Successful Inter-Organizational Knowledge Transfer: Developing Pre-Conditions through the Management of the Relationship Context

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Abstract

A key to developing company's competitive advantage has been increasingly recognized to lie in the set of organizational resources, and especially in the organization's knowledge base and core competencies. Besides that, companies especially in high-technology industries are forced to rely on their partnerships in coping with the number of technologies in order to cope with the complex business environment. *The aim of this conceptual paper is to discuss how and under what conditions pre-conditions for inter-organizational knowledge transfer can be developed.* As a result, a conceptual framework will be developed for the analysis of the phenomenon.

In knowledge transfer the challenge is to develop competencies by transferring and integrating knowledge from external sources into the organization's knowledge base. Knowledge transfer is a complex process that is essentially dependent on the relationship context, developed support structures, knowledge characteristics and the companies' learning abilities and incentives. One essential question in this regard is that there is often asymmetric power between the partners based on the control of the task and resources within the relationship. Consequently, the fear of opportunistic behavior and the need for mutual forbearance, which can be seen to essentially help the development of a trusting and committed atmosphere within the relationship, are key management issues. In a knowledge transfer context it is very difficult to develop meticulous governing contracts as the exchange process is highly social and processual. Thus, understanding the nature and dynamics of relationship management in a knowledge transfer context is an essential question regarding companies' ability to develop new competencies.

Keywords: knowledge, inter-organizational learning, relationship management.

Introduction

As it has been widely discussed, in today's business environment the key to the creation of long-term competitive advantage is regarded to lie in the development of organizational knowledge[1] (See e.g. Hamel 1991). Companies are forced to face the changes in their globalizing business environment by innovating at a higher pace and creating value to their customers better than competition. High uncertainty and the essential role of a variety of skills are common characteristics especially in high-technology industries (Moriarty - Kosnik 1989). As a result, being able to grasp and utilize knowledge outside the company's organizational borders (relationships and networks) is an important challenge. As tacit knowledge cannot be readily bought or sold, companies can develop new knowledge and competencies either through their own or other organizations' experiences (Bierly - Hämäläinen 1995). In knowledge transfer the challenge is to develop competencies by transferring and integrating knowledge from external sources into the organization's knowledge base (Almeida et al. 2002).

Knowledge transfer is a complex process that is essentially dependent on the relationship context, knowledge characteristics and the companies' learning abilities and incentives (See Goh 2002; Simonin 2004). The focus of this paper is to analyze the relationship context and the nature of inter-organizational learning and the issues related to companies' pre-requisites to cooperate in order to transfer knowledge. Only after pre-conditions for the cooperation are created, it is the individuals' and organizations' abilities and the encouragement of the organizational culture that can essentially affect the company's ability to absorb new knowledge (Cohen - Levinthal 1990; Bierly - Hämäläinen 1995). Thus, understanding the nature and dynamics of relationship management in a knowledge transfer context is an essential question regarding companies' ability to gain new competencies. *The aim of this conceptual paper is to discuss how pre-conditions for inter-organizational knowledge transfer can be developed.* The paper tries to analyze and understand the implications of these inter-dependencies on the relationship management and inter-organizational learning efforts. As a result, a conceptual framework will be developed for the analysis of the phenomenon.

Understanding the Relationship Dynamics in Knowledge Transfer Context

Dualities of Trust in the Learning Process

It is essential to understand how the learning process may affect and be affected by the relationship management efforts in a knowledge transfer context. Inter-organizational learning can be regarded as a process of developing new knowledge and insights through knowledge transfer enabling improved actions through better understanding (Fiol - Lyles 1985). Learning is processual, social and contextual in nature and thus, the role of the organizations' ability to develop an understanding of the partner's context within which knowledge has been constructed and developed needs to be emphasized especially considering the transfer of tacit knowledge (Weick 1979; Cook - Brown 1999). At the outset, it is essential for the companies to trust each other in order to develop transparency for open communication and close interaction (Hamel 1991; Möller - Wilson 1995). Moreover, an individual company is different from the market transaction in the sense that coordination, communication and learning (i.e. the essence of the transfer process) are situated and mentally within an identity. This identity not only lowers the cost of communication and the fear of opportunism, but also sets certain tacit rules and values for efficient coordination and learning. (Kogut - Zander 1996.)

If the organizational bases for perceiving and interpreting environment are very different, it may create challenges to knowledge transfer. The role of shared identity between the partners is essential, as it helps the partners' possibilities to relate to each other's contexts and understanding the underlying mechanisms and assumptions of the transferred knowledge. (See Nahapiet - Ghoshal 1998; Child - Rodrigues 2003; Kogut - Zander 1996.) Thus, strong shared identity, trust, mutual adaptations to each other's activities as well as extensive social linkages may in the long run offer the companies many of the benefits of firm's internal development processes (See Almeida et al. 2002). This can be achieved through developing a shared identity for identification within the group interacting in the relationship (Kogut - Zander 1996; Child - Rodrigues 2003). A strong identity within the separate organizations may mean that individuals distance themselves from differing identities and oppose their views about learning. It can be seen that the basis for similarity and shared identity may be derived from close

[1] Based on its characteristics knowledge is considered here to comprise of explicit and implicit (know-how) knowledge.

interaction and e.g. similar occupational background or a common organizational or national cultural background. (See Kogut - Zander 1996; Child - Rodrigues 2003.) These bases may enable the individuals to find a common identification based on their shared values and the perceptions of outsiders – i.e. the distinctiveness and prestige of the group (Asforth - Mael 1989). The shared social identity can be seen as a result of the cognitive and the social relatedness (identification, norms and trust) towards other individuals involved with the partnership (Nahapiet - Ghoshal 1998). Shared identity defines the rules, norms and values according to which individuals coordinate their behavior – often perceived as the essence of organizational culture (Kogut - Zander 1996; Child - Rodrigues 2003). As part of the development of shared identity, understanding the basis of knowledge requires the development of a common language, which enables learning through more efficient communication and interpretation. Shared language may also help in the development of social relations, shared interpretation and the individuals' ability to communicate and learn. (Nahapiet - Ghoshal 1998.) Essentially, previous experiences with other organizations and their social worlds can be seen affecting the individuals' ability to develop shared identity within new relationships (Gelbuda et al. 2003). It could be argued that the more specific the aim of the relationship is, and the more different the people involved are, the more important will the development of shared identity be.

Furthermore, the identity and the aims of the organizations affect how individuals perceive the relationship and decision-making within it, thus affecting knowledge transfer within the relationship (See Wiig 2003; Simonin 1999). The identity may further affect the way people perceive each other as members of the group, and consequently, the way self-interest and trust are perceived. Thus, it can be argued that shared identity is not just related to the social context and the companies' ability and willingness to change their processes and values, but also to the relationship context. Shared identity may essentially help in developing mutual trust as a result of which the partnership can be developed to become more transparent, and the intent to learn can be developed into a more mutual one (Child 2001a). Consequently, this kind of trust can be seen to help companies to understand each other better, as it requires more transparency than trust based on enforced agreements and contracts.

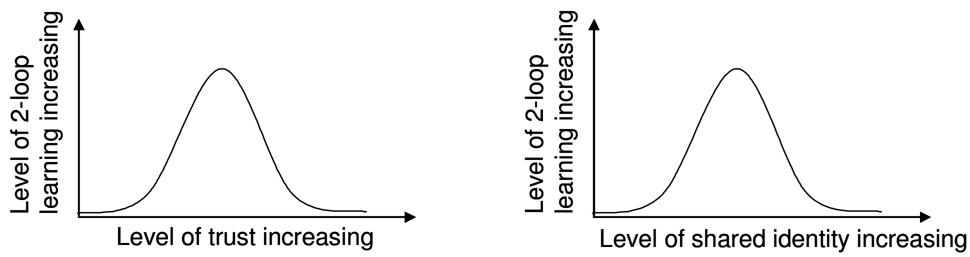

Figure 1: Representation of the Effect of Trust and Shared Identity on the Level of Learning

On the other hand, the relationship specific absorptive capacity and shared identity may form a learning barrier if it becomes formalized and cannot be re-created for new knowledge transfer contexts (Child 2001b). This can be seen to take place if the shared identity becomes too strong and begins to support the existing causal maps, not supporting the creativity in the development of new knowledge. Furthermore, also trust developed within a relationship may begin to support the restrictive nature of social identity, as it supports the mutual sense of cohesion and stability (Seines - Sallis 2003). Thus, trust is required for the parties to be able to communicate where as too much trust may restrict the level of companies' innovative thinking. Similarly, a trade-off can be seen concerning knowledge transferability: the more similar companies are, the easier the transfer is likely to be, but simultaneously the benefits of the transfer may be delimited (Håkansson – Snehota 1995; See Levin - Cross 2004). However, similarities are needed to some extent for the companies to be able to understand the underlying assumptions and experiences of their knowledge bases. One could further argue that the relations between shared identity and learning as well as the relation between the level of trust and learning could be analyzed through a bell-shaped curve (Figure 1).

The Role of Trust and Commitment in Knowledge Transfer

In general, as companies learn to work together, they begin to find new ways of developing activities through mutual adaptations. This can happen if the companies can see that they can benefit more from the relationship in the long-term by modifying their resources and processes (Möller - Wilson 1995). The process of knowledge transfer is dynamic, and thus, its developments are interlinked not only to the relationship context but also to the past of the focal network. Changes in the relationship or focal network reflect also to the success of knowledge transfer. (Adapted from Bierly - Hämäläinen

1995; Goh 2002.) In order for the transfer of knowledge to be possible, companies may need to adjust to each other's activities and build mutual trust (transparency) and intents (Goh 2002). The role of mutual trust and intent is important, as the transferred knowledge is highly related to the organizations' competitive advantage, and thus the fear of opportunism may rise as an essential question (See e.g. Hamel 1991; Norman 2002). Developing trust is an evolutionary process in which the current and previous experiences are closely linked with the future expectations and future level of trust (Parkhe 1998b). Thus, the creation of a shared identity can be seen related to the tasks of relationship management, as it can not be achieved without the consent and inputs from both parties.

The interaction process has six main groups of factors that can be regarded essential in analyzing business relationships: environmental characteristics, organizational characteristics, relationship's atmosphere, task characteristics, the interaction processes and the outcome of the relationship (IMP Group 1982; Möller - Wilson 1995). For the purposes of this paper, the environment of the dyad will be considered in two parts: firstly the focal network and then the wider macro environment, in which the focal net is embedded. The focal net can be seen to consist of actors, to whom the parties of the dyad have direct linkages, e.g. competitors, customers and other partners. (Compare Alajoutsijärvi et al. 1999.) As a result of these effects, the company will establish a network identity[2], which determines the company's position and power within its network context (Anderson et al. 1994; Easton 1992).

Considering the importance of trust and commitment in a knowledge transfer context it is essential to understand the role of relationship atmosphere and the factors affecting it. This is related to the level of power dependencies within the relationship. Dependencies are essentially important regarding the access to and development of complementary resources due to their vitality competitiveness of any company (Pfeffer - Salancik 1978). Trust can be characterized as the parties' ability to believe that the counterpart's behavior will remain consistent in the future, although they may have a possibility to behave opportunistically. In this way they can rely on each other's commitments and open communication. Commitment to a relationship, on the other hand, can be characterized as the parties' intention to stay in and to at least maintain the level of the relationship. (Adapted from MacMillan et al. 2000.) Trust is essentially bound to the past of the relationship and the common experiences with the partner organization and its individuals. It can also be seen that often the most successful relationships are informal in terms of written agreements, and instead the history of mutual adaptations and cooperation act as insurance. (See MacMillan et al. 2000; Håkansson 1989; Brandt Husman 2001.) Furthermore, adaptations are an important vehicle for expressing one's willingness to commit to the relationship and consequently can be considered as a way of creating and enhancing mutual trust (Hallén et al. 1991). In the literature, trust is often analyzed in terms of the basis that it is built on - it can be built on three sets of issues: *process-based, characteristics based and institutional trust* (Parkhe 1998b; See Blomqvist 2002; Young-Ybarra - Wiersema 1999).

Process-based trust reflects the level of trust between the companies regarding their mutual history, reputation for trust and their expected future dealings as well as current activities (Parkhe 1998b; MacMillan et al. 2000). Regarding the companies' willingness to make further adaptations, especially the importance of future dealings will be high. Furthermore, in process-based trust one could differentiate between the partners' reliability regarding their honesty and predictability in relationship management as well as their ability to perform the required tasks within the relationship (See Svensson 2004). Trust in partner's abilities is especially important when the task can be considered to be highly complex and uncertain as well as strategically important in nature as is the case in knowledge transfer (Levin - Cross 2004; Blomqvist 2002). Characteristics-based trust reflects the level of cognitive and cultural similarities as well as social relations between the companies and individuals, and their ability to develop shared understanding and identity between each other (Nahapiet - Ghoshal 1998; Parkhe 1998b). In this sense, the role of shared values and attitudes represent an important base of trust development in knowledge transfer (See Child 2001a; Nahapiet - Ghoshal 1998). Institutional trust on the other hand, can be analyzed as trust between the companies rather than individuals. Such trust can be built either on the companies' implicit certificates or the partners' ability and willingness to develop mutual hostages and contractual agreements in order to minimize the benefits of shirking and maximize the value of cooperation. (Parkhe 1998b; Child 2001a.)

[2] The network identity expresses the perceived attractiveness of a company as an exchange partner due to its unique set of connected relationships and links to other companies' activities, resources and actors (Anderson et al. 1994).

Trust is essentially related to uncertainty in relationships: i.e. uncertainty regarding future events and uncertainty regarding the partner's reactions to these events as well as the inability to affect the nature of these reactions (Parkhe 1998a; See further Svensson 2004). Furthermore, there seems to be a paradox regarding the importance of trust in a highly complex and dynamic environment. As the complexity increases, so does also the need for inter-organizational trust. However, as the complexity increases, the companies' risk, and consequently, the cost for trusting increase as well. (Blomqvist 2002.) Thus, the difficulty in dyadic relationships is that the governance of the partner and the existing interdependencies in an uncertain environment (and especially in case of unforeseen change of circumstances) cause transaction costs. Trust can be seen as an essential way of lowering the uncertainty and the related costs, as the need for governance and negotiations is lower (See MacMillan et al. 2000; Das - Teng 2002.) Closely related to the notions of trust and commitment, one can also recognize the notion of mutual forbearance, which can be seen resulting in (1) both parties avoiding opportunism and (2) helping the partner as much as possible to accomplish the best possible result (Buckley - Casson 1988; See Conner - Prahalad). The idea of mutual forbearance can be seen as a result of strong trust and commitment and can be seen affecting the cooperative nature of the coordination and adaptation activities of the partners. Furthermore, it depicts the problematic situation within relationships where valuable knowledge is transferred, and the scope of the cooperation needs to be limited to the specific capability in order to guard the basis of competitive advantage.

The companies' ability to transfer knowledge is strongly related to the partners' ability to build incentives to act transparently. Thus, the governance form of the relationship needs to be based on such self enforcing incentives that companies' have mutual willingness to cooperate, which means lower transaction costs and higher propensity to share knowledge. (Dyer - Singh 1998; Brandt Husman 2001; Blomqvist 2002.) Besides preventing opportunism, a closer relationship may encourage parties to work together in order to get mutual gain from the cooperation (Conner - Prahalad 1996; Parkhe 1998b). However, it may be difficult to rely on only social relations and close communication in terms of developing a required level of trust for knowledge transfer. Instead, a more concrete base may be needed, as the weight of social relations in terms of economic constraints may prove to be low (Compare Baughn et al. 1997). Thus, using contractual specifications and mutual hostages seem an essential means to control the partner's behavior. However, these mechanisms often cover only a part of the skills that could become transferred during the relationship (Baughn et al. 1997; Parkhe 1998b). As part of the managerial decisions, the support for open communication within relationships and the use of rewarding schemes in encouraging and motivating learning need to be considered as well (Bresman et al. 1999; Gupta - Govindarajan 2000).

As discussed, trust developed within a relationship may also become a barrier to learning, as it supports a sense of cohesion and stability. Thus, besides trust, one has to note the role of mutual intent and incentives as part of the relationship management (Wilson - Möller 1995; Hamel 1991). Aligning aims could help in the alignment of the organizations' motivations, which can support the learning efforts within the relationship. Besides that, the role of intent can be considered both regarding the learning intent within the relationship as well as the intent to develop the knowledge further after knowledge integration (See Hamel 1991). Furthermore, it is important to understand that even the learning process is not totally up to the receiver, but it needs to be supported by the transferor's characteristics, transparency and activities in order to assure the balance of the basic elements for learning (See Lane - Lubatkin 1998; Hamel 1991).

Inter-Dependency between Partners

The number of possibilities for companies to find a suitable mode of cooperation is rather wide - ranging from standard market agreements to joint ventures and wholly owned subsidiaries. It can be argued that quasi-integration between the partners imply a more stable and long-term relationship. The differences between the modes are often expressed in terms of compensation methods and the interdependence between the partners (Contractor - Lorange 1988). The level of interdependence is often measured in terms of investments or the monetary value of exchange within the relationship. However, in the case of inter-organizational knowledge transfer one could argue that the level of interdependence between the partners is not just a question of investments. As the basic notion of the KBV suggests, resources and knowledge as sources of companies' long-term competitiveness are critical (Wernerfelt 1997). Thus, assessing the level of interdependencies in relationships where valuable knowledge is being transferred is far from simple.

As the process includes exchange of difficult to imitate, intangible and valuable resources, the dependency is likely to shift (See Figure 2) during the relationship and transfer process. At first, the receiver can be expected to be dependent on the transferor due to the high uncertainty and intangibility of the target of transfer and the transferor's ability to provide the receiver what it is looking for. As an example, the fundamental difficulty and uncertainty related to buying knowledge from the markets was presented in Arrow's paradox (1962), which states that it is difficult to value the worth of knowledge until it is known, but once known, there is little incentive to buy it (Helleloid - Simonin 1994)[3]. This highlights that some initial level of trust and understanding of the partner's competence is required for the relationship and learning in the beginning – even before the individuals' interaction. This is dependent on the companies' resource complementarity and ability to establish mutual understanding and intents. However, as the knowledge is absorbed by the receiver, the transferor becomes increasingly dependent on the receiver's willingness not to behave opportunistically (See Das - Rahman 2001). This means that there is asymmetric power within the relationship as long as the relationship and the exchange process are not equally important for both parties, or the parties become dependent on each other as a result of it (Baughn et al. 1997; Hallén et al. 1991; Pfeffer - Salancik 1978; Das - Teng 2002). As the dependencies and the bargaining power of the partners shift, this affects the way companies are committed to the relationship and the level of mutual forbearance. The difficulty is that too much power asymmetry may lead to an imbalance between the partners' aims and to a possible unwillingness to comply with the partner's needs (See Das - Teng 2002).

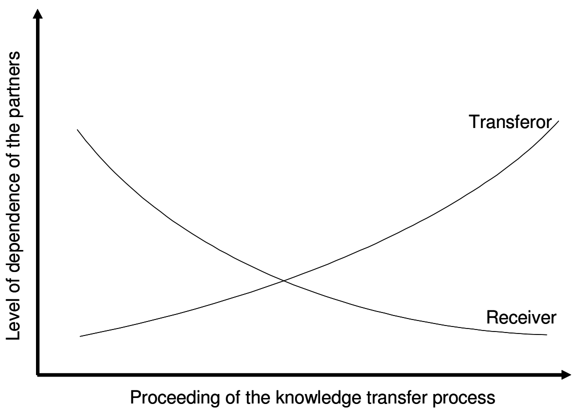

Figure 2: The Changing Nature of Dependency in Inter-Organizational Knowledge Transfer

Similar difficulties can be seen in case the changes in the power relations are about to change and they are difficult to foresee. It can be argued that understanding the changing nature of the dependencies does not need to lead to a learning race but it is an essential issue to understand regarding the relationship dynamics. Moreover, the focus in relationship management should be set on the management of these power dependencies and their implications, for the companies to be able to work cooperatively. The bargaining power of a company can be related to the asymmetry and dependence in the resource bases, the contextual factors or the strategic position of the partners (Adapted from Yan - Gray 1994). By resources it is meant here the level of available resources to the partners and the other party's dependence on these resources. On the other hand, contextual factors, such as the prevailing uncertainty and the availability of other partners may also affect the power distribution. Finally, also the importance of third parties or the strategic positions of the partners involved is dependent on the set of resources available for the partners.

As the value of the transferred knowledge increases, increases also the risk of opportunistic behavior (Helleloid - Simonin 1994). This fear of opportunism can be realized in at least three ways. Firstly, it may be difficult to ensure the partner is capable of providing what the company needs. Instead, the partner may be trying to cheat and in this way gain opportunistically out of the relationship. (Das - Rahman 2001.) This asymmetric information between the parties is one of the main reasons to the risk of opportunism to arise as an essential consideration when dealing with competence development (Barney - Ouchi 1986). Secondly, the partner may be trying to gain only access to the other company's

[3] Original source: Arrow, K. J. (1962) Economic welfare and the allocation of resources to invention. In: National Bureau of Economic Research (Ed.) The Rate and Direction of Incentive Activity: Economic and Social Factors. Princeton University Press: Princeton.

competencies and then exploiting them to their own benefit (Das - Rahman 2001). Even worse, the receiving party may try to use the knowledge against the original partner later on. (Helleloid - Simonin 1994.) Then thirdly, the partner may be unwilling to continue the cooperation, as the positive results are becoming clear. Instead the company may try to leave its partner and pursue the new business opportunities on its own. (Das - Rahman 2001.) However, this kind of behavior will at least in the long run most likely lead to a bad reputation of exploiting partners among other companies, and as a result the opportunism will eventually backfire (Helleloid - Simonin 1994; Barney - Ouchi 1986). Consequently, one could further emphasize the importance and value of the knowledge being transferred and its implications on the companies' network identities (See Anderson et al. 1994).

In this sense the companies' ability to establish and maintain inter-company trust and commitment are important pre-requisites for the success of the relationship (See e.g. Buckley - Casson 1988). Due to the crucial role of the interdependencies within the relationship one has to understand how to ensure that each party involved is committed to the task. In case the risk of opportunism becomes too high for either of the partners, it will affect the nature and atmosphere of the relationship as well as the success of the learning process. Further security for the relationship development and management can be built on mutual hostages and contractual agreements – issues that build the basis for institutional trust. These can be seen especially important issues considering the prevention of opportunism and the subsequent lowering of the costs of negotiating and conflict resolution (Zaheer et al. 1998; Das - Rahman 2001; Wathne - Heide 2000).

There are also several other essential considerations, when trying to minimize the risk of opportunism. Besides the development of trust, also the so-called preventive considerations during the formation of the cooperation are essentially important (Das – Rahman 2001; Norman 2001)[4]. Staffing policies are an important matter, since the knowledge gets transmitted through the interaction between the individuals. Clear guidelines and education can be seen as essential issues together with the actual selection of individuals involved with the relationship. Process-related matters can be considered closely related to the staffing policies. These comprise of e.g. the use of gatekeepers, decision-making policies or performing certain activities separately from the partner. The need for using different kinds of mechanisms can be seen highly dependent on the type of knowledge (tacitness and competitive importance) being transferred and the type of relationship the companies have (Norman 2002).

In general, contracts may be able to minimize the willingness to behave opportunistically, but this is possible only in situations where the circumstances and their development are well known (Das - Rahman 2001; Contractor - Ra 2002). However, in a knowledge transfer context it is very difficult to develop meticulous governing contracts, as the process of exchange is highly social and processual in nature. Similarly, as the tacitness and value of the knowledge increases, so does the need for interaction and communication as well as security about the partner's trustworthiness (See Contractor - Ra 2002). Consequently, one could argue that contractual agreements are an essential way of developing the cooperative skills and the mutual trust between the partners without committing to huge investments. On the other hand, as the aim is to transfer strategically valuable knowledge, companies may be forced to find also other ways of ensuring the continuation of mutual forbearance.

Mutual hostages can in this context be investments in customer specific resources or support structures[5], other related projects (affected by possible opportunism) and other adaptations in organizational procedures (See Young-Yabarra - Wiersema 1999; Hallén et al. 1991). In a sense, also sharing knowledge about each other's competencies already represents a certain kind of hostage as it makes the partners vulnerable to each other's activities. The effect of the investments lies in the fact that in case of opportunism, the relationship is terminated and consequently the investments will be lost at least to the extent that they can not be exploited in other relationships (Das - Rahman 2001). In order to get the partner to make such investments, some level of bargaining power (i.e. complementarity of resources) and trust is needed. A partner in a position where it is possible to behave opportunistically will face lower bargaining power in case it is increasing the level of mutual hostages that can be seen as incentives not to cheat. Due to the role of the interdependencies one

[4] Contractual specifications and mutual hostages can be regarded as ways of designing the cooperational structure together with the partner with the aim of clearer guidelines and trust development. The further considerations presented here, on the other hand, can be regarded as ways for the individual organizations to ensure a required level of knowledge protection.

[5] The support structures can be seen comprising of the design of the relationship's governance mode, but also of the more concrete infrastructure and operational design, which enable the flow of communication and transactions between the companies (Adapted from Goh 2002).

has to consider the role of relationship management and the nature of termination (/switching) costs as well as mutual hostages (See Jones et al. 2002). The termination costs are in this case related to the exchanged VRIO knowledge, the input of human resources and the interaction, adaptation and coordination activities (See Möller - Wilson 1995). Thus, the role of termination costs can be analyzed in a knowledge transfer context especially in terms of (Adapted from Jones et al. 2002): *continuity costs*, i.e. costs of lost potential performance and quality and the risk of lower performance with another partner or of not finding a suitable partner; *sunk costs*, i.e. costs already incurred during the relationship and its development through managerial input and relationship specific investments; *switching costs*, i.e. costs of finding another (possible) partner and negotiating; *learning costs*, i.e. costs of learning the specifics of a new partner and developing a shared identity; *strategic costs*, i.e. costs related to the nature of sharing VRIO knowledge outside the organizational boundaries.

If one considers the level of adaptations being made regarding the learning process, one must take into account the importance and strategic nature of the learning process. It may be difficult to assess the monetary value of the potential benefits of the relationship and knowledge transfer where as the value of required adaptations in terms of support structures may be quite low[6] as the aim is not to produce physical products. In knowledge transfer mutual hostages (i.e. sunk costs) are a potential mechanism to protect against potential strategic costs. This is because the power dependencies are likely to change during the relationship, and thus, the transferor may be in position to require such security measures. It is also important to notice how balanced the level of the partners' investments are, as more balanced investments can be seen to support the flexibility of the relationship especially in case of highly uncertain and complex relationship tasks (Young-Ybarra - Wiersema 1999). In fact, due to the specific nature of knowledge transfer only the sunk costs are potentially rather low where as other types of termination costs are potentially high. It may be almost impossible to find other suitable partners if the level of technological expertise is highly rare and the understanding of the partner's knowledge and business context may require substantial amounts of learning. Furthermore, as companies commit to the relationship the level of termination costs can rise quickly as the nature of the knowledge is highly valuable.

Inter-Dependence between Relationship Management and Inter-Organizational Learning

As discussed, similar issues arise in the analysis of trust and bargaining power. The bargaining power and the termination costs can be analyzed considering the strategic consequences, the contextual factors and the importance of the resources. In knowledge transfer, the process-based trust is an essential question since the end result is highly uncertain and complex. This can be further supported by the level of institutional trust that can be built based on contractual agreements as well as mutual hostages. However, the relationship context and the reliance between the partners represent only the first half of the studied phenomenon. One can also analyze trust in terms of the partners' ability to develop mutual understanding of the transferred knowledge and its underlying assumptions. The important issue is that too much trust and harmony may result in poor motivation for learning as it restricts change to the current state of activities.

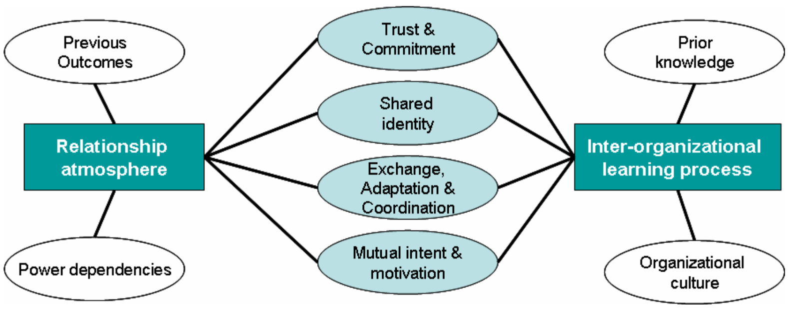

Figure 3: The Inter-Dependent Factors between Relationship Atmosphere and the Inter-Organizational Learning Processes

The interplay between trust and power dependencies in the relationship and the learning process has been depicted in Figure 3. As the role of trust in relationship management is complex, the concept of relationship atmosphere has been used to reflect the development of the relationship context to the

[6] The nature of the support structures are usually related to the enhancement of the flow of intangibles (information & communication) and e.g. the planning of rewarding schemes

inter-organizational learning process. One of the crucial questions in inter-organizational knowledge transfer is the fear of opportunism and the need for mutual forbearance which can be seen to enable the development of a trusting and committed atmosphere within the relationship (Buckley - Casson 1988; Håkansson 1989).

Similar factors affecting the relationship atmosphere may also affect the learning process. Especially, the role of shared identity is closely related to a trusting atmosphere. Besides that, the exchange processes, adaptations and coordination can be seen mediating the importance of trust and power dependencies to the relationship atmosphere. On the other hand, the interaction processes constitute an essential part of the actual learning process as the knowledge becomes exchanged in the interaction processes. It is important to understand the dependencies between learning and relationship management. It can be argued that as trust allows for more variety and innovative learning, it may also become more difficult to govern the partner's activities. A high level of trust in the characteristics of the partner may lead to lower motivation or ability to learn. On the other hand, strong process-based trust may support more innovative learning possibilities.

Discussion and Implications

The dynamics of the relationship arise from the fact that the environment is not stable, and therefore, companies need to realign their activities and processes. This means that the role and importance of the actors and their resources may change and this can accordingly affect the existing dependencies. (Pfeffer - Salancik 1978.) This is an essential issue in knowledge transfer, as the role of the dependent factors is likely to change during the learning process. As the nature of knowledge may be highly relevant to a company's competitiveness, it is essential to understand the role of opportunism and the related governance costs. However, a trusting relationship context based on mutual hostages, process/capability related trust and shared identity can be used to support the inter-organizational learning process. In the end, it is argued that the beginning of successful development of core competencies can be traced back to the successful knowledge transfer and the relationship context, which creates the basic preconditions for the companies to work and develop knowledge together.

As the transfer of competencies is a processual phenomenon, there are three dynamic areas of research that need to be addressed in the framework: the context, the content and the process (Adapted from Halinen 1994[7]; See Möller – Wilson 1995). This entails the environmental context of the process (i.e. relationship and network context), but also the process (i.e. transfer of knowledge) as well as the content and outcome of the process (i.e. characteristics of knowledge and the development of competencies) (Adapted from Pettigrew 1997). In the knowledge transfer literature, three determinants are emphasized as basic elements for effective learning through relationships: mutual intent (motivation), transparency (possibility) and receptivity (ability) (See Hamel 1991; Lane - Lubatkin 1998). The issues are presented in Figure 4 that depicts the factors affecting knowledge transfer and competence development. As discussed, the role of mutual hostages is essential in developing a relationship for inter-organizational knowledge transfer. However, as the process is highly complex and the transferred knowledge highly valuable for the competitive advantage of the partner, the level of mutual hostages is difficult to determine. Furthermore, the issues are strongly related to the partners' ability to develop organizational receptivity. It can be argued that in order to change, organizations need to create an environment where the individuals can trust each other and feel supported in their learning efforts (Schein 1993). Consequently, strong mutual trust will allow for fluent communication between the companies and can enable the development of a shared identity between the individuals. Furthermore, the attachment between the individuals involved has been found to support the development of the relationship through limiting the threat of dissolution (Seabright et al. 1992). Thus, the staffing policies can be seen affecting both the learning abilities as well as trust development.

Considering the organizing of the cooperation one of the most essential issues is to balance between the ease of knowledge transfer and the restrictions on the possibilities for opportunism (See Conner - Prahalad 1996; Hamel 1991). Trust is a complex issue as it is a pre-condition for transparency, but some initial level of trust is required for the relationship to begin. Consequently, the mutual characteristics and intents (finding long-term compatible goals) can be seen issues that enable the

[7] Original Source: Pettigrew, Andrew M. (1987) Introduction: Researching strategic change. In: *The Management of Strategic Change*, edited by: Andrew M. Pettigrew, 1-13. Basil Blackwell: Oxford.

development of the learning process. Thus, the level of mutual forbearance may need to exist in more concrete ways through the development of mutual hostages and support structures for the relationship. In knowledge transfer context the development of trust is essentially bound to the learning process and the way people are able to find a common understanding. It could be seen that investments and mutual hostages may provide a basis for trust development in the early stages of the relationship but they are not such an important issue for the continuity of the process. This is a valid point since the development of complete contracts is costly and the risks are especially high. This role of developing different basis of trust in knowledge transfer is also supported by the role of different types of switching costs. In a complex situation as knowledge transfer the costs for trusting in the beginning may be very high and thus trust established on higher termination costs in case of opportunistic behavior may be needed. This can also be used to reflect the commitment of the partner to the future of the relationship and mutual intents. Developing a relationship may be a time-consuming process and it should be seen as an evolutionary process (See Doz 1996). Thus, developing mutual hostages may serve as a basis for lowering the possibility of opportunism, but developing trust in the parties' abilities and the future of the relationship can be seen more related to the interaction processes, relationship outcomes and the mutual characteristics and intents of the partners. Thus, the role of trust concentrates also more on the support for the communication and learning. Besides that, the role of strategic, learning and switching costs of both partners will rise as the relationship as well as the level of transparency and interaction develops further. Furthermore, also the uncertainty will become lower as partners learn to understand the essence of each other's resources – thus the role of trust can be viewed as dynamic along the relationship development.

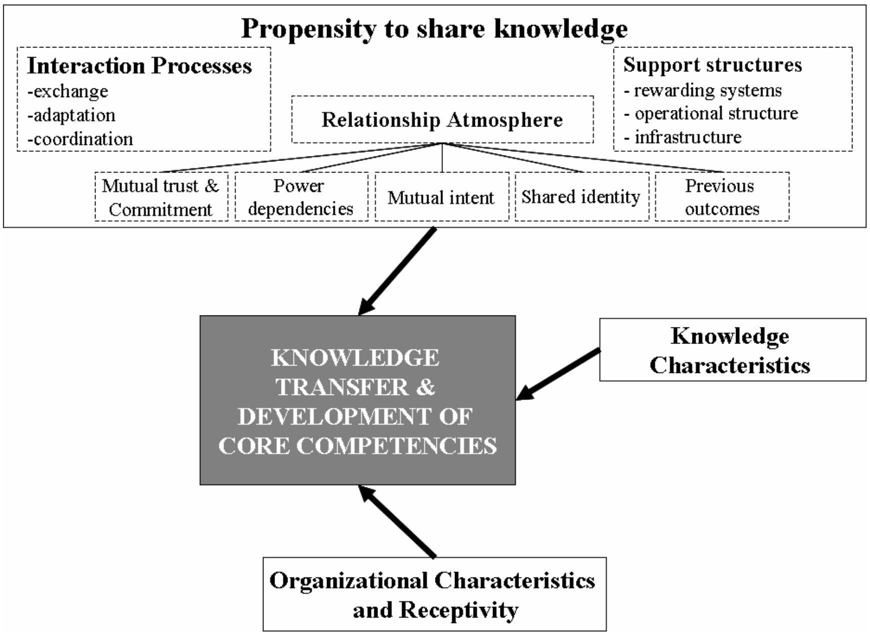

Figure 4: Factors affecting the inter-organizational knowledge transfer

The mutual intent on the other hand, will serve an important purpose in the management of the learning efforts as well as the relationship context. Mutual intents can support the development of trust and commitment as it can support the development of a mutual vision of the future outcomes. As strong shared identity and trust are required for developing a mutual understanding, they may also become restrictive to the innovative learning efforts as they support the existing ways of thinking. However, as the companies have strong intents regarding the learning process, as well as supportive rewarding systems, companies may be better able to direct the flow of interaction and efforts.

Taking a more network perspective it is essential to understand the nature of interorganisational knowledge transfer and the companies' learning abilities. Being actively involved in similar kinds of partnerships can help companies in building their alliance capability which supports the organization's ability to manage its partnerships better (Draulans et al. 2003). Also, cooperating with more partners may help in the development of shared identity and organizational receptivity as the company gains experience from similar situations. One could suggest that just as trust has an essentially iterative nature, also alliance capabilities can be developed through experience. However, a company's absorptive capacity can be seen strongly relationship specific due to the tacit and complex nature of the social processes, but experience may help in developing new capacities in other relationships. Moreover, due to the social nature of developing shared identity, this is also very much up to the personnel selections for the projects. This can, however, be further supported, as prior experience in business relationships and in inter-organizational learning seems to support companies' possibilities in knowledge transfer (Cummings - Teng 2003). At best, together with the relationship specific investments and developed interaction, the set of tacit and difficult to imitate social ties and shared identity as a basis for interpretation may even be developed into an asset yielding competitive advantage (Child 2001b; Dyer - Singh 1998; Fiol 2001). Other relationships may be able to benefit from some of the results of the partnership, but it would be very difficult to copy the absorptive capacity of the partners and their shared social identity and capability in order to develop shared understanding (See Dyer – Singh 1998). On the other hand, the relationship specific absorptive capacity could be also seen to form a learning barrier if it becomes formalized and cannot be re-created for new knowledge transfer contexts. Following this, although it may be argued that a variety of partners will mean more diverse knowledge base, it will also mean that sharing knowledge with new partners will become increasingly challenging as finding a shared identity basis for interpretation will become more complex which emphasizes the need to manage and coordinate the company's partnerships. This is also true from the viewpoint that each relationship will affect the partners' network identity and consequently their ability to establish trust in future relationships.

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