the study. The data was gathered during the October and November in 2012. The companies for interviews were randomly selected among the largest technology companies listed by Talouselämä Journal in 2012. Hence, the research results may not be directly applicable to other industries or technology industries in other countries. Both public listed companies (Corp.) and public limited companies (Plc.) were included.

As the focus of the study is on inter-organizational relationships, the interviewees were selected among the top managers, directors and executives responsible for inter-organizational interfaces. More specifically, the empirical data consists of top managers responsible for sourcing. Therefore, the study may be seen to be limited to provide a truthful picture only from the buyer side and may not represent the viewpoint of the suppliers.

RESULTS

The interview data revealed that the companies in Finnish technology industry appear to emphasize the importance of the partnerships and the management of the business networks. Every interviewee mentioned that without their partners they are not able to

meet their strategic goals. This finding is directly aligned with the findings in the literature and Parmigiani and Rivera-Santos' (2011, pp.1109) comment "*No organization is an island*". In addition, the influence of the partnerships on the focal company's success is predicted to grow in the future. The interview data presented some evidence that the competition is recognized to occur at the network level and that the company at the end customer interface is recognized to be the most responsible for the competitiveness of the entire network.

Interviewed companies appear to have various types of partnerships that are strategically important. Some of them are aiming in achieving cost efficiency through state of art manufacturing facilities and others are based on high innovation capability. There are also partnerships which are between these two main drivers. In addition, geographically well located partners and flexible partners were also mentioned as important. Mutually understanding the role of each partner appears to be highly important.

Another trend one can find from the interview data is that the interviewees expect to have less suppliers but more long term relationships in the future. Partners are expected to be able to deliver more and larger entities. As companies are focusing on their core competences and value propositions are becoming increasingly complex, partnerships are to be built on strong relationships where both parties understand the end customer value creation process. Open collaboration and communication, which are seen as the key elements for success, appear to be challenging to achieve in a traditional industry such as Finnish technology industry. However, the change in the industry culture can be seen to begun. The emphasized importance of inter-firm communication also justifies the authors' decision to add inter-organizational knowledge exchange into the theoretical framework of this paper.

In addition, the shift into more complex value propositions and collaboration in unforeseen areas has also changed the role of the sourcing and the skill profile of the purchasers. Sourcing is seen as a connector between internal and external resources and it is also commonly seen as the owner of the relationship. Sourcing is the face of the company, and having a face appears to be very important.

Moreover, sourcing is often responsible for partner selection as well. The tasks of sourcing has become rather demanding as the activities may include areas such as: understanding the presence of a market need; analysis of the current partner portfolio; recognize the need to increase competences in the portfolio; identify suitable candidates; evaluate candidate's ability to fulfill the need; evaluate supplier's ability to continuously improve their solutions; evaluate the match in values and culture.

The actual management of the partnership appears to occur more often at the relationship level than network level, even though some evidence of network level management was revealed by the interviews. Almost every interviewee emphasizes the idea of evaluating partners and their role in the partner portfolio, but the most of the managerial activities tend to be related to a single relationship level. The relationship is most commonly led by the buyer, but some interviewees argued that the relationship of two parties cannot be led solely and both parties must have a contribution in it. Majority

of the interviewees monitor facts such as quality, time of delivery and costs. The distinctive factor between vendor management and partnership management appears to be that in addition to facts, the importance of open two way communication is emphasized. To foster the relationship, the communication must be enabled at all the hierarchical levels between companies and it must be cohesive at every level. Moreover, people at both sides must also know the authority making decisions.

Moreover, communication appears to be also one of the main challenges. Especially modern communication technologies were mentioned as a challenge as they tend to increase the facelessness. Face to face meetings are still required and play an important role in establishing a personal connection, which facilitates communication between individuals.

The most common reasons for the dissolution of a relationship appears to derive from change in business environment, change in strategy, change in people, change in performance, or change in level of trust. In addition, if the organization culture does not support the openness, management is not committed or the supplier fail to deliver what was agreed the relationship often lead to termination. Hence, one may argue that many challenging areas are market need, capability to deliver or people related.

The key factors for a successful partnerships that arise from the interview data consists of factors such as: recognized market need, willingness of both parties, clear mutual vision, open two way communication, understanding of each other's capabilities, realistic ability to jointly fulfill the market need, high level of trust, chemistry between key individuals, ability to implement the joint strategy, commitment of management and mutually agreed performance indicators. It is to be noticed that many interviewees pointed out the importance of the market need for the collaboration and realistic ability to deliver what is required to fulfill the need. These two factors must exist and thereafter the commitment and willingness of the management and the key interface people tend to determine the success of the relationship. Similarly, in center of the solution tend to be the people and communication between people. It appears to be highly important that the communication at every level is consistent to ensure that the mutual goals are transparent and present at all times.

If all these findings are drawn together, one may argue that there are seven themes that appear to continuously repeat in the answers:

1. Existence of a market need

"...there was a mutual goal, market need, required competences, and both parties were willing to learn." (Person E)

"First we recognize the need, can we fulfill the need by using existing partners, if we cannot then look for a company who can..." (Person H)

“there must be a need.. and the offering of the supplier must fit to that need, willingness, flexibility of both, trust, long term mutual goals.” (Person F)

2. Realistic ability to fulfill the market need together (possession of the required competences)

“You must know your network and be aware who can do what and not to run after the lowest price [...] Trust, right scale of cooperation, realistic expectations and realistic promises, eagerness to increase efficiency in the future.” (Person C)

“There must be need and offering filling the need and realistic ability to really do it. “ (Person E)

3. Willingness and commitment of the management and the key people to fulfill the market need together

“Partner must be interested in the business of the focal company [...] Collective responsibility for the success: good times are good for both parties and similarly bad times are bad for both...” (Person A)

“Mutual willingness, competences that are valuable for the focal company, similar goals, aligned strategy, trust, managers and owners and interface people and their synergies, the supplier has face, leadership, genuine willingness to serve the end customer well, understand key competitive factors, what can the supplier provide to foster those factors, continuous dialogue...” (Person G)

4. Jointly agreed goals

“The proficiency and commitment of the people and personal desire to create something extraordinary [...] both parties were committed and understood what the goals were...” (Person B)

“Strategies must fit and both sides must share their strategies openly to be able to create joint strategy.” (Person E)

5. Capability to implement jointly agreed strategy

“Supplier introduced completely new markets and showed clearly value that they could add to the final proposal. The success was dependent on the leadership capability and the willingness of both organizations. Both companies understood the business success

parameters, had willingness to reach those, had capability to sell the idea of collaboration inside the company and get people to act accordingly.” (Person D)

“The management of both parties is committed and ability to commit the lower levels as well. (Person E)

6. Open two way communication at all hierarchical levels

“Monitoring and management of delivery is part of daily operational routines, but partnership requires also open communication.” (Person C)

Face to face meetings, not only phone or email communication. Depending on the partner, it may require quite a lot of sitting down together. (Person E)

7. Overcoming cultural barriers (organization culture, industry culture, national culture)

One must understand cultural differences and educate own people to be able to work with different cultures. Increasing transparency through organization culture one can solve issues involved national culture...” (Person F)

“Cultural differences in designing standards [...] cultural differences in hierarchical structures [...] It is challenging to measure the actually realized gains that choosing Asian supplier instead of a supplier geographically close to the focal company will provide.” (Person H)

DISCUSSION

This paper investigated the factors affecting to the managerial success of inter-organizational strategic relationships. To be able to measure whether a relationship has been successful, one must understand the fundamental drivers, the root reasons, for collaboration. To approach the drivers, the paper examined two alternative angles – industry-related strategic management point of view (Teng, 2007; Wassmer, 2010; Maritan and Peteraf, 2011); and co-exploitation & co-exploration point of view (March, 1991; Parmigiani and Rivera-Santos, 2011) – which were found through the literature review. The idea of these approaches relies on the aspiration to identify and classify the drivers of all the inter-organizational relationships that a company has. The literature recognized that depending on the driver, some relationships tend to be more knowledge intensive than others (Phelps et al., 2011).

The empirical data provided direct support for applicability of the co-exploration & co-exploitation approach as some of the interviewees mentioned that they have different partners to reach for efficiency and different to pursue innovativeness. Several

interviewees explained that some suppliers aspire to provide both. The empirical data did not provide direct support for strategic management classification of offensive and defensive motivation. However, the used interview structure did not directly focus on revealing this single specific theoretical angle. To be able to evaluate the applicability of the four field model presented in **Figure**, one should empirically investigate the model more explicitly. This could be a topic for a future study.

In general, the interviewees emphasized the importance of understanding the reason (drivers) why the companies collaborate and the goals which they are aspiring to achieve through the relationship. Hence, as mentioned in the literature (Gottschalg and Zollo, 2007), one may argue that the transparent and mutually agreed goals may be seen as one of the key success factors.

The second theoretical area of the paper discussed the factors affecting the inter-organizational knowledge exchange, which was commonly recognized as one of the key elements in enabling relationship success (Esterby-Smith et al., 2008; Squire et al., 2008; Van Wijk et al., 2008; Grimpe and Kaiser, 2010; Phelps et al., 2011). This argumentation was strongly supported by the empirical data and therefore one may argue that the inter-organizational communication is definitely one of the factors affecting to success of a strategic relationship. The prior research suggested that the knowledge exchange may be seen to occur at different levels such as inter-personal, intra-organizational, inter-organizational, intra-network and inter-network (Squire et al., 2008, pp.463; Phelps et al., 2011, pp.1). There are also the characteristics of knowledge (Esterby-Smith et al., 2008; Pérez-Nordtvedt et al., 2008; Squire et al., 2008); the characteristics of the donor and the recipient (Cohen and Levinthal, 1990; Esterby-Smith et al., 2008; Squire et al., 2008; Khoja and Maranville, 2009; Phelps et al., 2011); and the contextual characteristics (Inkipen, 2000; Teng, 2007; Mason and Leek, 2008; Squire et al., 2008; Makadok and Coff, 2009) that affect the success in knowledge transfer.

Culture as a contextual characteristic was strongly emphasized by empirical data as an important factor. The data showed support that firstly the organization culture has great influence on the openness to share knowledge with internal and external stakeholders. This finding is aligned with the wide recognition (Esterby-Smith et al., 2008; Pugh and Dixon, 2008; Van Wijk et al., 2008; Grimpe and Kaiser, 2010) regarding dependency between intra- and inter-organizational knowledge sharing. In addition, the Finnish technology industry was recognized to be rather conservative and the industry culture does not fully support the open collaboration. However, one may interpret from the answers that the trend is towards more open cooperation. Thirdly, the national culture was mentioned by interviewees and especially the distance between Finnish and Asian cultures. Some cultural differences between Finns and Swedes and between Chinese and French were also mentioned.

Geographical distance was also discussed as a contextual factor affecting to knowledge exchange. Theory suggests that whereas high geographical distance may increase the diversity and heterogeneity of the accessible knowledge (Phelps et al., 2011), high distance may cause problems through diminishing communication forms (Esterby-Smith et al., 2008; Sammarra and Biggiero, 2008). Empirical data indicates that

geographical distance is seen as a challenge. The main reason for this is that face to face meetings are still required and play an important role in establishing a personal connection, which facilitates communication between individuals. Moreover, the empirical evidence highly emphasized the idea that companies must have a face in order to succeed in the relationship and geographical distance may increase facelessness.

In addition, the ideas represented in the reviewed articles regarding the direction of knowledge flow and the relationship tie density was strongly supported by empirical data. Hence, the argumentation behalf the strong direct ties (Nonaka and Takeuchi, 1995; Cavusgil et al., 2003; Squire et al., 2008) and transparent knowledge flow at all hierarchical levels (Yanow, 2004; Esterby-Smith et al., 2008) may be seen applicable. In addition, the empirical data indicated the trend of decreasing the number of direct ties and purchasing larger entities from the partners. This notification supports Wassmer's (2010) finding that direct ties are costly to maintain and one should rather have direct ties only with companies that have further networked.

Interest alignment and motivation to share knowledge and cooperate was also discussed in the prior literature as a contextual factor. Gottschalg and Zollo (2007) argued that in order to achieve competitive advantage through collaboration both ability to exchange knowledge but also willingness must be solid. Empirical evidence showed very strong support to Gottschalg and Zollo's (2007) argumentation. Mutual willingness and commitment of especially management towards cooperation were the factors mentioned by the most of the interviewees.

The third area of the literature review focused on the management of a relationship. Alliance capability (Heimeriks and Duyster, 2007), alliance management capability (Schilke and Goerzen, 2010) and alliance portfolio management (Wassmer, 2010) were main concepts contributing to building a framework for relationship management. Based on the findings in the literature, the topic was divided into subtopics to cover managerial routines and learning routines, both important to all of these three contributing concepts.

As a managerial practice, theory recognizes a relationship and portfolio levels of management (Heimeriks and Duyster, 2007; Dimitratos et al., 2009; Mitsunashi and Greve, 2009; Wassmer, 2010). For inexperienced companies the single relationship level may be more beneficial whereas for experienced corporations the portfolio level of analysis tend to deliver additional value (Wassmer, 2010). Empirical findings were similar. Almost every interviewee emphasized the idea of evaluating partners and their role in the partner portfolio, but the most of the managerial activities tend to be related to a single relationship level.

Managerial routines vary in different phases of the relationship life cycle. In the phase before entering, the literature recognizes three key activities for partner selection: recognizing current and upcoming market needs (Mitsunashi and Greve, 2009; Schilke and Goerzen, 2010); new partnering opportunity identification (Teng, 2007; Wassmer, 2010); and evaluating social match (Mitsunashi and Greve, 2009; Das and Kumar, 2011). The empirical data indicates that the tasks of people operating in the supplier interface consist of wide range of activities. The interface people must be able to

understand the presence of a market need; analysis of the current partner portfolio; recognize the need to increase competences in the portfolio; identify suitable candidates; evaluate candidate's ability to fulfill the need; evaluate supplier's ability to continuously improve their solutions; evaluate the match in values and culture. Hence, one may argue that the importance of activities in relationship formulation phase is emphasized by both prior research and the empirical data.

Theory also suggests that the main objective of portfolio management is to achieve the strategic goals through configuration of relationships of the entire alliance portfolio. Measuring key performance indicators can help in the configuration task. In knowledge intensive relationship, also monitoring innovation performance could be beneficial. In addition, at the corporate level the analysis should show the success in meeting the strategic goals (Wassmer, 2010). Empirical data showed that the majority of the interviewees monitor facts such as quality, time of delivery and costs. In addition, common opinion was that the distinctive factor between vendor management and partnership management appears to be open two way communication and organizing joint operations around the relationship in a way that the responsibilities are clear and processes run without interruption. The empirical data also supported the idea of measuring the strategic goals by arguing that alliance performance may be also measured based on ability to satisfy end customer needs and make profit.

Moreover, as the alliance is relationship of two market operators, decisions to adjust the relationship involve both organizations (Wassmer, 2010). Empirical data indicated that the relationship is most commonly led by the buyer, but some interviewees argued that the relationship of two parties cannot be led solely and both parties must have a contribution in it. Theory suggested that the decisions should be made in the company and by the people who has the best knowledge regarding a certain matter (Walter et al., 2008). Hence, one may argue that there is still a gap between ideal theoretical model and present managerial practices.

The literature recognizes two main factors that most commonly lead to dissolution of a relationship. Change in the markets where the premises for collaboration suddenly disappear may be seen as the first one (Greve et al., 2010). Second factor that many scholars (Teng, 2007; Walter et al., 2008; Squire et al., 2008; Dirks et al., 2009; Janowicz-Panjaitan and Khrisnan, 2009; Mitsunashi and Greve, 2009; Greve et al., 2010; Wassmer, 2010; Das and Kumar, 2011; Phelps et al., 2011) recognize is trust, which appears to be the most important element determining the success of the relationship. Violations may be either competence- based violations, meaning that the partner fails in fulfilling the agreement despite the effort, whereas integrity-based violation means that the partner shows dishonestly (Janowicz-Panjaitan and Khrisnan, 2009). The empirical data suggests that the most common reasons for the dissolution derive from change in business environment, change in strategy, change in people, change in the partner's performance, or change in the level of trust. Findings are congruent with prior research. Hence, the management of the both parties must be aware of the changing market needs, be able to ensure the required level of performance and honor the strict requirement of honesty.

The final topic of the literature review discussed learning routines. Whereas managerial routines emphasize the actual activities that the management executes in the alliance management process, learning routines refer to activities aiming to capture, analyze, formalize and further exploit the cumulative experience and further develop the managerial routines (Pangarkar, 2009). Prior research recognize the learning routines to be rather challenging activities for managers as the experience may be highly relationship-specific and the learning outcomes are not easily transferred to other relationships (Wassmer, 2010). The empirical data indicated that learning from prior experience is one of the challenges in relationship management. In addition, empirical data showed that experience appears to be highly people embedded and even though some of the interviewees revealed that they have certain collective places where they store relationship data, experience may be hard to codify and store in a database. Empirical data showed that companies vary in their learning practices.

CONCLUSIONS

Based on the findings discussed above, one may notice that there is relatively high number of factors influencing the managerial success inter-organizational strategic relationships. However, to summarize the most important factors the authors have come up with a list of five fundamental factors or themes to consider in aspiration to facilitate managerial success:

1. Both parties recognize the existing and/or the future market needs
2. Realistic ability to fulfill the need together
3. Willingness and commitment to fulfill the need together
4. Capability to implement the jointly agreed strategy
5. Continuous open communication to keep the goals transparent and present

As a conclusion the author suggest that if there are a market need, realistic ability to fulfill the need, willingness to fulfill the need and ability to lead, through open communication strategic relationships may be quite close to success. Obviously it may not be easy and all the changes in the markets, strategy or people may cause challenges. However, whereas changes may decrease or demolish the fundamentals for the relationship, they may also increase or create new attractive partnering opportunities.

REFERENCES

- Becerra, M. Lunnan, R. and Huemer, L. (2008) 'Trustworthiness, risk, and the transfer of tacit and explicit knowledge between alliance partners.' *Journal of Management Studies*, 45 (4): 675-698
- Becht, B. (2010) 'Building a Company Without Borders.' *Harvard Business Review*, 88(4): 103-106
- Cavusgil, S. T. Calantone, R. J. and Zhao, Y. (2003) 'Tacit knowledge transfer and firm innovation capability.' *Journal of Business and Industrial Marketing*, 18(1): 6-21
- Cohen, W. M. and Levinthal, D. A. (1990) 'Absorptive capacity: a new perspective on learning and innovation.' *Administrative Science Quarterly*, 35(1): 128-152
- Conner, K. R. and Prahalad, C. K. (1996) 'A resource-based theory of the firm: knowledge versus opportunism.' *Organization Science*, 7(5): 477-501
- Das, T. K. and Kumar, R. (2011) 'Regulatory Focus and Opportunism in the Alliance Development Process.' *Journal of Management*, 37(3): 682-708
- Deeds, D. L. and Rothaermel, F. T. (2003) 'Honeymoons and liabilities: The relationship between age and performance in research and development alliances.' *Journal of Product Innovation Management*, 20(6): 468-484
- Deeds, D. L. (2003) 'Alternative strategies for acquiring knowledge. In: *Managing Knowledge for Sustainable Competitive Advantage*.' Ed. S. E. Jackson, M. A. Hitt and A. S. Denisi. San Francisco. CA: Wiley.
- Dimitratos, P. Lioukas, S. Ibeh, K. I. N. and Wheeler, C. (2009) 'Governance Mechanisms of Small and Medium Enterprise International Partner Management.' *British Journal of Management*, 21(3): 754-771
- Dirks, K. T. Lewicki, R. J. and Zaheer, A. (2009) 'Repairing Relationships Within and Between Organizations: Building a Conceptual Foundation.' *Academy of Management Review*, 34(1): 68-84
- Easterby-Smith, M. Lyles, M. A. and Tsang, E. W. K. (2008) 'Inter-Organizational Knowledge Transfer: Current Themes and Future Prospects.' *Journal of Management Studies*, 45(4): 677-690
- Gottschalg, O. and Zollo, M. (2007) 'Interest Alignment and Competitive Advantage.' *Academy of Management Review*, 32(2): 418-437

- Greve, H. R. Mitsuhashi, H. and Rowley, T. J. (2010) 'Built to Last But Falling Apart: Cohesion, Friction, and Withdrawal from Interfirm Alliances.' *Academy of Management Journal*, 53(2): 302-322
- Grimpe, C. and Kaiser, U. (2010) 'Balancing Internal and External Knowledge Acquisition: The Gains and Pains from R&D Outsourcing.' *Journal of Management Studies*, 47(8): 1484-1509
- Guth, W. D. and Ginsberg, A. (1990) 'Guest editors' introduction: corporate entrepreneurship.' *Strategic Management Journal*, 11(Summer Special Issue): 5-15
- Harryson, S. J. Dudkowski, R. and Stern, A. (2008) 'Transformation networks in innovation alliances – the development of Volvo C70.' *Journal of Management Studies*, 45(4): 730-758
- Heimeriks, K. H. and Duysters, G. (2007) 'Alliance Capability as a Mediator Between Experience and Alliance Performance: An Empirical Investigation into the Alliance Capability Development Process.' *Journal of Management Studies*, 44(1): 25-49
- Janowicz-Panjaitan, M. and Krishnan, R. (2008) 'Measures for Dealing with Competence and Integrity Violations of Interorganizational Trust at the Corporate and Operating Levels of Organizational Hierarchy.' *Journal of Management Studies*, 46(2): 245-268
- Kaish, S. and Gilad, B. (1991) 'Characteristics of opportunities search of entrepreneurs: sources, interests, general alertness.' *Journal of Business Venturing*, 6(1): 45-61
- Khoja, F. and Maranville, S. (2009) 'The Power of Intrafirm Networks.' *Academy of Strategic Management Journal*, 8: 51-70
- Kraljic, P. (1983) 'Purchasing must become supply management.' *Harvard Business Review*, 61(5): 109-117
- Lazer, D. and Friedman, A. (2007) 'The network structure of exploration and exploitation.' *Administrative Science Quarterly*, 52(4): 667-694
- Lindenberg, S. and Foss, N. (2011) 'Managing Joint Production Motivation: The Role of Goal Framing and Governance Mechanisms.' *Academy of Management Review*, 36(3): 500-525
- Madhok, A. and Tallman, S. B. (1998) 'Resources, Transactions and Rents: Managing Value Through Interfirm Collaborative Relationships.' *Organization Science*, 9(3): 326-339

- Makadok, R. and Coff, R. (2009) 'Both Market and Hierarchy: An Incentive-System Theory of Hybrid Governance Forms.' *Academy of Management Review*, 34(2): 297-319
- March, J. G. (1991) 'Exploration and exploitation in organizational learning.' *Organization Science*, 2(1): 71-87
- Maritan, C. A. and Peteraf, M. A. (2011) 'Building a Bridge Between Resource Acquisition and Resource Accumulation.' *Journal of Management*, 37(5): 1374-1389
- Martin, J. A. and Eisenhardt, K. M. (2010) 'Rewiring: Cross-Business-Unit Collaborations in Multibusiness Organizations.' *Academy of Management Journal*, 53(2): 265-301
- Martin, R. J. (2010) 'How Hierarchy Can Hurt Strategy Execution.' *Harvard Business Review*, 88(7): 74-75
- Mason, K. J. and Leek, S. (2008) 'Learning to Build a Supply Network: An Exploration of Dynamic Business Models.' *Journal of Management Studies*, 45(4): 774-799
- Mitsuhashi, H. and Greve, H. R. (2009) 'A Matching Theory of Alliance Formation and Organizational Success: Complementarity and Compatibility.' *Academy of Management Journal*, 52(5): 975-995
- Nonaka, I. and Takeuchi, H. (1995) *The Knowledge Creating Company*. Oxford. Oxford University Press.
- Pangarkar, N. (2009) 'Do Firms Learn from Alliance Terminations? An Empirical Examination.' *Journal of Management Studies*, 46(6): 982-1004
- Parmigiani, A. and Rivera-Santos, M. (2011) 'Clearing a Path Through the Forest: A Meta-Review of Interorganizational Relationships.' *Journal of Management*, 37(4): 1108-1136
- Pérez-Nordtvedt, L. Kedia, B. L. Datta, D. K. and Rasheed, A. A. (2008) 'Effectiveness and Efficiency of Cross-Border Knowledge Transfer: An Empirical Examination.' *Journal of Management Studies*, 45(4): 714-744
- Phelps, C. C. (2010) 'A Longitudinal Study of the Influence of Alliance Network Structure and Composition on Firm Exploratory Innovation.' *Academy of Management Journal*, 53(4): 890-913
- Phelps, C. Heidl, R. and Wadhwa, A. (2011) 'Knowledge, Networks, and Knowledge Networks: A Review and Research Agenda.' *Journal of Management*, 38(4): 1-52

- Pugh, K. and Dixon, N. M. (2008) 'Don't Just Capture Knowledge – Put It to Work.' *Harvard Business Review*, 86(5): 21-22
- Ramaswamy, V. and Gouillart, F. (2010) 'Building the Co-Creative Enterprise: Give all your stakeholders a bigger say, and they'll lead you to better insights, revenues, and profits.' *Harvard Business Review*, 88(10): 100-109
- Sammarra, A. and Biggiero, L. (2008) 'Heterogeneity and specificity of inter-firm knowledge flows in innovation networks.' *Journal of Management Studies*, 45(4): 785-814
- Schilke, O. and Goerzen, A. (2010) 'Alliance Management Capability: An Investigation of the Construct and Its Measurement.' *Journal of Management*, 36(5): 1192-1219
- Squire, B. Cousins, P. D. and Brown, S. (2009) 'Cooperation and Knowledge Transfer within Buyer–Supplier Relationships: The Moderating Properties of Trust, Relationship Duration and Supplier Performance.' *British Journal of Management*, 20(4): 461-477
- Szulanski, G. (1996) 'Exploring internal stickiness: impediments to the transfer of best practice within the firm.' *Strategic Management Journal*, 17(Winter Special Issue): 27-43
- Teknologiaoteollisuus (2013) Teknologiaoteollisuus ry. Available at: <http://www.teknologiaoteollisuus.fi/en/> (Accessed 4 February 2013)
- Teng, B. (2007) 'Corporate Entrepreneurship Activities through Strategic Alliances: A Resource-Based Approach toward Competitive Advantage.' *Journal of Management Studies*, 44(1): 119-142
- Van Wijk, R. Jansen, J. P. and Lyles, M. A. (2008) 'Inter- and intra-organizational knowledge transfer: a meta-analytic review and assessment of its antecedents and consequences.' *Journal of Management Studies*, 45(4): 815-838
- Vesalainen, J. (2006) *Kaupankäynnistä kumppanuuteen*. 2nd ed. Helsinki: Teknologiaoteollisuus ry.
- Von Hippel, E. (1994) "'Sticky information" and the locus of problem solving: implications for innovation.' *Management Science*, 40(4): 429-439
- Walter, J. Lechner, C. and Kellermanns, F. W. (2008) 'Disentangling Alliance Management Processes: Decision Making, Politicality, and Alliance Performance.' *Journal of Management Studies*, 45(3): 530-560
- Wassmer, U. (2010) 'Alliance Portfolios: A Review and Research Agenda.' *Journal of Management*, 36(1): 141-171

- Yanow, D. (2004) 'Translating local knowledge at organizational peripheries.' *British Journal of Management*, 15(Special Issue): 9-25
- Yin, R.K. (2009) *Case study research – Design and methods*. 4th ed. Applied social research methods series vol 5. London. Sage.