

Tarja Niemelä

Inter-Firm Co-operation Capability

A Processual Empirical Study on
Networking Family Firms

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JYVÄSKYLÄ 2003

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TO JUHO

ABSTRACT

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Finnish Summary

Diss.

This study examines inter-firm co-operation capability both conceptually and empirically. The central questions to be examined in this study are as follows: 1) What is inter-firm co-operation capability?, 2) How can it be described by using the concepts of networking and inter-firm co-operation?, 3) What has been the role of learning, trust and commitment in the inter-firm co-operation and networking process?

The conceptual analysis rests mainly on the theories of interorganisational studies (network approach) and education. The multiplicity and heterogeneity of the phenomenon led quickly to the conclusion that no one-dimensional approach alone would be adequate to describe the inter-firm co-operation capability in the context of networking family firms.

Accordingly, inter-firm co-operation is defined, in the context of networking family firms, as consisting of the following capabilities: Social 'Networking' Capability, Management Capability, and Learning Capability. At the empirical level, the role of learning contributes to knowledge creation, the role of trust contributes to value creation, and the role of commitment contributes to trust creation of the networking process of family firms.

The empirical results of the study suggest that inter-firm co-operation is a simultaneous learning process for the owner-managers, as well as for the networking family firms. This, if any, is a result of the developmental process of inter-firm co-operation capability, and has an influence on the competitiveness of the whole network. Furthermore, the values, attitudes, and beliefs of the owner-managers reflect their family business culture, and the culture of each family firm influences the development and quality of inter-firm co-operation capability. The conclusion of this processual empirical study is that both inter-firm co-operation capability and family business culture are the main contributors to the competitiveness of the family firm network.

The phenomenon of inter-firm co-operation capability is studied here in the context of family business. Family business takes into account the interests of both family and business. When the complex system and its operating environment are taken into account, owner-managers of the family firms have the key role in creating and establishing network relationships. Both the conceptual and empirical discussion should be limited to the family business context only, and therefore, any generalisations should be made very cautiously outside of this context.

Keywords: capability, competitiveness, co-operation, family business, family business culture, learning, networking

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Seinäjoki, January 2003

Tarja Niemelä

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1 INTRODUCTION

1.1 The Aims and Rationale of the Study

Inter-firm co-operation capability has not been a widely studied phenomenon in the family business context. In spite of the current interest in organisational resources and capabilities being part of maintaining competitive advantage in the marketplace, there is still little information about how capabilities are actually created, and how individual and firm specific resources are combined. Thus, a number of conceptual and empirical studies have focused on describing the core competencies, capacities, abilities of both individuals and organisations in the SME context, but more integrative and comprehensive understanding is needed in the family business context.

The importance of networks, networking and inter-firm co-operation has clearly been demonstrated by several authors in inter-organisational studies during the last decade. Previous studies of networking and inter-firm co-operation have of late focused on the formation of co-operation, the governance structure of the net or alliances, the performance (outcomes) of networking and co-operation, the prerequisites and conditions for entering co-operative ventures, learning, and the developmental and evolutionary stages of co-operation, to mention but a few. (Chaston 1995; Gulati & Khanna 1994; Gulati 1995a, 1995b, 1998; Aldrich & Reese 1993; Szarka 1990; Hamel 1991; Doz & Schuen 1995; Provan & Human 1999; Murto-Koivisto & Vesalainen 1995; Hovi 1995; Maskell & Malmberg 1995; Ring & Van de Ven 1992, 1994; Varamäki 1996, 1997, 2001; Lazerson 1995; Harrison 1993; Axelsson & Easton 1992; Håkansson 1989; Håkansson & Johansson 1993; Bronder & Britzl 1992; Dei Ottati 1994; Jarillo 1988; Varamäki & Pihkala 1997; Yli-Renko 1999; Lorenzoni & Lipparini 1999.)

The industrial districts and regional development, such as branch agglomerations and industrial milieux in many countries (e.g., Italy, USA, Canada, Germany, Denmark, Sweden, Finland) are revealed in many studies to

pinpoint the importance of the co-ordination of complementary activities and resources, and co-operation. The nature of groups and networks, and the role of culture and local institutions in the development of entrepreneurship and industrial districts, as well as the local dimension of entrepreneurial vitality, technological behaviour and flexible specialisation are highlighted by several authors (see e.g., Balloni & Iacobucci 1996; Dei Ottati 1994; Bamford 1987; Sweeney 1991; Triglia 1992; Pyke & Sengenberger 1992; Niemelä & Leimu 1995; Kankaanpää & Leimu 1982; Havusela 1999, 2001; Johannisson & Ramirez-Pasillas 2001). Some of the studies demonstrate how social, historical and cultural factors influence the small firm sector's capacity to grow (Bamford 1992; Johannisson 1984), and the new forms of inter-firm co-operation enabling districts or milieux to maintain their principal features while ensuring their ongoing development. Small and medium sized family firms overwhelmingly predominate in some cases, and no single organisational model may prevail for networking or inter-firm co-operation in the context of family firms (see e.g., Zeitlin 1992).

During the last decade, inter-firm co-operation and its varied forms of networking have also appeared in the Finnish SME sector (see e.g., Pihkala 2001; Varamäki 2001; Hyötyläinen 2000; Leimu & Pusila 1995; Niemelä & Leimu 1995; Malinen 1998; Ollus, Ranta & Ylä-Anttila 1998; Hovi 1995; Vesalainen & Murto-Koivisto 1994). Many co-operative groups have arisen, based on their own joint projects or as a result of some network promoter intervention, hired by the firms themselves or the public authorities. It has also been noticed on the basis of previous studies on networks, networking and inter-firm co-operation that, most often, the positive outcomes of networking and inter-firm co-operation are anchored in the commitment and trust among the partners in co-operative forms. The lack of knowledge of preconditions and awareness of different models of co-operative ventures have been the most cited "gaps" and obstacles in starting or establishing co-operation. (see e.g., Vesalainen & Murto-Koivisto 1994; Varamäki 2001.)

Inter-firm co-operation capability, especially in the context of networking family firms, has so far not been adequately modelled or studied as a phenomenon in previous SME networking literature. Earlier studies have focused more on describing and analysing the issues concerning SME co-operation - such as co-operation and competition, process gaps in developing networks and networking relationships, managing inter-firm co-operation and strategic alliances, identifying the structures and roles of social and economic relationships and exchange in networks, outcomes of networking, and learning in networks. (see e.g., Bronder & Britzl 1992; Uzzi 1997; Brusco 1982, 1986; Chaston 1995; Contractor & Lorange 1988; Dei Ottati 1994; Doz & Schuen 1995; Cook & Emerson 1984; Dyer & Singh 1998; Easton & Araujo 1992; Gibb 1993; Grandori 1999; Gulati 1995; Gulati & Khanna 1994; Harrison 1993; Johannisson 1987; Varamäki & Vesalainen 1996; Vesalainen & Strömmer 1999; Räsänen 1999; Lorenzoni & Lipparini 1999; Wilkinson, Mattsson & Easton 2000; Ring & Van de Ven 1992; Van de Ven 1992; Szarka 1990.)

Inter-organisational relationships are typically interdisciplinary research objects. They have been studied, at the very least, in the fields of economics, sociology, psychology, business administration and political economy. Sociological and psychological based studies highlight the significance of people, whereas the tradition of economics highlights the significance of transaction. (e.g., Malinen 1998; Cook & Emerson 1984; Aldrich & Whetten 1981; Paasche, Pettersen & Solem 1993.) Also, the units of analysis in previous studies have varied from an individual person to a firm, to dyadic relationships, to a group or a net, and to a network or regional industry (see e.g., Tikkanen 1996; Malinen 1998; Hovi 1995). Horizontal and lateral relationships have received much less attention than vertical business relationships (Varamäki 2001; Provan & Human 1999; Hovi 1995). Also the 'diagonal' alliances between companies in different unrelated industries are discussed (Nooteboom 1999; Ali-Yrkkö 2001; Sorensen 1999) as well as the need for cospecialization, identifying and enhancing precompetitive advantages, and 'market making' (Ali-Yrkkö 2001; Doz & Hamel 1999).

The discussion of entrepreneurs' characteristics and competencies has had an effect on how entrepreneurial capability has been explained. Some authors have made a distinction between resources and capabilities. Amit and Schoemaker (1993) pointed out that resources are convertible, externally available, and transferable and owned and controlled by the firm. The *relational capability* is based on the individual's (e.g., owner-manager) ability to interact with other companies, focusing on one's own core competencies, accelerating and enhancing the firms' knowledge access and transfer with relevant effects on company growth and innovativeness. (see e.g., Lorenzoni & Lipparini 1999; Hamel 1991.) *Entrepreneurial capabilities* can also be considered as social contracting (MacNeil 1980 cit. in Pihkala 2001, 13-14). An entrepreneur's ability to perform entrepreneurial acts is not a stable phenomenon, but depends on various personal and contextual contingencies. Thus, entrepreneurial capability can be defined as the personal abilities and relationships that can be used to cope with the changing environment.

Recent family business research has extended the work on *dynamic capabilities* by suggesting a direct relationship between values-culture and performance-competition (Salvato, Williams & Habbershon 2002, 59). In particular, Salvato et al. (2002, 59-64) have built a grounded model of the cultural determinants of dynamic capabilities in family firms in order to illustrate and investigate the value- and social-capital related antecedents of dynamic capabilities. Also Steier & Reay (2002, 372, 384-385) have pointed out the importance of values and knowledge transfer from one generation to the next as a set of capabilities created in the early stages of business. It has also been noted, that internationalization via strategic alliances in family businesses requires management capabilities in a context where objectives are not shared, the development of personal preferences must be toward the use of the alliances, and also the development of trust is essential in the partner organisation. (Gallo et al. 2002, 142.)

In interaction of firms, the firms must be able to analyse and describe themselves in terms of the counterparts which they have the capability to satisfy (Ford, Håkansson & Johanson 1986, 31-38). In an industrial network, this capability is associated with various type resources (Håkansson 1989, 16). *Capability theories* (e.g., Penrose 1995 [1959]) take a different view of the firm's capabilities, i.e., various types of economic organisation are understood in terms of their function as a repository of knowledge and a seedbed of learning (Conner & Prahalad 1996 cit. in Sautet 2000, 90; see also Teece, Pisano & Shuen 1997, 510; Eisenhardt & Martin 2000, 1108). The firm is able to co-ordinate collective learning and adapt to unforeseen changes in a more effective way than markets (Foss 1996c cit. in Sautet 2000). In this light, tacit and social knowledge are fundamental keys to the understanding of the firm. The firm's capabilities are employed to solve problems and learn from these solutions. In this perspective, a firm can be seen as a seedbed of knowledge in which individuals and teams learn and improve the routines of the firm. It has also been noted that in a complex firm, discoveries of new profit opportunities add to the experience of individuals and make capabilities grow over time (Sautet 2000, 106).

This study will begin by outlining inter-firm co-operation capability in the context of networking family firms. The primary purpose of this research is to deepen our understanding of inter-firm co-operation capability in the context of networking family firms. To achieve the objectives of the study, analysis on both a theoretical and empirical level is required. At the theoretical level, the conceptual analysis rests mainly on the theories of interorganisational studies (network approach) and education. At the empirical level the analysis rests on the single case study of the networking process of family firms. As a whole the aim is to set up a framework and revise the conceptualisation of the inter-firm co-operation capability in the context of networking family firms. The central questions to be examined in this study are as follows:

- a) What is inter-firm co-operation capability?
- b) How can it be described by using the concepts of networking and inter-firm co-operation?, and
- c) What has been the role of learning, trust and commitment in the networking process of family firms?

This begs the question: why study inter-firm co-operation capability in the context of family firms? The main focus of the conceptual analysis is the owner-manager of the family firm. In this light, the recent studies - e.g., in entrepreneurship education have clearly pointed out the crucial role of the entrepreneur and his/her abilities and resources, as having an influence on entrepreneurial behaviour and the success of a firm or organisation. (see e.g., Gibb 1992, 1993, 1999; Snow, Corno & Jackson 1996; Ruohotie & Koiranen 2000; Kyrö & Suojanen 1999.) But it is also worth noting that family firms have a major impact on the growth of economies - as producers, employers, and innovators (Neubauer & Lank 1998). In Europe, family firms dominate the field as regards small and medium-sized firms, and constitute a majority of larger

firms in some countries (Donckels & Fröhlich 1991; Lank 1995; Gersick & Davis et al. 1997). The most commonly cited figures claim that family businesses represent 90-98 % of all US businesses, and that they generate 40-60% of the GDP (Shanker & Astrachan 1996). In the UK, many researches conclude that family firms are significant and play an important role in the UK economy (Dunn 1995). In Finland family firms play a significant role in relation to the nation's GDP. Nearly 50 % of Finnish jobs are provided by family businesses, and their share of the GNP is estimated to be nearly 40 per cent. (Koiranen 1998, 2000.)

It has also been stated that family businesses in Europe seem to have a need for fewer socio-economic networks, less co-operation with other firms, less subcontracting, and less collaboration with other firm's production than non-family firms. The main reason for this has been considered to be the owner-manager's less pioneering profile. (Donckels & Fröhlich 1991.) It can be concluded, on the basis of recent studies, that processual and longitudinal studies are more highly recommended than cross-sectional studies (see e.g., Doz & Schuen 1995; Grandori 1999; Dyer & Singh 1998; Niemelä & Koiranen 2002). In the present study, inter-firm co-operation capability covers processually both individual and firm specific capabilities in the context of family firms and their operational environment.

1.2 Preliminary Definitions

In this section, the main concepts used in this study will be defined briefly. It is worth mentioning that these definitions and concepts will be looked at in more depth in the progress of this study. In this section, preliminary definitions of 'inter-firm co-operation', 'capability' and a 'family firm' are mainly described in their linguistic or even etymological meaning and discussed in the context of a firm. Some notes on the definitions of co-operation, networking, networks and family firm are given a closer look by other authors as well. From a methodological point of view some notes on definitions of abductive reasoning are briefly introduced, and are discussed more deeply in chapter 6 .

A network is 1) a structure of criss-crossing wires secured at the intersections, e.g., by nodes. It is 2) any system of interconnecting *horizontal and vertical lines*, it is 3) a system of interconnections like interconnected railways, roads or 4) a group of broadcasting stations. In electricity, e.g., a network is 5) an arrangement of connected electrical conductors, however, in computer science it is 6) a set of interconnected computers and/or terminals. *Diagonal lines* refer to 1) joining nonadjacent angles of a polygon or polyhedron, 2) running in an oblique direction from a reference line (e.g., the vertical). In the context of inter-firm alliances, '*diagonal alliances*' mean companies which are multi-faced and have elements of more than one industry (see Ali-Yrkkö 2001, 12).

To network (*networking*) as a transitive verb means "to link up so as to interact with something or somebody". To network, as an intransitive verb, means to create useful contacts for oneself by interacting with others. In a more pragmatic sense this being the synthesis for a firm context it means that firms make contacts that are useful to them. "the network of firms, means a structure, system, group or arrangement of enterprises connecting and interacting with each other." Through networking, firms aim at creating useful links and contacts for themselves by interacting with others.

Hägg and Johansson (1983) have studied networks - defining a net formed by local actors as co-operation, which can be considered as a net of mutually supplementary resources and strengths as a part of a larger network unit. In this sense, nets can be considered to have the tendency to build up vertically and horizontally, which means that the actors do not necessarily interact. In other words, a net is a co-operative group, the member firms of which have a common interest and, thus, together seek some means of achieving a higher level of performance by using a multilateral group design (see e.g., Varamäki 2001).

Co-operation is rather a general term in our language. It can be described in many ways, depending on its context. To co-operate means to act with another person for a common (shared) purpose. 'Co-operation' means two different things. It is 1) the act of working together for a shared purpose, or 2) the willingness to work together (for a shared purpose). The latter meaning can be illustrated, for example, with the sentence: "I need your co-operation in this matter". A synthesis of the term co-operation in a firm context can be constructed and illustrated, for example, in the following way: "Co-operation of firms means 1) the act of companies working together for a shared purpose, this being based on 2) their willingness to work together" (see e.g., BBC, English Dictionary 1992; Oxford Dictionary for International Business, 1998).

To sum up: co-operation is a combination of required attributes and inclinations (such as knowledge, skills, power, openness and willingness) to work and act together for a shared purpose. This kind of co-operation usually takes the form of a network, in other words, a structure or other arrangement where the firms are grouped, connected and in interaction with each other. Varamäki (2001) has pointed out that firms do not necessarily have "a shared purpose" in their co-operation; on the contrary, the partners can utilise the co-operative goals in different ways (Varamäki 2001). Quite similarly Sorensen (1999, 2) has pointed out that the partners of a strategic alliance (e.g., inter-firm alliance) need not have common goals. They may have different goals, but what is important is that all the partners know these goals, and have agreed that the different goals can be fulfilled within one and the same strategic alliance.

Andersson (1979, 10) has defined co-operation as follows:

"Co-operation is a voluntary and usually long-term agreement between two or more quite independent enterprises. The agreement aims at improving the results of the enterprise. This is to be done by investing resources and personal engagement in a joint project. The enterprises share decision-making, responsibility, implementation, results and risk-taking in

connection with projects. In every other respect they remain quite independent." (Andersson 1979, 10.)

A brief, more accurate glimpse into the meaning of the word inter: 1) "*between, among* 2) *intercontinental* 3) *mutually, reciprocally as 'interbreed'* 4) *something is moving, existing, or happening between similar things or groups of people*".

As a synthesis from the above-given definitions, inter-firm co-operation is to be described as follows for the purposes of this study:

Inter-firm co-operation, i.e., the co-operation between firms, is based on the voluntary willingness to work and interact as a group or any other form or structure - as e.g., a network - for a shared purpose. This requires similar, mutual and reciprocal understanding of the visions and goals of the joint actions, and skills and knowledge of the firm or a group to work efficiently together and the 'realistic' idea of equality between the member firms in a group or in a network.

The word 'capable' also has several meanings: 1) having the ability (knowledge) of doing something, 2) having the power to do something (autonomy/independence), 3) being open to something, 4) being able to do something that requires a number of different skills. Capable can also mean 1) competent, able, gifted, 2) having ability, fitness or 3) admitting of explanation, improvement, as well as susceptible¹. Accordingly, capability means, "*having the required attributes or inclination to perform a specified deed or action, and it is based on human's ability, power, openness and skills*" (see e.g., BBC, English Dictionary 1992; Oxford Dictionary for International Business 1998; The Penguin English Dictionary 1985-1986).

Pihkala (2000, 14) has defined the entrepreneurial capability as a "*person's ability to capitalise emerging opportunities, relate to different aspects in the operating context, to activate these parts in the context to be used in the emerging project*". Chandler and Hanks (1994) have defined capability as the capacity for a co-ordinated set of resources to perform some task or opportunity, where the notion of capacity reflects the nature of capability as an ability to use skills, competencies and resources in action. (see Pihkala 2000.)

In a synthesis, to an *individual or to a group* one can see that 'capability' covers both the skill- and the will-factor, as well as openness and empowerment.

A family can be seen as a group of people, consisting of two or more individuals that define themselves as a family unit and feel responsibility and obligations towards each other (Vosler 1996). According to Vosler (1988), the members of the family do not have to live in the same household. (Vosler 1996 cit. in Koiranen 2000.) The definition of family can be stated as follows: Family is a 1) a set of relations, especially parents and their children, 2) members of a household, a person's children, 3) all descendants of a common ancestor, 4) a

¹ Referring to The Penguin English Dictionary (1985-1986) the word susceptible means various issues as follows: 1) capable of submitting to an action, process, or operation, 2) open, subject, or unresistant to some stimulus, influence, or agency, 3) easily moved or emotionally affected, impressionable (see pages 118, 841).

group of similar objects, people etc., and/or 5) a group of related genera of animals or plants.

One very wide and applicable definition of a family business is introduced by Astrachan, Klein and Smyrniotis (2002, 45-58). The authors suggest a proposal for solving the family business definition problem by considering the F-PEC Scale of family influence. The model consists of a power subscale, experience subscale and culture subscale. Based on the definition given above, a family firm is defined by adapting the definition of F-PEC Scale, combining the dimensions of power (ownership), experience (succession for the next generation), and the cultural (influence of the cultural bedrock of family and business values) on the networking family firms. The adapted and redefined family firm definition will be discussed and illustrated in chapter 4, and applied in the case description in chapter 7.

Furthermore, the verb *abduct* and the word *abduction* have several meanings: as a verb it means 1) carry off or kidnap illegally, 2) to carry off secretly or by force, 3) abduction means that e.g., "*detectives are questioning a woman about the child's abduction*" (see BBC, English Dictionary 1992). Dubois and Gadde (2002, 553-555) refer to Pierce (1931) and Kirkeby (1994) defining abduction as follows: "*abduction is about investigating the relationship between 'everyday language and concepts', which is obviously similar to induction*". The logic of abduction follows another line that makes it useful for this study. In this processual empirical study on networking family firms, the abductive case research can be highlighted as a systematic combining process between theories, framework(s), the empirical world and single case study (i.e., network of family firms) that is discussed more deeply in chapter 6.

1.3 Research Setting

In the first phase of this thesis (conceptual study) the theoretical frame of reference and the set-up for the empirical investigation were constructed. As a result of the conceptual study, the multiplicity and heterogeneity of the phenomenon led quickly to the conclusion that no one-dimensional approach alone would be adequate to describe the inter-firm co-operation capability in the context of networking family firms (Niemelä 2002, 83).

The conceptual study has suggested that inter-firm co-operation capability consists of three concepts, such as learning, trust and commitment in the context of networking family firms. From the viewpoint of education, the concept of learning covers all the dimensions of affective, conative and cognitive constructs. From the viewpoint of a network approach, the trust and commitment define and describe the inter-firm co-operation in the context of networking family firms. (Niemelä 2002). Empirically, the study sets out to investigate the role of learning, trust and commitment in the inter-firm co-operation and networking process.

The specified conceptual research questions have been formulated at the theoretical level as follows:

How to define and conceptualise inter-firm co-operation capability in the light of the earlier literature of networking and inter-firm co-operation?

1. How do the individual taxonomies of affective, conative and cognitive constructs define and describe the networking and inter-firm co-operation capability in the context of networking family firms?
2. Are the chosen theories and methodology applicable and sufficient to describe inter-firm co-operation capability in the family business context ?

The main empirical research question has been formulated as follows:

What has been the role of learning, trust and commitment in the inter-firm co-operation and networking process?

To get a sufficient description of the case firms, and the development of networking, the following sub-questions and themes are discussed.

- What kind of knowledge and skills have been essential in the inter-firm co-operation?
- What issues have `pushed` and `pulled` family firms to inter-firm co-operation?
- What issues have promoted and advanced the inter-firm co-operation of family firms?
- What issues have strengthened and weakened the inter-firm co-operation of family firms?
- What issues have contributed to (helped in) utilising the networking and co-operation in the progress of the inter-firm co-operation?
- What issues have restrained the utilisation of inter-firm co-operation of family firms?
- How are the values, attitudes and beliefs of the owner-managers associated with the inter-firm co-operation ?

The research design for the study is introduced in Figure 1.

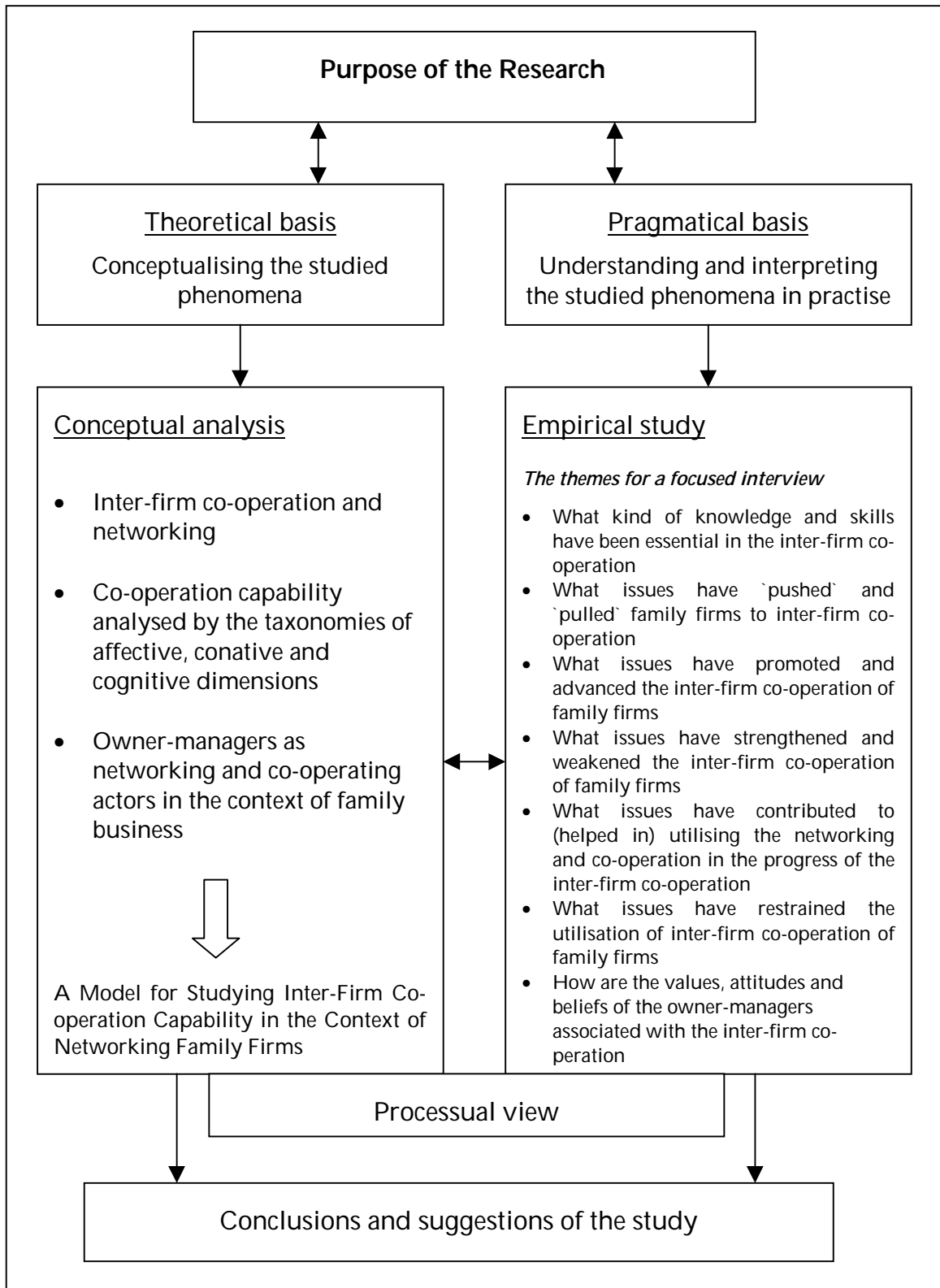


FIGURE 1 The Research Design of the Study

The approach of the empirical study is processual in order to understand and interpret the development of networking and inter-firm co-operation. Figure 2 introduces the set up for the empirical study and the elements of the theoretical frame of reference and their connectedness with the empirical part of the study. The chapters pinpointing the theoretical frame of reference have been printed in boldface. The numbers in the brackets refer to the chapters of the study.

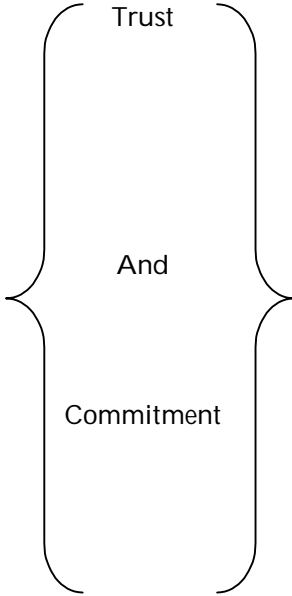
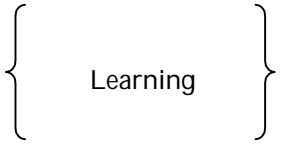
	Literature Review	A Model of Inter-Firm Co-operation Capability	Empirical Study
Phenomenon of the Study	Conceptual Analysis	Key Concepts of the Study	What has been the Role of Learning, Trust and Commitment in a Networking Process of Family Firms
	Inter-Firm Co-operation and Networking (chapter 2)		<ul style="list-style-type: none"> • What issues have 'pushed' and 'pulled' family firms to inter-firm co-operation • What issues have promoted and advanced the inter-firm co-operation of family firms • What issues have strengthened and weakened the inter-firm co-operation of family firms • What issues have contributed to (helped in) utilising the networking and co-operation in the progress of the inter-firm co-operation • What issues have restrained the utilisation of inter-firm co-operation of family firms
Context of the Study	Co-operation capability analysed by the taxonomies of affective, conative and cognitive dimensions (chapter 3)		<ul style="list-style-type: none"> • What kind of knowledge and skills have been essential in the inter-firm co-operation
	Owner-managers as networking and co-operating actors in the context of family business (chapter 4)	Owner-managers of the family firms	<ul style="list-style-type: none"> • How are the values, attitudes and beliefs of the owner-managers associated with the inter-firm co-operation

FIGURE 2 The Set up for the Study

This research process has followed an abductive logic (reasoning) (cf. Dubois & Gadde 2002; Grönfors 1982; Alvesson & Skoldberg 2000) which means that multiple theories and approaches have been studied in parallel with the former empirical findings to develop new models and classifications. All these elements have been in frequent interaction and constant movement, and they have followed the idea of 'systematic combining' (see Dubois & Gadde 2002) that there are interactive, overlapping and interplaying processes between data collection, data analysis, and theoretical framework building and empirical reality. Figure 3 is an illustration of the research process based on the abductive logic applied in this study.

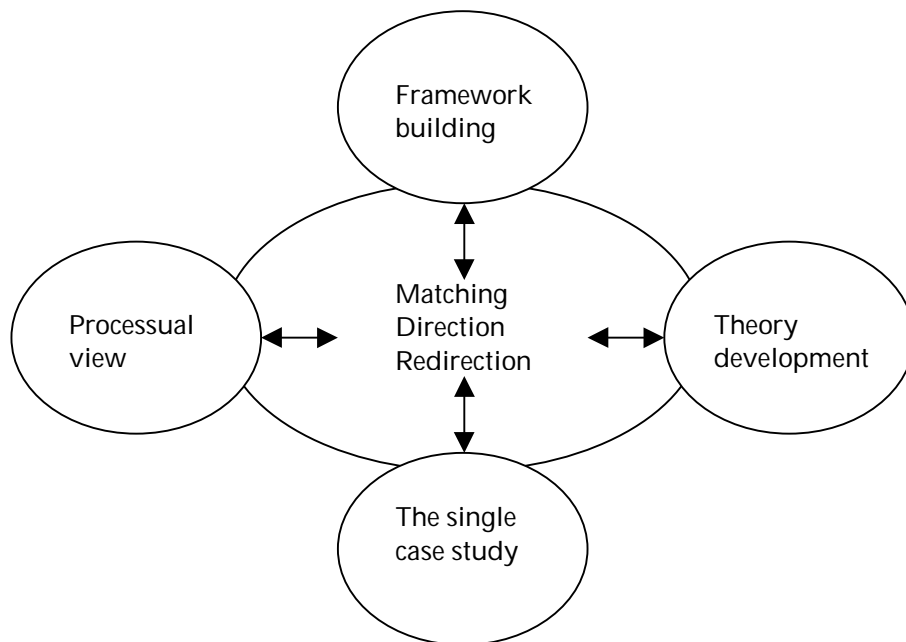


FIGURE 3 Abductive Logic Applied to This Study (adapted from Dubois & Gadde 2002)

In processual case studies the real creative process of research takes place in a constantly iterating cycle of deduction and induction (see Pettigrew 1997; cf. Coffey & Atkinson 1996; Strauss & Corbin 1991). In this iterative process of research, where the researcher is constantly going back and forth between one type of research activity to another, the preliminary analytical framework will be affected by what is discovered during the data generation and interpretation (see e.g., Dubois & Gadde 2002). Data analysis might identify new issues that must be covered in interviews. According to Gadde and Dubois (2002) there is no need to review all of the literature beforehand and usually the researcher is not even able to identify all the relevant literature since the empirical fieldwork parallels the theoretical conceptualisations. However, it is important to enter into research settings with some theoretical background (Strauss & Corbin 1991). The abductive logic applied here is discussed in more detail in chapter 6.

1.4 Theoretical Positioning of the Study

The importance of networking and inter-firm co-operation has been highlighted by the research on the inter-organisational studies. The inter-organisational studies, and especially the network approach, are closely related and partly overlapping with the sciences of entrepreneurship, marketing, social psychology, education, strategic management, sociology and regional studies (see Figure 4). This study as a whole participates in the discussion of individual capabilities and firm specific capabilities in the context of networking family business. From this viewpoint, both the phenomena of networking and inter-firm co-operation and the context of the study provide a good basis for the study.

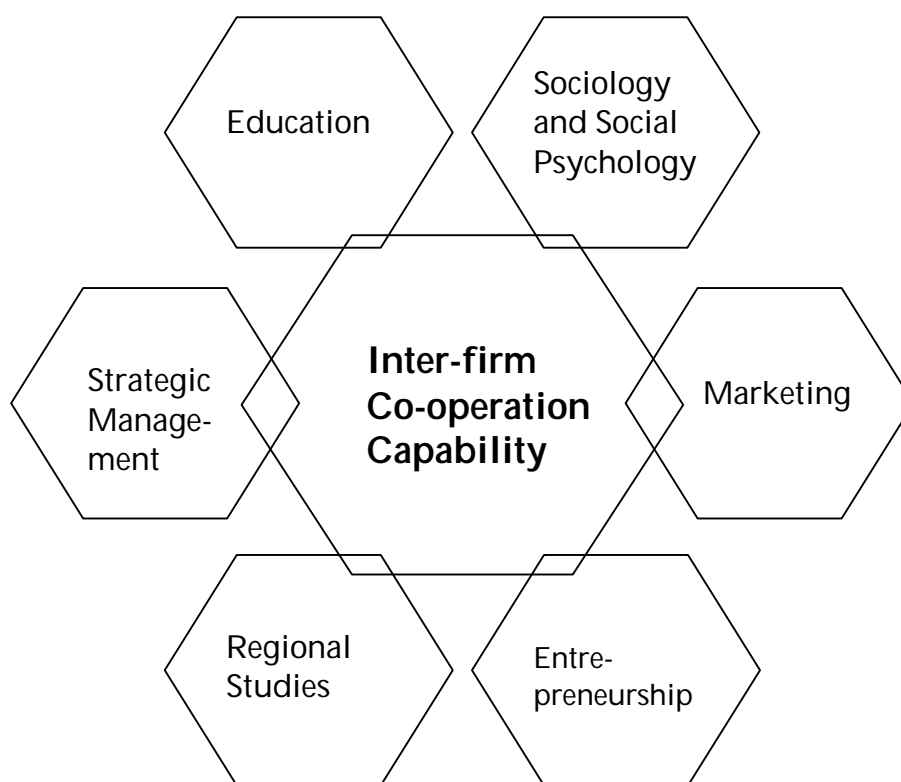


FIGURE 4 Sciences Closely Related to the Study

Entrepreneurship is seen as a special way of thinking and acting, and as a work-related attitude (Peltonen & Koiranen 1995). In addition, the research of social-psychology and sociology identifies the importance of human behaviour and relationships in the process of networking and co-operation. Applying educational thinking to entrepreneurship, Ruohotie and Koiranen (2000), Peltonen and Ruohotie (1992) and Gibb (1993, 1995, 1999) have pointed out the importance of the personal learning abilities in the context of entrepreneurial venturing and entrepreneurship education.

The structure and the processual (as well as evolutionary) development of the networks is the result of the strategic nature of management between the partner firms (see e.g., Jarillo 1990; Thorelli 1986). However, strategic management theory has not been suitable to describe the networking and inter-firm co-operation for several reasons. The theory mainly focuses on large firms, and it does not sufficiently take into account the fact that the owner-managers' visions, desires (motivation) and ambitions or personal commitment to the objectives are influencing the strategy. At the strategic level, owner-managers have to cope with the changes of the market, and learn to use their resources and capabilities and to concentrate on their own and joint core competencies in order to enhance the added-value and sustain their competitiveness in the marketplace (see also Varamäki 2001).

As a research paradigm network thinking is fairly young. The researchers endeavour to understand the complex relationships among enterprises mainly through deep-probing descriptions of networks. Taking the context and the time into account is a very typical feature of this approach. Individual occurrences and factors that determine them can not be understood without some knowledge of their context. The configuration, therefore, provides good and ample opportunities for methodological research options. However, the paradigm is rather cohesive and there are many shared assumptions between the different views and perspectives.

The Scandinavian concern for the non-economic aspects of business relations partially reflects a European research tradition, where societal conditions are regarded as important in economic analysis. Scandinavia has many things in common with Northern Italy, where small firms dominate. The level of trust is argued to be one of the explanatory factors in the development of firms in Italy. From this point of view, the network as a structure that creates more benefits for the contributing actors than do individual contributions is realised in societies dominated by a certain level of solidarity. It is not surprising that Scandinavian network research more often than not reflects community and regional development than, for example, individual management strategies. (Johannisson & Monsted 1997.)

The network approach is closely connected with IMP-Group's work (The Industrial Marketing and Purchasing Group's research) (Axelsson & Easton 1992; Håkansson & Snehota 1995; Håkansson & Johansson 1992). It is concerned with understanding the totality of the relationships in an industrial system. The theoretical background of the network approach is primarily formed by inter-organisational resource dependence theory, systems theory and the theory of social exchange (Möller 1993). The aims of the network approach are descriptive, not explanatory. The researchers propose that the relationships between enterprises can be understood from the standpoint of the individual enterprise and from a holistic standpoint of the network.

The industrial network approach shares with other approaches a belief that the existence of relationships, many of them durable and stable among firms engaged in economic exchanges provides a compelling reason for using inter-organisational relationships as a research perspective. Business

relationships and networks have been the object of many studies in Europe (e.g., Axelsson & Easton 1992; Gadde & Håkansson 1994; Johannisson 1987, 1988; Andersson & Håkansson & Johanson 1994; Lorenzoni & Ornatì 1988; Ford 1980; 1997; Andersson & Narus 1990; Easton 1992; Vesalainen & Murto-Koivisto 1994; Raatikainen 1992; Tikkanen 1996; Alajoutsijärvi 1996) as well as reasons and objectives *behind co-operation and networking*, which have been widely dealt within research of networks (Tjoswold & Weicker 1993; Bronder & Pritzl 1992; Gulati 1998; Chaston 1995; Lazerson 1995; Contractor & Lorange 1988; Varamäki 2001). Networks are also seen as something between markets and hierarchies (Williamson 1975; Thorelli 1986) and modes of organising economic activity (Jarillo 1988).

The concept of inter-firm co-operation capability requires closer scrutiny. The aim towards a more holistic view of inter-firm co-operation capability might be achieved by combining not only inter-organisational and network approaches, but also educational models in the context of networking family firms (Figure 5). It is difficult to narrow down the chosen theoretical approaches or models, because the purpose of the study is to analyse phenomena in as multidimensional way as possible.

In this study, the phenomenon of inter-firm co-operation capability combines both the individual, as well as organisational (firm and network) levels of analysis, with the main emphasis lying on the individual level² (see Figure 5). This approach of the analysis will benefit the empirical investigation. Multilevel and interdependent analyses are based on the paradigmatic and methodological choices, and they might influence the validity of the study.

Figure 5 illustrates the descriptive summary of the chosen theories, models and approaches investigated in this study. The description of the network approach will be illustrated more specifically in section 2.2.

² Referring to Figure 5, based on the descriptive summary of theories, approaches and models studying inter-firm co-operation in the context of networking family firms, the individual and organisational (firm and network) levels are combined and described together. In Figure 12, the emphasis is only on the individual level (owner-manager). It is also noteworthy that in Figure 13 individual and organisational (firm and network) levels are combined in order to set up a framework for the empirical investigation.

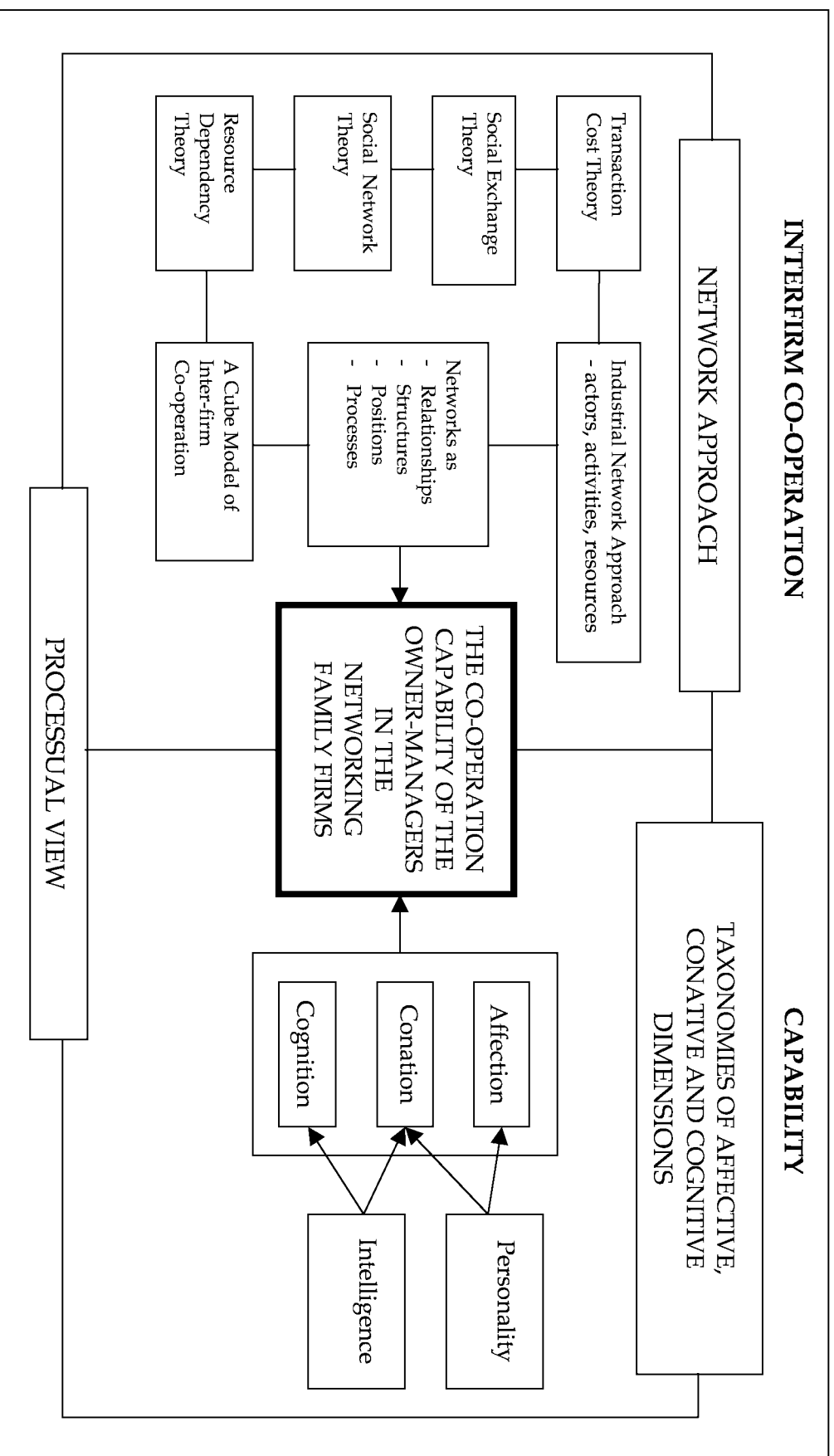


FIGURE 5 The Descriptive Summary of Theories, Approaches and Models Studying Inter-firm Co-operation in the Context of Networking Family Firms (see note 1, 25)

1.5 Limitations of the Study

Pettigrew has stated that processual research has its strengths and weaknesses, as well as its virtues and limitations (1997, 345-346). Presenting this thesis as a processual research, based on the conceptual and empirical study is not an easy task while there is so much to be memorized, retrospective, and time-bound data that the researcher has tried to capture in one monograph. However, this study has given support to the earlier studies (reports) based on the same phenomenon that were undertaken by the researcher herself and also to the other more seasoned researchers of the same field by focusing on the same sample of industry, partially the same case firms and their networks, and industrial district (region) as well. Although, this processual empirical study is anchored to one small portion of industry, the industry is not the issue to be discussed here. Thus, the chosen sample can also be seen as one limitation for collection and analysis of data.

One limitation of this study are the research objectives and research formulation. Theoretically, this study is limited to describing the meaning of inter-firm co-operation capability, conceptually. Empirically, the inter-firm co-operation capability is studied processually by anchoring the phenomenon in the family business context. The purpose of this research as a whole has been to obtain a deeper insight and understanding of both the individual and firm specific capabilities by developing a theoretical model and providing some practical implications based on the networking family firms studied. The networking process as well as the development of inter-firm co-operation is clearly a dynamic and processual phenomenon where many factors are connected, intertwined and playing important roles at the same time. It might be very difficult to separate different constructs, concepts or factors in order to build a comprehensive, somewhat 'ideal' theoretical frame of reference or model at the necessary level of abstraction or to know how it will fit the purpose of the empirical investigation. The multilevel analysis at the individual, firm and network level does not make the work any easier. In addition, these issues are studied in the context of the complex system of family business.

One limitation of this research might also be the method used and the cases chosen, as the case method, and focussed interviews as such do not allow any generalisation. However, as the inter-firm co-operation capability is not yet a widely studied phenomenon in the fields of network studies, or education in the family business context, the case method and processual view was perhaps the only possible, logical and justified way to collect and analyse the material. In order to study 'soft matters' such as trust, commitment and learning, that are very context dependent and culture specific issues, the case method, and abductive reasoning, and processual view fit best. In this thesis, all these concepts were studied combining the network and learning studies.

One very important limitation is the time perspective of the study. The driving assumption behind processual thinking and analysis is that social reality is not a stable state, but that it is a dynamic process. (Pettigrew 1997.) This study aims at and comprises a nine year processual perspective on the networking process of family firms. The purpose is only to describe, not explain. The unit of analysis are the owner-managers, and their experiences, that might both have a retrospective and real-time context in nature. In this light, 'bending the truth' is inevitable while attempting to describe a complex system of family business, multiplicity of phenomena and a networking process in a way that would be theoretically sound but also parsimonious enough.

Inter-firm co-operation as a phenomenon comprised many levels, i.e., individual, family firm and network levels. Thus, there also exists possibility to reduce the information from one level to another. The idea is to capture the phenomenon of inter-firm co-operation capability through the context of the study, that is, all the levels of phenomenon are to be analysed and interpreted via the *owner-managers* of the networking family firms by the researcher.

A lot of research concerning networking and inter-firm co-operation, as well as family business has already been done by using the major concepts dealt with in this conceptual part of the study (e.g., networks, networking and co-operation in general, entrepreneurship education, family business) but there is still need to clarify and integrate these phenomena, when studying inter-firm co-operation capability in the context of networking family firms. This study as a whole is limited to consisting of the inter-firm co-operation and learning by analysing both the owner-managers' and firm-specific capabilities. Therefore, the network approach is described by using multiple theories, models and approaches in order to define, describe and processually investigate the inter-firm co-operation in the context of networking family firms (see Figure 5).

1.6 Overview of the Study as a Process and the Structure of the Report

The study consists of nine chapters out of which the first five ones are rather conceptual. In the first chapter, *Introduction*, the background and the focus of the study and its objectives are presented. The research design outlines and shapes the framework for conducting the study.

In Chapter Two, *Descriptive Analysis of Inter-Firm Co-operation and Networking*, approaches and models of networking and inter-firm co-operation are conceptualised and redefined for the purpose of this study. First, the interdisciplinary and multidimensional background of the network research, related approaches, and definitions are laid out.

In Chapter Three, *Descriptive Analysis of Co-operation Capability*, the description and analysis of taxonomies describing affective, conative and

cognitive constructs are introduced and conceptualised, and an integrated model is presented.

Chapter Four, *A Closer Look at the Context of the Study: Owner-managers as Networking and Co-operating Actors*, introduces and characterises the family firms and their networking and co-operating capabilities in the light of the earlier network studies and family business.

Chapter Five, *The Integrated Model of Studying Inter-Firm Co-operation Capability in the Context of Networking Family Firms*, introduces the synthesis of the literature review (conceptual part) of the study, and constructs the theoretical frame of reference for the empirical investigation. The key concepts of the study are operationalised for the empirical qualitative analysis.

In Chapter Six, *Methodological Base*, the methodological choices and key interests at the paradigmatic level of the study will be presented. The research interest and the key choices of paradigm, methods and conceptual and empirical basis are discussed. Furthermore, the processual view on the networking process of family firms, and the validity and reliability of the study are discussed.

In Chapter Seven, *The Development of Inter-Firm Co-operation Capability in the Context of Networking Family Firms*, describes the empirical part of the study. The Setting introduces the main research question. The case descriptions are introduced, and the affective, conative and cognitive capabilities on a networking process of family firms are investigated, and findings presented.

In Chapter Eight, *The Inter-Firm Co-operation Capability: The Role of Learning, Trust and Commitment in the Inter-firm Co-operation and Networking Process* is described, and the empirical part of the study is synthesised. The Integrated Model of Inter-Firm Co-operation Capability is revised, and the inter-firm co-operation capability and networking process of family firms are highlighted paving the way for contextual issues of family business.

In Chapter Nine, *Discussion*, firstly, the main conclusions of the study are revisited. Secondly, the results of the study are reviewed in the light of prior research. Thirdly, critical assessment is presented, and suggestions for further research are introduced. Fourthly, practical and educational implications are discussed.

2 THE DESCRIPTIVE ANALYSIS OF INTER-FIRM CO-OPERATION AND NETWORKING

In this section, some of the central features of the network approach are described and analysed. The network approach is strongly based on the IMP group's model of Industrial Networks supported by the metaphors introduced by Easton (1992). To achieve a more holistic view of the inter-firm co-operation, approaches, perspectives and models – such as resource dependency, transaction cost theory, social network theory and social exchange theory and a cube model of inter-firm co-operation - are introduced in this study.

2.1 The Network Approach

Traditionally, the viewpoints are studied from two different angles: From *strategic management* (e.g., Jarillo 1988; Johansson & Mattsson 1987) and from *psychological and sociological* (e.g., Aldrich & Whetten 1981; Cook & Emerson 1984) viewpoints. The first viewpoint underlines the importance of transactions (Williamson 1975) and adaptation within and between the firms and the information, communication and resource dependence and interdependencies (Pfeffer & Salancik 1978) within these transactions, and the latter points out the importance of the prevailing social exchange of individuals (firms) in a network.

Theories of social exchange are primarily interested in explaining the association of network phenomena. According to Cook and Emerson (1984) ...*“the primary focus of social exchange theory is the explanation of the emergence of various forms of social structure, including networks and corporate groups...”* The concept provides an idea of indirect relationships where A may effect C through B because there are connected exchange relationships between all three parties.

Research of communication and social networks has been largely inductive in character. The unit of analysis is commonly the individual in a social context, and the network is defined in terms of patterns of communication or social interactions, occurring regularly between and among those individuals. This perspective gives an idea to look at the social, long-term relationships between the individuals in and between the firms.

Social network theory (Johannisson 1987, 1988) argues that an emerging network structure is loosely coupled (e.g., Weick 1979 cit. in Orton & Weick 1990), non-hierarchical, and open-ended. The entrepreneur's personal network is his/her most valuable asset. Johannisson (1988, 84) argues that the main social condition for action is commitment, supplied by the entrepreneur's personal network. The mutual commitment of the ties implies responsibilities. Commitment facilitates the rationalization of actions that have already taken place. According to Johannisson (1988, 84-85), in personal networks the ties are relationships of trust. There is an intuitively shared belief that both parties in the relationships will benefit in the long run. In addition to trust, commitment and friendship, values and beliefs are the central concepts of networking entrepreneurs and the culture in which they are enacted.

Resource dependency and transaction costs theories provide links and alternative perspectives to an industrial network approach. Resource dependence theory (Pfeffer & Salancik 1978) argues that organisations are externally constrained. According to Aldrich & Pfeffer (1976) "*...resource dependence argues for greater attention to internal organisational political decision-making processes and also for the perspective that organisations seek to manage or strategically adapt to their environments...*" (Aldrich & Pfeffer 1976, 76).

Organisations are not internally self-sufficient and they require resources from the environment, and thus become interdependent with those elements of the environment with which they transact. Organisations will respond more to the demands of those groups or organisations in the environment that control critical resources. Resource dependence describes the development of inter-organisational power and argues that this power affects the activities of organisations. (Pfeffer 1982, 192-193.)

Managers attempt to control their external dependencies both to ensure the survival of the organisation and to acquire more autonomy and freedom from external constraint. Managers try to cope with the companies' strategies with external constraints from resource interdependence. In other words, the basic assumption is that firms and organisations use relationships in order to gain access to resources which are vital to their survival and success. (Easton 1992, 5; Pfeffer & Salancik 1978, 45-46.) According to Pfeffer & Salancik 1978: "*the underlying premise of the external perspective on organisations is that organisational activities and outcomes are accounted for by the context in which the organisation is embedded...*". Firms access resources not only through suppliers and customers but also through, e.g., banks, shareholders, government, distributors etc. The resource dependence model brings to the study of industrial systems a vision of the multiplicity of relationships and the dominant role of resources in determining behaviour. The resource dependence

perspective differs from the industrial network perspective by concentrating on the actions of a single firm. (Easton 1982, 5.)

In general, two types of interdependence and their effects on organisational strategies have been considered:

1. competitive or co-operative interdependence, and
2. symbiotic interdependence, such as, e.g., between buyers and sellers of some product or service.

Inter-firm co-ordination can also be accomplished through the movement of executives across competitive firms within the same industry. The movement of personnel within an industry can form a set of understandings about the industry (Edström & Galbraith 1977 cit. in Pfeffer 1978, 198-199). The literature on commitment, selective attention and perception, and socialisation speaks for the effectiveness and background on information that is gathered and used, and the types of decisions that are made (Pfeffer 1982, 203). According to Pfeffer (1978) "*organisations are only loosely coupled with their environments, and ... power is one important variable intervening between environments and organisations.*" (Pfeffer & Salancik 1978, 229-230).

There is a presumption of competitive pressure to force efficiency on organisations. The resource dependence argues that the principal concern motivating integration is the attempt to reduce uncertainty, and that this uncertainty reduction will be pursued even at the expense of profits. Resource dependence is more concerned with the power and politics both within the firm and between the firms, so that the power maintenance and power acquisition is important. Structural autonomy and freedom from the external constraints and the ability to affect other firms motivate the various co-operative strategies, used by firms (Pfeffer 1982, 206). Fundamentally, resource dependence sees such inter-firm linkages as linking firms together to manage various kinds of interdependence, including transactions interdependence and financial interdependence (Pfeffer 1982, 206).

The comparison with Williamson's (1975) transaction cost theory indicates that both theories are operating largely at the level of an *individual firm*. The market failure perspective considering the small firm problem, is to be a critical element in explaining vertical integration and the resource control which also means many potential transaction partners to the firms. The primary difference between the transaction cost theory and resource dependence theory relies on assumptions about the motivation for the vertical integration. Transaction cost theory studies the structures of the transaction costs between enterprises (Williamson 1975, 1979). According to this theory, there are three different kinds of structure solutions: markets, which are determined by price; hierarchies, whose leadership is authorised, for instance, through ownership; and the hybrid structures between the two.

The ultimate task of the transaction cost theory (TCA) is to recognise and develop effective transaction structures. The optimal structures are formed through the joint effects of various contingency factors. The most typical

contingency factors of the TCA are the transactions and the properties of the markets, especially frequency, importance, complexity and uncertainty. The TCA offers a contingency model for exploring structures and control systems between enterprises which implement transactions. Since there are fairly few contingency factors in the TCA, it is relatively simple to use for causal explanations and even for predictions. The TCA perspective is objectivistic and deterministic. (Williamson 1975, 11-24.)

The theory has its own limitations, too. TCA does not clarify the ability of enterprises to cope with transaction costs, nor does it offer precise structural solutions. The theory does not take into account the processes in development in the relationships between enterprises, either. However, the weaknesses of the theory - which are hidden under the thinking in terms of economic efficiency - should be kept in mind. It is assumed that the relationships between enterprises are based on trust and the development of trust, which help enterprises to lower transaction costs as a defence against opportunistic behaviour (Johansson & Mattsson 1987; Andersson & Narus 1990).

The development of institutional economics, which gives transaction costs a major role in determining vertical market mechanisms, comes closest to addressing the same issues as the industrial network approach. It assumes that transactions between suppliers are not without friction and, that as a result, costs arise which are dependent on the particular nature of the transactions. These costs, in turn, help determine which organisational form, vertical firms, seek to minimise costs. (Easton 1992, 7.)

Empirical observation of alliances over time, and of the behaviour of the partners towards making their relationships efficient, has also shown the limits of the transactions cost paradigm in explaining the behaviour of the partner. This can be seen in particular when changes occur in alliance partners' internal and external environment. The transaction cost theory is not applicable to explain how the relationships evolve over time. (Gulati 1995a, 1995b.)

2.1.1 A Cube Model of Inter-Firm Co-operation

Some of the key concepts based on the Cube Model of Inter-Firm Co-operation are discussed briefly by commenting on the work of Varamäki (1997, 2001) and her reflections. Varamäki (1997, 2001) has introduced a cubic model for analysing inter-firm co-operation or networks in a more holistic way (Figure 6). She points out that the Cube Model of Inter-Firm Co-operation can be applied when trying to describe or analyse the current situation of co-operation or when trying to analyse the history and the developmental stages of a certain net.

The cube model of inter-firm co-operation rests on three dimensions each looking at different variables. Basically, the model shows the reasons and objectives behind the inter-firm co-operation. The *strategic management dimension* describes the internal division of work and the intensity of co-operative efforts. The *network management dimension* describes the formality and decision-making style, and the *socio-psychological dimension* describes

commitment and trust based on the individual group members or firms and the requirements for long-term relationships.

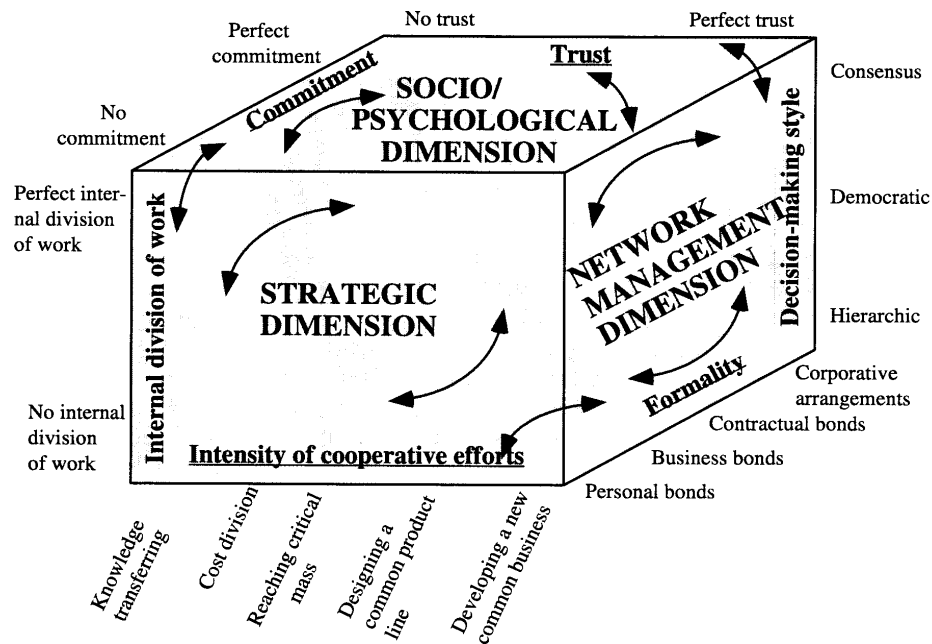


FIGURE 6 A Cube Model of Inter-firm Co-operation (Varamäki 1997)

As a synthesis based on the theories and approaches utilised in the conceptual study Varamäki (1997) divides the Cube Model into three dimensions and illustrates a few central key concepts that are also partially identified, i.e., industrial network studies and the concepts of networks as well. According to Varamäki (1997) the cube model and its three dimensions, and the two variables belonging to each of them, have been taken into account. Correspondingly, the arrows in Figure 6 illustrate the process view and the changing nature of co-operation and indicate that the dimensions are closely related to each other. Varamäki (1997) points out that the co-operation can vary and develop in each dimension over time, and this natural and evolutionary change easily brings about changes in other dimensions as well. (cf. Varamäki 1997, 81-82, Varamäki 2001, 89-90.)

Varamäki (1997) suggested that the theories in the field of inter-firm co-operation interpret and also explain changes in nets differently (see also Paasche, Pettersen & Solem 1993). "According to sociological-psychological perspectives, inter-firm co-operation is a result of friendship or social interaction between persons on both the strategic and the operational level of organisations, and changes in inter-firm co-operation are a question of the degree of changes in social interactions" (Johannisson 1987, 1988). Strategic dimensions are described as being such variables as the co-operative efforts and the internal division of work. The intensity of co-operative efforts indicates the level of objectives and investments set for the co-operation and the intensity of co-operation, i.e., how

closely the co-operative partners are linked to each other. The internal division of work refers to how overlapping or complementary the partners' resources are in a net. The network management dimension refers to the commitment and trust of co-operative partners. (see also Murto-Koivisto & Vesalainen 1995; Vesalainen & Murto-Koivisto 1994.)

It is noteworthy that the previous literature on networking and inter-firm co-operation has taken into account a number of process characteristics (see Varamäki 2001; Doz & Schuen 1999; Pettersen 1993; Dyer & Shing 1998). The holistic classification has also been used by describing the inter-firm co-operation performance (Roos & Oijord 1992 cit. in Varamäki 2001, 85), human management issues and strategy issues (see among others Johannisson 1987, 1988). The psychological-sociological and transaction-oriented strategic management perspectives referred to and described earlier (in section 2.1.1) have been classified as process oriented studies (cf. Cook & Emerson 1984; Paasche, Pettersen & Solem 1993).

As a conclusion of the key concepts introduced by Varamäki (1997), it seems that trust and commitment are the combining and uniting concepts of the present triadic dimensions of the Cube Model of Inter-firm Co-operation. These two concepts are the result of friendship and entrepreneurs' mutual social understanding of relationships and interactions, as well as social and personal networks. The concepts of trust and commitment are introduced briefly, based on Varamäki's reflections. (see Varamäki 1997, 2001, 88-90.)

The Concept of Commitment

Commitment is future oriented (Ring & Van de Ven 1994), which means that partners are ready to develop stable relationships, and to sacrifice some short-term benefits because of expectations of long-term benefits (Ring & Van de Ven, 1994; Hovi 1995). When partners are committed, they exert some effort on behalf of the relationships so that both parties can achieve their individual and joint goals without fear of opportunistic behaviour. Commitment has also been considered as the most important variable in distinguishing "stayers" and "leavers" (Gundlach, Achrol & Mentzer 1995 cit. in Varamäki 2001). Usually, early success is an extremely critical factor, which most decisively increases commitment (Lorange & Roos 1992). Other authors have pointed out that equal outcomes between partners are crucial (Buckley & Casson 1987). But more important than equal outcomes is fair dealing, which means that partners receive benefits proportional to their investments. (e.g., Ring & Van de Ven 1994, see Varamäki 1997, 2001.)

The Concept of Trust

Trust is based on the expectation that one will find what is expected rather than what is feared (McAllister 1995). Trust requires a risky situation, which means that an actor's outcome is at least partially determined by another actor's behaviour. Trust requires a situation where there is a risk of failing because of

another partner. (e.g., Ring & Van de Ven 1992.) There are four interrelated dimensions of trust: competence (Shamdasani & Sheth 1994) openness, caring and reliability. Competence contributes to building the credibility of the firm. One type of indicator of competence is the capacity of an organisation to process information efficiently. Openness implies that a firm is willing to listen to new ideas, and to share rather than withhold information. Caring is the knowledge that one firm will not take advantage of another, and reliability refers to the consistency between what a firm says and what it does; a firm keep its promises. (Hart & Saunders 1997 cit. in Varamäki 1997, Varamäki 2001.)

2.1.2 The Model of Industrial Networks

The IMP model consists of three basic groups of variables: *actors, activities and resources* (Håkansson & Snehota 1995, 28). These concepts construct the unit of network function. Actor bonds connect actors and determine how the actors perceive one another and form their identities in the networks. The actors can be people, parts of different organisations, organisations and their combinations, or groups of enterprises which control activities and resources. According to Håkansson & Snehota (1995, 39-41) every relationship has the network function: activity links are important in the activity pattern, resource ties in the resource constellation and actor bonds in the web of actors.

The aggregated structure is an organised web of conscious and goal-seeking actors. Håkansson & Snehota (1995, 40) states that *"the structure of business networks has certain peculiar organisational attributes. The actors (firms) have no common goal, but there exist some shared beliefs about activity pattern as well as the resource constellation..."*. Networks have no clear boundaries, nor any centre or apex. Change in the substance of any of the relationships affects the overall structure.

The essence of the network function of business relationships is that as they arise, they form a structure of actor bonds, activity links and resource ties where third parties integrate. How the relationships develop and unfold is important for the features of the actors' pattern and resource constellation, and thus for the properties of the network structure, such as stability. The emergent structure has in any given moment a limiting effect on its actors, and at the same time it provides a base for future development.

According to Mattsson (1988) a network can be seen as a giant global industrial system which forms a complex structure where all actors are connected by at least one type of chain. In the interaction processes the enterprises increase their resource reserves by combining their resources. As the activities form the network and/or the structure of the economic interaction, they also influence the profitability of the enterprises. Flexibility is connected with the relationships between activities in the interaction process. The performance outcomes comprise the economic and the functional efficiency and effectiveness of exchange, co-ordination and adaptation processes. The number of different activities is of great importance when initiating co-operation.

2.2 The Elements of Networks as Revealed by Metaphors

The network researchers have developed four different concepts, in other words, metaphors to describe the complex phenomenon of the network approach as relationships, structures, positions and processes. In this section, the concepts of networks will be described, basing the discussion on Easton's (1992) reflections. The four metaphors are revealed by several authors' perspectives on network concepts. The aim of this chapter is to shed light on the issues in networking and inter-firm co-operation in a firm context.

2.2.1 Networks as Relationships

Hägg and Johansson (1983) illustrate the importance of relationships: "*relationships allow a more effective acquisition of resources and sale of product*". One analysis of inter-firm behaviour distinguishes between relationships and interactions (Johansson and Mattsson 1987, 34–38). The relationship elements of the behaviour are rather general and long-term in character. Interactions represent inter-firm behaviour and comprise exchange and adaptation processes. Relationships can be presented as comprising four elements: *mutual orientation, dependence, bonds and investments*. Each of these elements is strongly tied to the others. Mattsson (1988) states that interaction presupposes that the enterprises are ready for interaction contacts and expect a similar attitude from the counterpart. Co-operation is required, and this depends - at least in terms of one view of co-operation - on the relationships between the firms' objectives.

Co-operation may also be instrumental in that each firm seeks to gain different ends from the same development programme, or seeks new markets and wishes to develop new processes, for instance, with the intention of developing new technology. Knowledge of the co-operative partners makes it possible, better and more precise to define what they can do and offer, for in either case it is possible to cut costs and increase sales. With the help of relationships, it is also possible to create and combine knowledge between firms. Furthermore, relationships provide continuity and stability with an increased ability to plan, reduce costs and increase effectiveness.

Dependence is partly a matter of choice and partly a matter of circumstances. Dependence brings with it the problems of power and control. Håkansson (1987, 17) refers to the power structure of networks pointing out that the actors base their power on the control of activities and/or resources. Thus, there is a systematic handling of the different components in relation to each other – they are organised by conscious hands. Structure of the network thus act as a control mechanism of the development process. (Håkansson 1987, 91.) Networks consists of many relationships, as well as other types of interdependence relations such as, technical dependencies, knowledge

dependencies, social dependencies and logistic or administrative dependencies, to mention but a few. (Håkansson 1987, 92.)

Leimu and Pusila (1995) have studied the dependency of the subcontractors on the shipyards highlighting the position of the subcontractors. According to these authors a shipyard can be seen as a mediator between, on the one hand the needs and wishes of a customer and on the other hand the technological possibilities and economic constraints. A shipyard is also a mediator on the customer – subcontractor axis. (Leimu & Pusila 1995, 44-45.) As a conclusion of their study the authors pointed out “ *it is true that the shipyards need capacity (incl. know-how) of subcontractors, and the need of long term cooperation (in R&D) is frequently mentioned in the interviews. On the other hand, the shipyards strive at reducing their dependence on subcontractors. This is realized by stricter competition, which has meant that price has outweighed cooperation in practice*”. The length of relations has no impact on the loyalty of the shipyard for the subcontractor (Sriram & Mummalaneni 1990, 23 cit. in Leimu & Pusila 1995, 52).

As a whole, the action of shipyards does not promote trust between shipyard and subcontractor and consequently does not enhance the development of long term relationships (Leimu & Pusila 1995, 52). Referring to the research by Easton and Araujo (1992), understanding the operations and development of a network also presupposes understanding the relationships between indirect and non-economic actors.

The direct relationships involving economic interaction are the core relationships in a network, typically customer-seller relationships. A relationship involving economic interaction can be a matter of competitors with a common customer. According to network terms, strong bonds provide a more stable and predictable structure and one which is more likely to be able to withstand change (Easton 1992, 9). In inter-firm co-operation the formality and distribution of tasks with regard to a relationship can be identified by means of different bonds. Different bonds determine the strength and operational form of relationships. Referring to the model of the industrial networks and network approach, bonds can be divided into bonds concerned with technique, planning, knowledge, and social, economic, and legal relations. (Easton 1992 cit. in Mattsson 1984.)

A related characteristic of network relationships is longevity. The original IMP study and the studies of Gadde and Mattsson (1987) carried out a more complex analysis of relationships' duration within the context of other relationships. The study reflects the dynamics of the network. Even a strongly bonded network can change, if the external forces are powerful enough. A weakly bonded network may continue to exist in benign and unchanging conditions. The economic rationale for strong bonding is clearly dependent upon the satisfaction with the terms of the current exchange and the presence (or absence) of alternatives. More formal economic bonds may also exist where firms invest in one another or in joint ventures or provide extended credit facilities.

The strength of co-operative relationships should actually be seen as an operational capacity to counteract threatening or disturbing forces. According

to Easton and Araujo (1992), strongly bonded co-operative activity develops more permanent and predictable structures which will withstand changes. Loosely bonded co-operation is presumably more vulnerable.

Social exchange has been identified as a significant factor in the overall strength of inter-firm relationships. Mattsson (1988) cites Blau's (1968) description of the process. *"Social exchange relations evolve in a slow process, starting with minor transactions in which little trust is required because little risk is involved and in which both partners can prove their trustworthiness."*

It is also worth noticing that familiarity breeds affection. Social relations between firms are the result of the relations of the individuals involved. Social relationships extend beyond individual firms. Networks will usually have a social dimension characterised by patterns of individual social contacts (Hamfelt & Lindberg 1987 cit. in Easton 1992). They might also have the same culture, i.e., commonly held beliefs about the basis of social activity within the network. Information is taken as a common currency of inter-firm relations. The collection of information is one of the primary uncertainty reduction activities that firms adopt, and networks provide a necessary vector. Firms may be bound legally by contracts or by rather more general articles of involvement or ownership. (Hamfelt & Lindberg 1987 cit. in Easton 1992.)

Johannisson (1987) presents three network types that come close to fulfilling the needs outlined. These include, firstly, production networks which occur within and between trading organisations and contracts. Secondly, he presents personal networks which are formed by ad hoc friendship ties and based on trust. Thirdly, he conceives of symbolic networks formed by social bonds, based on community ties and conformity to collective values. In Johannisson's terms, the core of the exchange networks is the business partners of the firm in the production networks (Johannisson 1984, 1987, 1988). The personal network is the vehicle by which the established entrepreneur exchanges information with and acquires resources from the environment. Personal networks makes it possible to enact the environment (Johannisson 1988). Vision and motivation are personally brought into venture by the entrepreneur.

The fourth element of relationships is investment, according to Johansson and Mattsson (1986): *"Investments are processes in which resources are committed in order to create, build or acquire assets which can be used in the future"*. Investments can consist of various elements, such as machinery, know-how and people in organisations. The time spent in establishing good social relationships may also be counted among investments.

One important aspect of relationships is atmosphere. It is inherent that, in any relationships, there exists tension between conflict and co-operation (Ford, Håkansson & Johanson 1986). It is inherent, because partners will be concerned that they are receiving an equitable share of the benefits which accrue from the existence of the relationships. Conflict may also arise from absence of mutuality because of changes in the objectives of either party, or because the processes of exchanges are not being managed to the satisfaction of one or both parties. Relationships form the context in which transactions take place.

When transactions are exchanges and adaptation procedures, the latter is closely associated with the investment elements and the adaptation is to a continuous process of change in products or other resource commitments. As a conclusion, the relationships in networks and inter-firm co-operation are multiple. In this whole analysis, it is an implicit notion that strongly bonded relationships define networks. While this may be true in general, it is arguable that other kinds of relationships also exist in networks, which can have a significant effect on their operation.

Indirect relationships are another very different form of relationship, though crucial when they provide a direct link between dyadic relationships and networks. An indirect relationship is most simply described as a relationship between two firms which are not directly related. It is mediated by a third firm with which they both have relationships. Two rather important kinds of indirect relationships are vertical and horizontal, firm to competitor through a mutual customer.

Indirect relationships also specify the routes by means of which firms gain access to resources. Mattsson (1986) identifies seven dimensions which can be used to characterise indirect relationships. They include: distance from a focal firm, vertical or horizontal nature, complementary or competitive, narrow or wide connection, the strength, kind and content of the direct bonds concerned, the interdependency of the direct relations concerned, and the value added of a focal firm's direct relationships. Mattsson (1986) points out that, for example, the predominance of widely or narrowly connected indirect relationships will fundamentally affect the structure of a network.

2.2.2 Networks as Structures

When there is no interdependence (as assumed in some economic models), an industrial system will be unstructured and stochastic in nature. The greater the interdependence, the clearer the structure of the network becomes and the more important the role it has in determining the behaviour of individual firms. A basic assumption of the industrial network approach is that networks are essentially heterogeneous in nature (Hägg & Johansson 1983). The sources of heterogeneity are easy to describe, but not so easy to model.

Industrial systems exist to match heterogeneous resources to heterogeneous demands. The heterogeneity lies in the firms involved in the network transforming resources to meet needs. Each firm is individual in its structure, employee preferences, history, resources, investments, skills, knowledge etc. The role it chooses, or may be forced to play in the transformation process, will be determined partly by factors such as these. Uncertainty reduction is one source of motivation for forming strong relationships; it has been argued, though, that networks also create uncertainty, albeit of a different kind.

Thus specialisation, learning by doing and the careful investments of business activities will further develop heterogeneity and create new possibilities for, e.g., expanding the market. One way of characterising the

structure of the network is to divide the work among the enterprises belonging to the network. Thus, interdependence is not only a source of heterogeneity, but also a result of it. They are mutually reinforcing.

One structural issue in network analysis is that of boundaries. Mattsson (1988) refers to the global structure of networks, which imposes criteria on the analysis of networks, criteria which can be analysed in the context of the interaction and dependence of enterprises, the chains between enterprises and the geographical distance.

Nets may be identified in terms of the strength of complementary resources and activities among the members of the net (Hägg & Johanson 1983). They may be thought of as local concentrations in the network. The firm may be a member of more than one net, which adds another dimensionality problem to the analysis of networks. A net may also be defined by the activities of a single powerful organisation. Mattsson (1984) suggests that the term net be used to describe only this situation. It, e.g., corresponds to the organisation set concept used by Aldrich (1981).

Networks can also be divided into the tightly and loosely structured. Typical of the tight networks is that there are many ties between the actors and definite tasks. The activities of the individual enterprises are thus strongly restricted by the network. A further typical feature of the tightly structured networks is that new actors joining the network are rare, just as the exit of old actors is exceptional. The case is the opposite with respect to loosely structured networks. (Orton & Weick 1990.)

2.2.3 Networks as Positions

The position of networks can best be studied from the viewpoints of individual enterprises. The history or earlier position in the network relationships determines, to a large extent, also the future position in the network, but at the same time it offers new possibilities. The operational role of the enterprise, its power relations to the other enterprises within the network, determines in most cases the future interaction and power relationships. Pfeffer (1981, 2) has pointed out that most definitions of power include an element indicating that power is the capability of one social actor to overcome resistance in achieving a desired objective or result. Thus, power is context or relationship specific. The importance of power can be described as substituting knowledge or technological skills in the sense of utilising, for instance, subcontracting. If knowledge and skills are not unique in the interaction between enterprises, power is seen as control by the stronger enterprise.

Position does not, however, always indicate power even if the internal relationships within the network are hardly ever equal. Firms whose activity within the network is a normal customer-seller relationship (for instance, subcontractors) can be quite independent and free to move, especially when the enterprise is a subcontractor to many different customers. On the other hand, a firm tied by strong bonds to other enterprises in the network can be quite vulnerable.

Johansson and Mattsson (1986) have divided the position concept into micro and macro positions:

The micro-positions are characterised by:

- A) the role of the firm in relation to the other firm(s),
- B) its [a firm's] importance to the other firm(s), and
- C) the strength of the relationships with the other firm(s).

The macro-positions are characterised by:

- A) the identity of the other firms with which the firm has direct relationships and indirect relationships in the network,
- B) the role of the firm in the network, and
- C) the strength of the relationships with other firms.

Mattsson (1987) provides a link to strategy by identifying four strategic situations in relation to network position; as entering and existing in an established network, defending and changing existing positions. He argues that all strategies involve network position change whether or not this particular focus provides the best way of understanding or implementing them. According to Szarka (1990, 13) power is linked to dependence in exchange formulations. In the context of small businesses, it is clear that where, e.g., a small firm derives a significant proportion of its turnover and profits from acting as a subcontractor to another, often larger firm, the small firm becomes dependent on the latter. Thus, a larger firm may acquire power over its subcontractor. This power can be measured in the terms of the larger company's influence on decision-making within the smaller firm in areas such as pricing or investments. In consequence dominance or control characterises one form of network constitution. By control is understood quasi-hierarchical relationships allowing one company to dominate another, e.g., that which is traditionally obtained in the car industry between the major manufacturers and their subcontractors.

Consequently, the role of power, dominance or dependence is matter of context and is relationship specific. The maturity of the industry might also affect the relations and interactions within and between the individual firms. It can also be argued as to whether the relations based on control do not produce the same results as co-operation, especially from the point of view of the small firm. Network relationships - whether based on control, co-ordination or co-operation - are thus determined by the nature of the linkage between firms and their positions relative to each other in the network. Mattsson (1986) and Johanson and Mattsson (1987) argue that network positions are predicated on the ownership and availability assets. By virtue of their greater financial or market power, big firms can and do heavily influence networks in which they are involved. Thus, power to control or influence others resides in control over the resources they value (Aldrich 1979, 268-273 cit. in Aldrich 1999, 64). According to Aldrich (1999, 64) participants gain and lose power through processes of bargaining, negotiation, and compromise, and thus organisations are constantly at risk of dissolution. Pfeffer and Salancik have followed the idea

of Barnard (1938) and argued that control and influence in organisations depends upon the importance of managers' and subunits' contributions to the organisation's survival and success. Power and dependence are intimately related. As Aldrich (1999, 65) has stated, two issues in particular deserve attention: whether dependence is an objective or a perceived state of affairs, or whether dependence or ordinary market-driven forces generate various forms of interorganisational relations.

In this study, power and dependence are intervening and interlocking subconcepts that are decentralised between individuals and individual firms of a network where the individuals (owner-managers) are in key positions to choose whether to use or not their personal or institutional power in, e.g., decision process concerning the strategically important resources (own and joint) in their horizontal inter-firm co-operation context, and in relation to outside markets. This kind of understanding relies on the assumptions that power, control and dependence are not capabilities as such, they are interacted and intertwined with the relationships, structures, positions and processes wherein the particular individual, group of the individual firms (organisations) or network are enacted.

2.2.4 Networks as Processes

Change is a central feature in networks and it occurs all the time. Network processes are dominated by the distribution of power and interest structures. It is typical of interaction that some enterprises have better opportunities to acquire additional resources than others, which may be a result of, for instance, far-sighted management of resources. The evolutionary processes are natural development processes in the network, because they belong to the changes in the network relationships. Networks do not have life cycles because they change and adapt all the time, as regards their relationships, structures and positions. Two dialectical processes in networks are competition and co-operation.

The existence of strong bonding demonstrates a high level of co-operation. Hägg and Johanson (1983) argue that competition in the traditional sense is replaced by rivalry for the control of resources. Such rivalry may occur at any level of aggregation. An alternative but complementary view is that competition in networks is a function of the overlap of organisational domains. Complete overlap implies competition and partial overlap implies networking. (Thorelli 1986.)

Networks are stable, not static. The continuing processes of interaction between firms are stabilised, since they take place within the context of existing relationships. From the standpoint of co-operation it is central to know what drives enterprises into networks, and what benefits the enterprises find in the networks. From the process point of view, resource balance is what is sought from the networks. The process is also characterised by minimal development. An evolutionary development is natural to the emergence of long-term network relationships.

Companies seeking to compete based on innovative products should be in the best position to take advantage of opportunities in rapidly changing industries. Such companies should seek highly creative and innovative employees. They should keep constant contact with customers and have good marketing skills as well as good technical skills. (Bentley 1990 cit. in Chandler & Hanks 1994, 335.) According to Räsänen (1999, 51) any innovation consists of two practical main components. The first is invention, a novel opportunity given by new technology, for solving a given problem. Invention may be a major or minor improvement compared with the old solution to the same problem. The second component is a user acceptance, an adaptation process. If the users do not accept the new invention, it will fall into oblivion. Räsänen has (1999) divided and grouped innovations into three main categories: 1) *product innovations* that are novel products for novel needs and more often novel products (novel technology) for old needs, 2) *Process innovations* are novel ways of doing the old task such as a new production method, new logistic solutions, 3) *Social innovations* are novel modes of action, new functional patterns of solving old problems in a social context. (Räsänen 1995, 51-52.)

Industrial systems exist to create products and services. Innovation leads to strongly bonded networks. Håkansson (1987) identifies three aspects of innovation in a network perspective: knowledge development, resource mobilisation and resource co-ordination. In a network where innovation dominates, a limitation of resources forces firms into increasing technical specialisation. This means that they become increasingly reliant upon other firms that have complementary resources, and they are driven to co-ordinate their resource activities with these other firms. (Easton 1992.)

Innovation is a major force in networks, and much of the empirical work on industrial networks has been done on new product development (Håkansson 1987). It is argued that invention and innovation occur in networks, not only within, but also between the firms. Håkansson (1987) suggests that an important part of the development process takes place in the form of a technical exchange between different 'actors' such as individuals or companies (1987, 3). Insofar, an innovation should not be seen as the product of only one actor but as the result of an interplay between two or more actors, in other words, as a product of a 'network' of actors. For the invention to become reality, network mobilisation must occur. Firms must adapt old relationships and internal activities, and develop new relationships. Mobilisation requires resources, and if such resources are not available or, more likely, will not be made available by network participants, the innovation fails. (Håkansson 1987.)

Networks do not tend towards optimal efficiency configurations. Mattsson (1986) suggests that lack of balance between resources is an important driving force for investment processes to be initiated in different firms. Thorelli (1986) sees entropy as the driving force leading to the disintegration of networks. Resources are consumed and structures created in an attempt to arrest the process. Innovations can be related to different forms of co-operation: vertical, horizontal (competitive or complementary), cooperation, or diagonal co-operation in networks. (see also Ali-Yrkkö 2001, 42-43; Håkansson 1987, 6). In

this study, innovations are understood to cover knowledge development, resource mobilisation and resource co-ordination. Innovations are based on the interaction, i.e., inter-firm co-operation and networking process of the family firms. They can appear simultaneously or separately as product, process and social innovations in the networking process.

2.3 Summary of Chapter 2

Multiple definitions, terms, typologies and metaphors have provided a multidimensional description of inter-firm co-operation and networking. The main viewpoints and key concepts of the descriptive analysis of the inter-firm co-operation and networking are summarised in Figure 7, which illustrates the key concepts and viewpoints of the theories, approaches and models related to the network approach and described in this chapter. As can be noticed from Figure 7, similarities and differences exist beyond the phenomena of inter-firm co-operation and networking. Therefore, the holistic view on the network approach needed to be examined here. The study points out that the key concepts of inter-firm co-operation and networking can be viewed from various angles and dimensions.

The descriptive analysis of network approach has revealed that the key concepts and main viewpoints are anchored on the social psychological dimensions and strategic management dimension. The concept of trust implies network management - how to manage the structure of networking and inter-firm co-operation (e.g., network of family firms). The concept of commitment implies that the firms have similar motives and attitudes towards co-operation, and that they are ready to share common rules and willing to invest in long-term relationships. The models of the IMP (industrial network approach) and the Cube Model of Inter-firm Co-operation take into account the processual view and the development of the relationships.

The concepts of power and dependence are also essential elements in networking and the inter-firm co-operation. Consequently, from the viewpoint of competition and cooperation, the developmental process of networking covers multiple concepts, motives, needs, and uncertainties at the individual and firm levels. Also cultural and personal preferences seemed to enhance cooperation and networking whereas fear of losing one's power, control and independency seemed to be restricting issues influencing 'bonding' in long-term relationships.

To sum up: both 'softer' and 'harder' sides of the networking are taken into consideration when any kind of networking relations comes to be discussed.

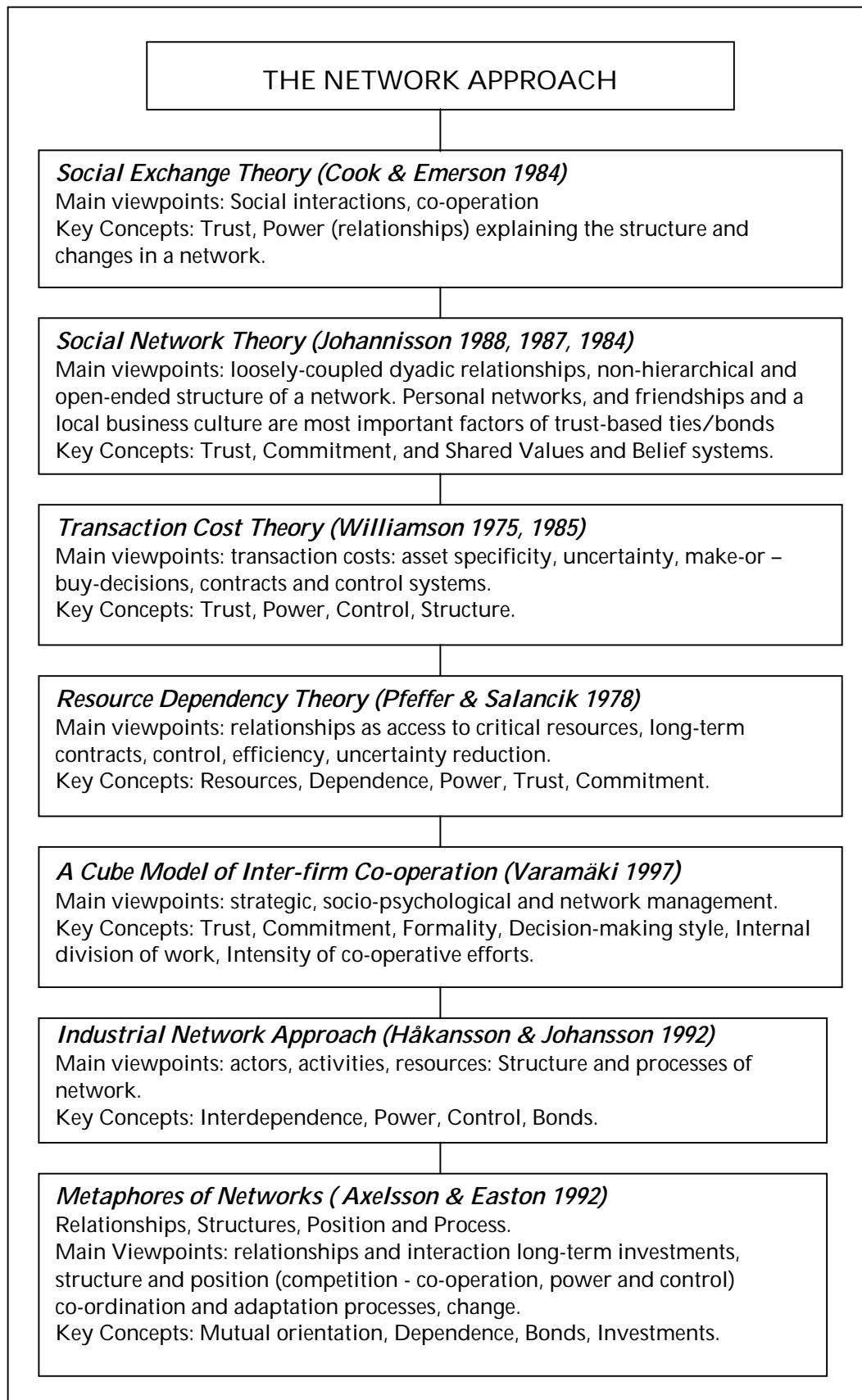


FIGURE 7 The Descriptive Summary of Inter-Firm Co-operation and Networking

3 THE DESCRIPTIVE ANALYSIS OF CO-OPERATION CAPABILITY

In this chapter, the dimensions of affective, conative and cognitive constructs will be described based mainly on Snow, Corno & Jackson's (1996) reflections. In Finland, Ruohotie (1998, 2000) and Ruohotie & Koiranen (2000) have studied and combined these triadic dimensions in the context of entrepreneurship education.

As a basis for this analysis, the co-operation capability is determined here as a combination of required attributes and inclinations - such as will and skill factors - as well as openness and empowerment in order to work together for a shared purpose or achieving the joint and singular goals. The unit for the analysis of co-operation capability is the owner-manager. Owner-managers of the networking family firms, not the firms as such, are in possession of personality and intelligence.

3.1 Affective, Conative and Cognitive Dimensions of Capability: An Overview

The human mind has long been thought to have three aspects: cognitive, conative and affective (Hilgard 1980 cit. in Snow, Corno & Jackson 1996). The affective and conative differences appear more numerous than cognitive abilities. The conative dimension is overlapping and interrelating to the affective dimension (Snow, Corno & Jackson 1996, 247). Historically, three modes of mental functioning were usually distinguished: cognition, conation and affection. In most systems cognition, affection and conation are the three categories under which all mental processes are classified (English & English 1958, 92-93). However, some writers have combined conation and affection (English & English 1958, 15 cit. in Snow, Corno & Jackson 1996).

The traditional definitions of cognition, affection and conation are defined by English and English (1958) as follows (cit. in Snow, Corno & Jackson 1996, 243-244):

Cognition - ...*"A generic term for any process whereby an organism becomes aware or obtains knowledge of an object...it includes perceiving, recognising, conceiving, judging, reasoning, ...in modern usage sensing is usually included under cognition..."*

Affection - ...*"A class name for feeling, emotion, mood, temperament... a single feeling response to a particular object or idea ...the general reaction toward something liked or disliked...dynamic or essential quality of an emotion; the energy of an emotion..."*

Conation - ...*"That aspect of mental process or behaviour by which it tends to develop into something else; an intrinsic "unrest" of the organism...almost the opposite of homeostasis. A conscious tendency to act; a conscious striving...It is now seldom used as a specific form of behaviour, rather for an aspect found in all. Impulse, desire, volition, purposive striving all emphasise the conative aspect..."*

Personality is rarely limited to personal characteristics, temperament or emotions only. Distinguishing between cognitive and non-cognitive constructs does not mean that cognitive factors have no effect on personality (Messic 1996, cit. in Snow, Corno & Jackson 1996). *Intelligence* means the *ability to* undertake activities which are difficult, complex, abstract, demanding, goal-oriented, socially prestigious and original; and the ability to accomplish these activities in situations which demand concentration and the control of one's emotions. (see Barrow & Milburn 1990, 158 cit. in Snow, Corno & Jackson 1996.)

According to Ruohotie and Koiranen (2000), an 'intelligent' person is a person who can think and/or act in a clever way in demanding matters, and who is capable of quickly discovering and grasping new ideas/things and possibilities. Thus, it is quite obvious that intelligence is an important facet in entrepreneurship, underlining the cognitive and conative constructs (Ruohotie & Koiranen 2000, 32). However, these aspects should ultimately be understood as a combination when researching, e.g., entrepreneurship education (Ruohotie & Koiranen 2000; Ruohotie 1998).

Attitudes, interests and beliefs (values only affective and conative) cut across all the three columns in the Provisional Taxonomy of Individual Difference Constructs (Figure 8). Values and attitudes are affective; interests are both affective and motivational; and beliefs have volitional as well as cognitive significance. In this sense, it is worth noting that values, attitudes, beliefs, and interests have strong interrelations - and even occasional interchangeability. The dimensions of affection, conation, and cognition are divided into sub-concepts, such as temperament and emotion, motivation and volition, and procedural and declarative knowledge, which are discussed briefly in the following sections.

Figure 8 illustrates a Provisional Taxonomy of Individual Difference Constructs introduced by Snow, Corno & Jackson (1996, 247).

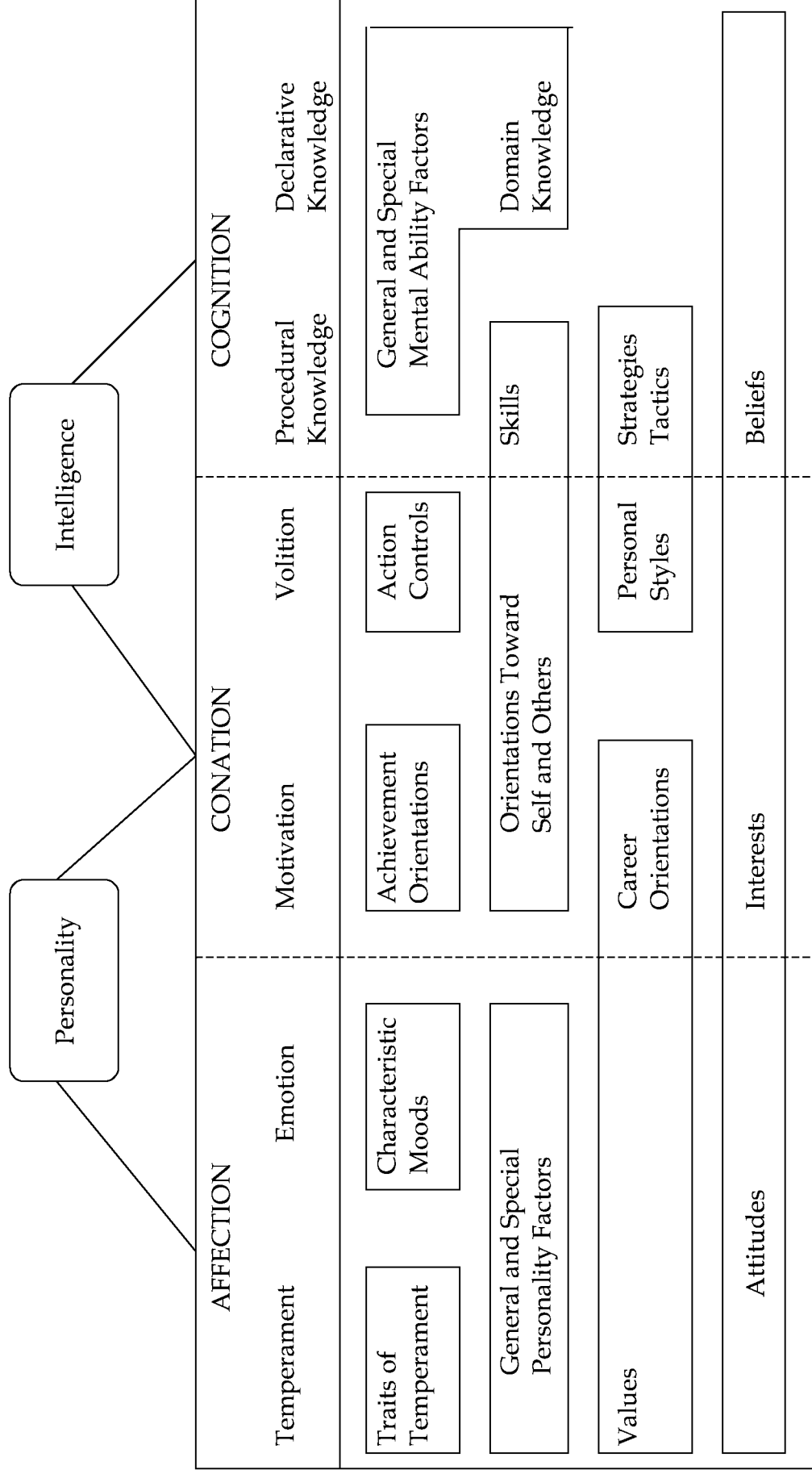


FIGURE 8 A Provisional Taxonomy of Individual Difference Constructs (Snow, Corno & Jackson 1996, 247)

3.2 Identifying Affective Constructs of Co-operation Capability

The 'view of life' is the most extensive. As a concept, it is hard to define and rather abstract. According to Peltonen (1986, 133) the view of life is quite stable, concerning the questions of life. The relationship between the 'view of life' and values is uncertain and vacillates between many viewpoints. The view of life can be seen as an entity that consists of different viewpoints such as world-view, view of human beings, attitude toward religion, and view of society (Peltonen 1986, 126-127). Looking more deeply at entrepreneurship, it is largely based on the power of emotional feelings that are affective (Peltonen & Ruohotie 1987; Koiranen 1998, 2000).

The affective constructs are crucial to co-operation capability. The mental hierarchy of entrepreneurship (Figure 9) describes how the affective constructs are associated with the co-operation capability in the context of networking family firms.

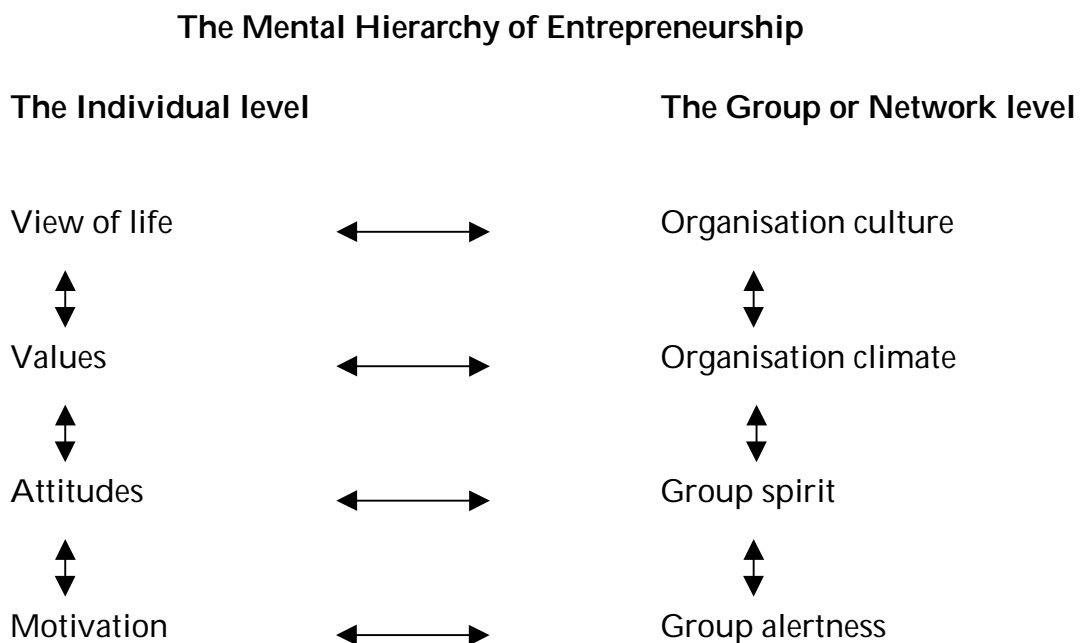


FIGURE 9 The Mental Hierarchy of Entrepreneurship (adapted from Peltonen 1986, 134-135)

It is worth observing that motivation, attitudes and values characterise the personality of the owner-managers. Conversely, co-operation and networking (on the group level), the group alertness, group spirit, organisational climate, and organisation culture characterise the co-operational and group level identity. All these personality traits are associated with entrepreneuring (Peltonen 1986, 104). In this light, the concept of motivation is understood as a mental stage of the individual which determines the activity level and orientations of his/her actions (Peltonen 1986, 107). According to Peltonen

(1986, 107), motivation appears as, e.g., flow of work, efficiency, enthusiasm, and work satisfaction. In this sense, the effectiveness, quality, and performance are the issues to be improved.

Attitudes are most often thought of as internal states that express, overtly or covertly, positive or negative evaluative responses to an object, person or condition (Eagly & Chaiken 1993 cit. in Snow, Corno & Jackson 1996; Hirsjärvi 1986 cit. in Paajanen 2001). But cognitive representation and behavioural response are also emphasised. Ruohotie (1998) has defined attitudes as follows:

"...Attitudes are usually studied as states that are based on aggregates of beliefs, persons can develop characteristic attitude patterns that become stable individual differences. Individual interests, e.g., tendency or willingness to acquire knowledge about the object of interest, may be thought as positive attitudes that have developed into enduring preferences for particular topics or tasks". (Ruohotie 1998, 36.)

The concept of value is wide and multidimensional. The 'value' is used in all social sciences subjects, such as, e.g., anthropology, psychology, sociology, business management, political science and economics. It is also widely used in philosophy, mathematics, natural science and so on. 'Value' is a interdisciplinary term like 'system' or 'leadership' (see e.g., Bjerke 2001, Koiranen 2000). Values are culturebound (Rokeach 1973, 24). Values are hard to measure, interpret and examine. Values are, to a very high extent, abstract and invisible (Hirsjärvi 1985, 79).

According to Turunen (1997), there are only three values proper: truth, beauty, and goodness. These three so-called Platonic values are often seen as the basic constituents of culture, and, indeed, of humanity itself. Truth has a very strong practical aspect to it. In many instances, following 'truth' leads to the desired goal: provided that the 'truthful' map or 'truthful' knowledge is used, the goal can be reached. From this point of view, truth can be considered to be an instrumental value – accurate knowledge is appreciated for practical reasons. Truth is commonly linked to thinking and knowledge. However, only a part of our thoughts can be classified as knowledge.

It is typical of an individual to experience that he/she holds a truth. This experience of 'truth' is largely explained through the mechanisms of belief. Belief and trust are auto-constructed in our minds, mainly without us taking notice of these processes. And yet we may evaluate our own experience of 'believing', conscious of the fact that we may indeed be mistaken. This consciousness of the possibility of fallibility has been a very important factor in the history of thought. Perhaps we never sufficiently question our own ideas and impressions - we are carried away with our belief in them. Our experience is formed, as it were, in a process of amalgamation; we are not aware of all the background processes and facilities. Below the surface of a single momentary experience we may find consideration, deduction, evaluation, beliefs, knowledge, memories, etc. We often experience that our thoughts are 'true', especially so at the specific moment when we think them. The experience of 'truth' is also a part of the human field of experience. So, truth in itself can also

be valuable; thus, it would not be constricted to hold a mere instrumental value for conscious and subconscious motives. It seems likely that we have learned to appreciate truth through the culture that surrounds us.

Truth is also linked to other ideals: honesty, openness and sincerity, aspiration and respect towards what is true. From the viewpoint of its ontology, truth can be understood as a truth that is 'faced', as the contents of thought, as an idea or a value. The conceptual image of 'beauty' is wide. It covers not only perceptions and experiences, but also feelings, senses and moods; even thoughts and values may be said to be 'beautiful'. In itself, beauty can be classified as an experience. As experiences do, beauty also can be naturally transformed into a goal, an experience that one actively seeks after. Objects that are perceived as beautiful become valued objects. Thus, the pursuit of beauty becomes a business activity, forming as it does a part of the 'experience market'. (Turunen 1997, 333-346; see also Hofstede [1980], 1984 19-20.)

When discussing 'good' and 'goodness', the same ontological questions may be posed as in the case of other values. Goodness has an individual aspect to it - individuals have 'subjective' ideas about what is good. It is also possible for the individuals to agree on these ideas. Against this background, the concepts of humanity and world-view have arisen (good-evil; right-wrong). As human beings we are faced with a conflict: on the one hand, we have narcissism and the pursuit of doing things for our own benefit construing a part of our experience; on the other, our social surroundings exerts pressure on us - as individuals, we may be expected to do not only what is 'right' but also what is "wrong". Unselfishness and altruism can be also perceived as finding - and doing things in favour of - one's own direction. (Turunen 1997.)

According to Peltonen & Ruohotie (1987, 19) values have objects that have stable meanings for an individual. Values are also learned and socially accepted desires/wishes of the good and bad, or the acceptable way of living (Juuti 1983, 7 cit. in Paajanen 2001). Individuals and environment reflect their values through behaviour. Values are associated with the entreprenuring, the environment, family, work, peer groups, and our own interpretations of things (Katz & Kahn 1978, 363 cit. in Paajanen, 2000). Guth and Tagiuri (1965) have suggested, that personal values are important determinants in the choice of corporate strategy, i.e., decision-making, and implementing company policy. (Guth & Tagiuri 1965, 123-124). According to Guth and Tagiuri (1965, 125) "*values are viewed as a conception, explicit or implicit, of what an individual or group regards as desirable, and in terms of which he or they select, from among alternative modes, the means and ends of action...*" Similarly, for Connor and Becker (1975, 551) values are "*global beliefs about desirable end-states underlying attitudinal and behavioural processes*".

Koironen (2001) has made a distinction between 'desirable and desired' values by pinpointing the idea that desired values and desirable values have different meanings. Likewise, Deal and Kennedy (1988, 21) have written in their textbook of Corporate Cultures: "*values are the bedrock of any corporate culture, and as the essence of a company's philosophy for achieving success, values provide a sense of common direction for all employees and guidelines for their day-to day*

behavior". It has also been noted that values and morality are closely related. Guy (1990) lists eight core values that are central to relations between people: honesty, accountability, keeping promises, fairness, loyalty, pursuit of excellence, respect for others, and caring (Guy 1990, 14 cit. in Koiranen 2001). Quite similarly Kujala's (2001) result pointed out that the core values are similar in business and life. Values can be open and hidden, and they are also deep-seated components of company culture. In many companies, both open and hidden values stem from experience.

Values reflect the shared beliefs of an organisation and they also manifest the company philosophy. A firm's or a corporation's culture is reflected in the attitudes and values, the management style, and the decision-making, and the problem solving behaviour of its people. Collins and Porras (1996, 66) have viewed the values as *core values*, i.e., the essential and enduring tenets of an organisation. A small set of timeless principles, core values require no justification; they have intrinsic value and importance to those inside an organisation.

Rokeach (1968) has defined 'value' as follows:

"A value is seen to be a disposition of a person just like an attitude, but more basic than an attitude, often underlining it... a value is a type of belief, centrally located in one's total belief system, about how one ought or ought not to behave, or about some end-state of existence worth or not worth attaining. Values are thus abstract ideals, positive or negative, not tied to any specific attitude object or situation, representing person's beliefs about the ideal modes of conduct and ideal terminal goals..." (Rokeach 1968, 124 cit. in Snow, Corno & Jackson 1996.)

Affection could be divided into *temperament and emotion*, even though a personality interpretation's factor relies on aspects of both. In their taxonomy of individual difference constructs Snow, Corno & Jackson (1996, 247) locate *characteristic moods* into the category of affection in personality. It is worth noting that authors place *values and attitudes* in the same category of personality constructs. Temperament is usually taken to refer to more constitutional, biologically based characteristics that are less situation-dependent, whereas emotion usually refers to states of 'feeling' that are more directly situation-dependent. Although emotions are usually thought of as states, not traits, it is clear that individuals differ consistently in the mood states they seem to adopt, display or submit to in given types of situations. According to Snow, Corno and Jackson (1996) there is quite a lot of research showing that there exist relations between various emotions and temperament constructs, motivational and volitional processes (including interest and self-regulation) and cognitive functions. As Lazarus has stated (1982):

"..Thus...above all, emotions are individual phenomena and display great variations among individuals; although to some extent people share emotional experiences, and general laws can be formulated about the emotion process, an emotion happens to an individual with a distinctive history who wants, thinks and confronts specific environments; evaluates their significance and acts as adaptively as possible..." (Lazarus 1982, 1022 cit. in Snow, Corno & Jackson 1996.)

In his study, *'Over 100 Years of Age But Still Entrepreneurially Active in Business: Exploring the Values and Family Characteristics of Old Finnish Family Firms'* Koironen (2001) uses Rokeach's (1973,4) definition: that speaks about what is 'personally or socially preferable'. Thus, values can be either individual personal values (of somebody) or shared values by a group (like family or family business organisation, for example). There are many studies, articles and first-class books of family business and SME's to justify these characteristics. (see e.g., Aronoff & Ward 2000; Dyer 1986; Steier & Reay 2002, 371; Salvato, Williams & Habbershon 2002, 41)

Values have both intensity and direction, and they should be distinguished between those values that are desired, and those that are desirable: that is what people actually desire versus what they think ought to be desired. A related issue is whether there are absolute values at all or only relative ones (Hofstede 1984, 20). According to Koironen (2001, 5) values can also be classified according to their nature and ideology (see also Hofstede 1984; Bjerke 2001), such as:

- Terminal versus instrumental values (Rokeach 1973, 11-12).
- Lived versus espoused values (Gatrell et al. 2001, 164).
- Material versus spiritual; societal versus individual; co-operative versus competitive values (Parikh 1996, 3).
- Explicit (open) versus implicit (hidden) values (Bjerke 2001, 35).

To sum up, some of the value definitions do differ, but they can also be generally regarded as fairly consistent in some of their global meanings (Davis & Rasool, 1988 12 cit. in Bjerke 2001, 35). According to Bjerke (2001, 35) and Koironen (2001, 4-5) the following quotations illustrate fairly general and broad definitions of 'value':

- A value is a conception, explicit or implicit, of the desirable which influences the selection from available modes, means, and ends of action (Kluckhohn 1951 cit. in Rokeach 1973, 10).
- By values we mean ideas about what is desirable (Athos & Coffey 1968, 100).
- Values are desirable end-states (Guth & Tagiuri 1965, 125).
- Values are global beliefs about desirable end-states underlying attitudinal and behavioural processes (Conner & Becker 1975, 551).
- Values are generalized, enduring beliefs about the personal and social desirability of certain modes of contact or end-states of existence (Rokeach 1973, 5).
- Values are the bedrock of any corporate culture (Deal & Kennedy 1983, 21).
- Values refer to people's reasons for acting and judgements about such reasons (Ozar 1997, 645).

3.3 Identifying Conative Constructs of Co-operation Capability

Motivation and volition are at the core of the conative structure (Ruohotie & Koironen 2000, 33). Motivation and volition are historically intertwined. Together, they reflect the conative aspect of human psychological functioning.

As defined earlier, conation is the tendency to take and maintain purposive action or direction toward goals (Snow, Corno & Jackson 1996, 265). Also Heckhausen and Kuhl's (1985) theory pointed out that motivation and volition are seen to form a continuum - *a kind of commitment pathway* - from contemplating or deliberating over options to *enactment* or implementation. (Heckhausen & Kuhl 1985 cit. in Snow, Corno & Jackson 1996.)

The conative constructs are of vital importance for both learning and entrepreneurship (Ruohotie & Koironen 2000, 33; see also Koironen & Peltonen 1995, 23-24). The domain of motivation is involved with the decision-making or *willingness* to engage in learning or performance tasks. These determinants include personal need for achievement (*nAch*) and fear of failure, various other intrinsic and extrinsic goals, and future time perspectives with respect of goals, that are classified as factors of achievement orientations. *Need for achievement (nAch)* was defined as a specialised desire to do something better, faster, more efficiently, with less effort when judged against a standard of excellence. (McClelland 1961.) In early research, *need for achievement* was related explicitly to competitiveness, the tendency to measure success against standards and specific goals or tasks (Snow, Corno & Jackson 1996).

Recent reviews of achievement motivation research have suggested that need for achievement is a form of intrinsic motivation (Entwisle 1987b cit. in Snow, Corno & Jackson 1996), but also that the distinction between an intrinsically and extrinsically motivated goal, choice behaviour and action is a critical theoretical issue. Individuals differ in their intrinsic motives, likewise individuals undertake challenges in achievement settings as a function of needs for competence or mastery. People engage in tasks and activities that are intrinsically motivating for their own sake, not to receive some external reward or avoid some negative consequence (Snow, Corno & Jackson 1996, 270). Looking at the intrinsic motivation more deeply of the entrepreneurs' point of view, entrepreneurs personify 'action' in its intrinsic sense (that is, intentional conduct) and engage in genuine interaction (that is, voluntary exchange) for mutual benefit and learning (Johannisson 1997, 20). Motivation can also be looked at by the stewardship theory and agency theories. The difference is that, according to stewardship theory managers and employees whose needs are based on growth, achievement and self-actualization and who are motivated by intrinsic factors may gain greater utility by accomplishing organizationally centred behaviours, whereas agency theory sees the actors as motivated by extrinsic rewards, that are based on the monetary rewards (see Salvato 2002, 28). Volition can be looked at by the concept of commitment, and more particularly by the causes and effects of commitment that have been documented in the experimental social psychological literature. The relationship between commitment and volition is in some extent based on choice. Without choice or at least the perceived freedom to choose from an available set of options, an individual will not become committed to choice. The importance of choice for producing commitment has been emphasized by Salancik (1977b, 69 cit. in Pfeffer 1981, 291) as follows:

" Volition is essential to all commitment. It is the cement that binds the action to the person and that motivates him to accept the implications of his acts.without volition, a behaviour is not necessarily committing, for the person can always assert that he really did not cause the behaviour himself. He thus would not have accepted the consequences of the behaviour or care very much what he has done. " (Salancik 1977b, 69 cit. in Pfeffer 1981, 291.)

The category of *action controls* includes a variety of self-regulatory mechanisms used to accomplish goals (Snow, Corno & Jackson 1996, 272-273). In Kuhl's (Kuhl et al. 1989, 387) terms, *volitional control strategies* are mechanisms used by individuals to 'manage the maintenance of intentions'. Volitional control is considered to be of a 'higher order', and be conscious. There are four control strategies - selective attention, motivation control, emotional control - and environmental control - that could protect individuals against competing action tendencies. One category of individual difference constructs are action controls used to handle competing intentions and other distractions affecting attention processes, and other goal-related actions that individuals engage themselves in to manage available resources in timely and efficient ways. It also incorporated the work on mindfulness, effort and persistence. (Snow, Corno & Jackson 1996, 273.)

The following two categories of conative constructs are orientations to self and toward other persons and social tasks. These two constructs could also be considered as just another group of affective or personality factors. Self-directed constructs, such as self-concept or self-image as a learner, seem fundamentally motivational in function, more closely tied than personality constructs to self-perceptions with respect to particular performance contexts or goals. Similarly, other directed constructs such as empathy and persuasibility seem fundamentally volitional. They include sensitiveness and receptiveness to social information, and the ability to judge environmental influences such as motives, goals, and personalities of other persons. But they also define - and are defined by - distinct and purposeful patterns of action with respect to other persons and social situations. (Snow, Corno & Jackson 1996, 273.)

There are also two categories to be identified that are important determinants of goal choice and motivation. One encompasses *self-directed orientations* such as self-concept, self-worth, and self-efficacy. The other comprises values, attitudes and interests in preferred subjects, matters, tasks or procedures. Explicit intentions are more likely than other goals to be enacted in the long-run, but even these are not accomplished automatically, and controls are necessary to protect intentions whenever there are questions about follow-through situations. Looking more carefully at these self-directed orientations, one could identify that a self-concept includes both self-knowledge and an evaluation of the value or worth of one's own abilities, actions, or products. (Snow, Corno & Jackson 1996, 276-278.)

In this study, the personal styles are emphasised as learning styles and strategies. A learning style construct would presumably encompass both one's own approach to learning, studying, and problem-solving tasks. However, many individual differences in style include variations in preferred modes of task performance, and may also refer to preferred and environmental

conditions in which such performance is undertaken. Furthermore, theorists such as Messick (1987, 1993, 1994) see style constructs as linkages or bridges between traditional ability and personality constructs, and as more directly representing processes than either, styles are both expressions of personality in action and expressions of preferred or habitual utilisation of abilities (Messick 1987, 1993, 1994 cit. in Snow, Corno & Jackson 1996). Smeck (1988b) also would place learning styles between personality traits and learning strategies in a causal chain of learning outcomes. He interprets style as an expression of personality in a situation of preferred learning strategy, but it also includes aspects of motivation, affect and cognitive style. (Smeck 1988b cit. in Snow, Corno & Jackson 1996, 282.) Learning styles are characterised as the independent-internal learner description. *Achievement via conformance*-individuals are described as capable, co-operative, organised, responsible, persistent, industrious, and sincere. In contrast, *Achievement via Independence*-individuals are described as mature, forceful, demanding, independent and self-reliant. However, the domain of volition includes constructs involved in implementing goals, assisting individuals to carry out their best-laid plans and intentions. (Snow, Corno & Jackson 1996, 286-287.)

According to Corno (1993), a second category of other-directed orientations is also located under volition. Individuals open to external influence from others must at some level permit it, even pursue it, and because individuals must behave intentionally in attempts to influence others. Characteristics such as persuasibility, empathy and social intelligence describe these factors of individuals. Both self-directed constructs and personal styles overlap with what are usually considered cognitive skills, strategies and tactics. (Corno 1993 cit. in Snow, Corno & Jackson 1996.)

3.4 Identifying Cognitive Constructs of Co-operation Capability

Individual differences in relation to learning and development have traditionally been used to focus on cognitive constructs. However, although knowledge and skills (procedural and declarative knowledge) are important, they are not sufficient. As stated earlier, in the beginning of this chapter, cognition is a generic term for any process whereby an organism becomes aware or obtains knowledge of an object. This includes that an individual perceives, recognises, judges, reasons and carries out sensible things and actions. Cognition is mostly combined and associated with the intelligence of a human being. (Ruohotie & Koironen 2000, 29.)

Cognitive theories make a distinction between declarative and procedural knowledge. Declarative knowledge can be thought of as a knowledge network in which concepts and facts are linked together. New knowledge develops as a result of a process of construction; organising the interdependencies of different pieces of distinct knowledge. Procedural knowledge can be thought of as a set

of rules, or a recipe, which helps in remembering and applying knowledge. This combines aspects of both knowledge and skill. Knowledge can not be used in practice without skill, and even a modest amount of skill presupposes some knowledge. It is also possible to discern schematic knowledge which has a significant role, e.g., when identifying the structure of a task, as well as strategic knowledge which has an impact on the structure of the plan of action. (Ruohotie 1998; Ruohotie & Koiranen 2000.)

In an entrepreneurial context, e.g., entre- and intrapreneurs use an interdependent combination of declarative knowledge and procedural knowledge. They need a strong base of relevant domain knowledge, but they cannot use that knowledge in practice without skills and strategies. From this point of view, so far, the 'skill' factor has dominated our discussion, both in theory and practice. However, there is also much evidence based on the reflections of Snow, Corno and Jackson (1996) as well as Ruohotie (1998), Ruohotie & Koiranen (2000) and Koiranen (1998, 2000) that the 'will' factor is essential, and not less important to entrepreneurial behaviour and success.

Cohen and Bacdayan (1994 cit. in Aldrich 1999, 90) stated that two kinds of knowledge are relevant to organisation building, that is, procedural and declarative. Procedural memory refers to the things people know because they have a stored stock of routines and skills applicable to familiar situations. Procedural knowledge does not necessarily come from the personal experience of the owner-managers, it can also be learned from others. Procedural memory tends to be use-specific, preventing the actor from generalising from it to dissimilar situations. Consequently, tacit knowledge refers to learned understanding that is difficult or impossible to verbalise (Polanyi 1966; Nonaka & Takeuchi 1995 cit. in Aldrich 1999, 91). In other words, learning of mutual competencies and differences is bound to lessen the negatively experienced dissimilarity, and thus to increase mutual understanding. Much of procedural knowledge is tacit or implicit and thus hard to codify. Tacit knowledge is a kind of result of maturity and experience. Declarative memory, on the other hand, refers to an 'abstract' level of knowledge. It is the memory of facts, events, propositions and principles. Declarative knowledge can be, for instance, industry-specific, or industry recipes captured by the notion of shared understandings that are industry-specific. (Aldrich 1999, 96.)

The degree to which personal entrepreneurial skills are demanded of the owner-manager (entrepreneur) is a function of the contextual environment he/she faces (Gibb 1999, 14). According to Gibb (1999), coping with the management of processes and networks will make greater demands upon a range of entrepreneurial skills, capacities or attributes. Gibb (1999, 14) has pointed out the importance of the following entrepreneurial 'skills':

- Intuitive decision taking/making - the skill to take decisions based upon judgement with the limited formal information.
- Creative problem solving - finding innovative ways of dealing with the major problems and opportunities.
- Managing interdependency on a 'know who' basis - social skills associated with building trust and friendship with key stakeholders and contacts.

- Ability to conclude deals - skill in bringing together different perspectives on a problem or deal in order to achieve a firm conclusion.
- Strategic thinking - an ability to 'think' on his/her feet, about the longer term implications of activities without resort to more formal planning of 'scenarios'.
- Project management - ability to manage and 'see through' specific new developments (which build the business internally and its reputation externally).
- Time management - ability to cope with flexible hours and multiple demands from internal and external stakeholders and family.
- Persuasion - skill in persuading stakeholders to undertake courses of action which are judged desirable.
- Selling - skill in setting out the benefits to stakeholders of dealing with a company as a business.
- Negotiation - skill in bringing together different perspectives on a deal to reach a conclusion of advantages to the business.
- Motivating people by example - ability to lead by example.

These aforementioned skills and capacities are underpinned by a number of basic attributes generally associated with the entrepreneur, including among others: self-confidence and self-belief; a high level of autonomy (locus of control); a high level of empathy with stakeholders and with customers; a hard working disposition; an orientation to achievement - setting targets that are reasonable in order to get things done; a propensity to take reasonable risks; and a flexibility in personality. (Caird 1988, 1-71 cit. in Gibb 1999, 15.)

Ruohotie (1998, 36) typifies beliefs as follows:..."*Beliefs are not strictly cognitive since they have their roots in affection. Also the volitional aspects of beliefs such as the connections between beliefs and intentions/actions are important... Beliefs can be classified goal beliefs, involving e.g., intrinsic and extrinsic orientations, value beliefs, involving intrinsic interest and instrumental value, self-efficacy beliefs, involving perceived abilities, self-confidence, and control beliefs,... involving perceived internal vs. external control, outcome expectancies...*" (see also Ruohotie & Koironen 2000, 35.)

3.5 Summary of Chapter 3

The co-operation capability was analysed and described mainly using the model of the Provisional Taxonomies of Individual Difference Constructs introduced by Snow, Corno and Jackson (1996). The main viewpoints and concepts of the descriptive analysis of co-operation capability are summarised in Table 1. The co-operation capability refers to 'view of life' (*openness*), motivation and volition (*willingness*) and knowledge and skills (*abilities*). Values, attitudes and beliefs of the owner-managers are also influencing the co-operation capability.

TABLE 1 Descriptive Summary of Affective, Conative and Cognitive Constructs of Co-Operation Capability

<p><i>The affective constructs of co-operation capability are summarised as follows:</i></p> <p>‘View of Life’ ‘View of Life’ is the most extensive. ‘View of Life’ is quite stable concerning the questions of life.</p> <p>Values Values represent and reflect an individuals’ desires/ideals/expectations towards co-operation. Values are associated with the family, work and environment wherein the individuals act. Values are also culturebound.</p> <p>Attitude Attitude is the way of thinking, feeling and acting in a certain way. It refers to the suggestion that individuals are <i>open</i> to new ideas and towards co-operation.</p> <p><i>The conative constructs of co-operation capability are summarised as follows:</i></p> <p>Motivation The motivational constructs of conation cover, e.g., internal and external goal-orientation, need for achievement, self-esteem and beliefs in one’s own possibilities, as well as the incentives of co-operational actions.</p> <p>Volition The volitional constructs cover, e.g., <i>willingness</i> to learn and work together for a shared purpose in order to achieve one’s own and joint goals (achievement motivation), persistence, intrinsic regulations, control and evaluation processes of individuals, control strategies that help to control collective as well as individual resources, emotional attentiveness, personal styles of processing knowledge (learning styles/strategies).</p> <p><i>The cognitive constructs of co-operation capability are summarised as follows:</i></p> <p>Cognitive constructs of co-operation capability define the knowledge (declarative) and skills (procedural) as <i>abilities</i> to use and produce knowledge and resources, and produce new knowledge in co-operation with other partners, and learning abilities (strategies). Skills can be defined as, e.g., problem-solving skills, negotiation skills, decision-making skills, strategic planning skills. Knowledge empowers one to cope with the changes in systems and the environment.</p>

4 A CLOSER LOOK AT THE CONTEXT OF THE STUDY: OWNER MANAGERS AS NETWORKING AND CO-OPERATING ACTORS

In this chapter, the context of the study is given a closer look. The definitions of family business are introduced in section 4.1, and the special characteristics of family firms are revealed in section 4.2. The need for the co-operation in family firms is described in section 4.3, and the contextual issues paving the way for the co-operation and restricting the co-operation between the family firms are discussed in sections 4.4 and 4.5. The summary of the chapter is presented in section 4.6.

4.1 Notes on the Definitions of Family Business

Most family business researchers have continuously arrived at a 'dead-end' trying to define what a family business really is. A variety of definitions is being used in this field. As the case with entrepreneurship there is no widely accepted definition of a family business, least of all one acceptable to owners of the enterprises themselves. Thus - as in any young field - it should not be surprising that there is little consensus on a definition.

Neubauer and Lank (1998, 5) provided a list of elements in order to exemplify varying definitions:

- The percentage of share capital (voting or otherwise) owned by a family.
- Employment of owning family in executive or other positions.
- The existence of non-family executives or employees.
- The extent to which the intention is to maintain family involvement in the future.
- The number of generations of the owning family involved in the business.
- The number of families involved in either management and/or ownership.
- Whether a given family accepts that it controls its own enterprise.
- Whether non-family employees accept that it is a family enterprise.

- Whether direct descendants of the founder have management and /or ownership control.
- The size of the enterprise, particularly the number of the employees.

TABLE 2 Family Firm Definitions used in Previous Studies (adapted from Westhead & Cowling 1998)

Author(s)	Family Business Definition
1. Family Involvement /Perceived to be a Family Business	
Binder Hamlyn (1994, 10)	The directors in the company had a family relationship.
Carsud (1994, 40)	A firm's ownership and policy making are dominated by the members of an 'emotional kinship group' whether members of that group recognise the fact or not.
2. Family Ownership	
Donckels and Fröhlich (1991, 149)	Family members in one family own 60 % or more of the equity in the business.
3. Family Management	
Daily & Dollinger (1992, 126; 1993, 83)	Two or more individuals with the same last name were listed as officers in the business and/or the top/key managers were related to the owner working in the business.
4. Inter-generational Ownership Transition	
Churchill & Hatten (1987, 52)	A useful start to researching family businesses is to identify the critical differences between family businesses and those that are owner-managed. These differences seem to be two: involvement of family business members in the business, and non-market-based transfers of power between family members...there are two aspects of this transfers of ownership or control of property rights, and a transfer of management control of the business operations and strategic direction.
Ward (1987, 252)	A firm passed on for the family's next generation to manage and control.
Handler (1989, 262)	A family business is defined here as an organisation whose major operating decisions and plans for leadership succession are influenced by the family members serving in management or on the board,...this definition indicates that current family involvement in the business, even though these family members may not necessarily be in line for succession, would qualify the organisation as a family business.
5. Multiple Conditions	
Church (1969, 211)	The whole capital is privately held, practically all the important and administrative posts are filled by members of the family.
Channon (1971, 161)	A family member was a chief executive officer, if there had been at least two generations of family control and a minimum of 5% of the voting stock was still held by the family or trust interests associated with it.
Gasson et al. (1988, 2)	A family business satisfied one or more of the following conditions: a) the principals are related by kinship or marriage, b) business ownership is usually combined with managerial control, and c) control is passed from one generation to another within the same family.

(continues)

TABLE 2 (continues)

Stoy Hayward (1992b, 3)	The family body has a considerable impact on the ongoing and future operations of the business and can also be considered where any of the three following criteria are true: a) more than 50 % of the voting shares are owned by a single family, b) a single family group is effectively controlling the firm, and c) a significant proportion of the senior management is drawn from the same family.
Smyrniou and Romano (1994, 5)	A family business satisfied one or more of the following conditions: a) more than 50% of the ownership is held by a single family, b) more than 50 % of the ownership is held by more than one family, c) a single family group is effectively controlling the business, and d) a significant proportion of the senior management is drawn from the same family.
Cromie et al. (1995, 1)	A family business satisfied one or more of the following conditions: a) more than 50% of the shares owned by one family, b) one family can exert considerable control over the business, c) a significant number of top managers are drawn from one family.
Reynolds (1995, 8)	Three types of family businesses are identified: a) sole proprietorships, b) family business where more than 50% of the ownership is owned by family or kin and 50% or more of family or kin are on the management team, and c) family businesses where more than 50% of the ownership is owned by family or kin but less than 50% of family or kin on the management team.

As can be noticed from Table 2, no single definition addresses all these concerns, nor is it one's intent to impose a particular definition.

Shanker and Astrachan (1996) have developed their own definitions of family firms dividing them into three categories which are labelled as follows:

- a) Broad: Effective control of strategic direction, intended to remain in family, little direct family involvement
- b) Middle: Founder/descendant runs the company, legal control of voting stock, some family involvement
- c) Narrow: Multiple generations, family involved in running and owning, more than one member of owners' family having significant management responsibility, a lot of family involvement.

Another very applicable definition which also exemplifies the stages of life-cycles, generation and family values is introduced by Donnelley. Donnelley (1988) defines the 'family business' when it has been closely identified with at least two generations of a family, and when this link has had a mutual influence on the company policy and on the interests and the objectives of the family. Among others, the important institutional values of the firm are identified within a family, either in formal company publications or in the informal traditions of the organisation.

There will be soon as many definitions of a family firm or family business as there are researchers, scholars, consultants, entrepreneurs or others interested in the field. The variety of definitions covers different dimensions such as family involvement of business perceived to be a family business, majority voting share ownership by family members, management of the

business, or an inter-generational ownership transition. One of the emerging criteria used to define family business includes a percentage of ownership, voting control, power over strategic direction, involvement of multiple generations, active management by family members, and others.

One very wide and applicable definition of a family business is introduced by Astrachan, Klein and Smyrnios (2002, 45-58). The authors suggest a proposal for solving the problem of family business definition by considering the F-PEC Scale of family influence. The model comprises three subscales: power subscale, experience subscale, and culture subscale. Based on the definition given above, a family business is defined through adapting the definition of F-PEC by combining the power dimension of family influence such as ownership, governance, and management participation, the experience dimension of family influence that means the number of generations in charge, and the cultural dimension of family business that means family and business values of the networking family firms. The F-PEC Scale (2002, 52) fits the purpose of this study well. In addition, borrowing the idea of Varamäki's illustration of a cube model of inter-firm co-operation (1997), and combining the idea of the F-PEC Scale of Family influence, the following illustration of a family business definition has been developed in order to describe the networking family firms of this case study. The definition originally provides a basis for understanding family involvement in a business. FIGURE 10 illustrates the family business definition used in this study.

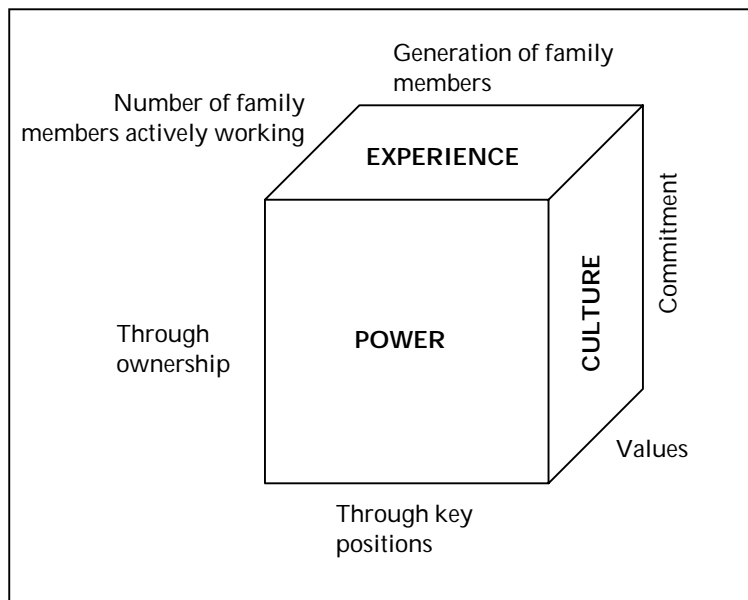


FIGURE 10 Model of Family Business Definition for the Purpose of This Study

The studied family firms can be described according to the three subscales considered by power through ownership and key positions, experience through number of family members actively working in the business, and through the overlapping family and business values, and commitment associated with

family and business culture. However, the model of family business (constructed here) is valid for its descriptive and pragmatic considerations for the purpose of this processual empirical study.

4.2 Special Characteristics of Family Firms

Family firms have a number of particular features. They are usually based on personal contacts, not official links; they are informal, and are not openly advertised. They are flexible, being built up and maintained in the hands of the family members, specifically to suit the purposes of their members. Most authors agree that commitment of family members to their companies is necessary for the success of a firm and the training of a successor to take it over (Lansberg & Astrachan 1994). The competencies and capabilities of a firm have rightly been identified with the behavioural and social processes resulting from the systems interaction (see Ward & Aronoff 1994). The deep assumptions, beliefs, values and attitudes of owner-managers are recognised as a part of a firm's behaviour and are transferred to the next generation (see among others Dyer 1986; Hall & Melin & Nordqvist 2000; Koironen 2002).

Family objectives and business strategies are said to be inseparable, thus creating a more unified long-run strategy and commitment to fulfil them (Ward & Aronoff 1994). Family firms were found to be more responsive to changes in the business environment and, correspondingly, to have less interdependence with the macro-environment and therefore, also, to be less susceptible to negative downturns (Donckels & Fröhlich 1991). Family firms seemed to have a long-term view on business. They engaged in more careful strategic planning which helped to strengthen the enterprise and extend its life span. (Littunen & Hyrsky 2000.)

Most of the small-and medium-sized enterprises in Europe are family business (Donckels & Fröhlich 1991, 149). According to Littunen and Hyrsky (2000) and the report of the Finnish Family Business Network, about 70 % of Finnish firms are family-owned firms - although no government agency has statistics tailored to family business, and thus, definite lists of family businesses are unavailable (Littunen & Hyrsky 2000, 42).

Donckels and Fröhlich (1991, 158-160) conducted a STRATOS study titled: (Strategic orientations of SMEs) *"Are Family Firms Really Different?"* This cross-cultural survey was conducted in eight European countries, comparing family businesses and non-family businesses. The study pointed out that family businesses are different from non-family businesses. Some typical and discriminating characteristics of family businesses and non-family businesses are briefly reflected in this study. Even though these statements are more or less results of one extensive study (STRATOS), they seem to refer to some common traits in family businesses. The following characteristics are a reflection of the STRATOS study and other authors in the field of family business.

- Family businesses can be considered as rather inwardly directed or close family related systems. This statement refers to the fact that the family business concerns both family and business interests (see also Dunn 1995). The study revealed that the management should stay in the hands of family, and that family traditions should be maintained and a business should be built up for the family. The family subsystem dominates the business, management and equity systems.
- Family business managers are less often pioneers, but more often all-rounders and organisers. Many of the family businesses are rather risk-averse, and thus also less innovative and less growth-oriented. In general, creativity and innovation are considered less important in family businesses than in non-family businesses.
- Family business seems to need fewer socioeconomic networks, less co-operation with other firms, less subcontracting, and less collaboration with other firms for production. It is not clear whether family businesses have more actual independence, or whether the owner-managers have a more positive attitude toward independence. The interdependencies with the environment-culture and the macroeconomic situation are less intense in family businesses. The main reason for this is the crucial role of the entrepreneur, who - in most cases - is also the owner-manager. Taking his/her less pioneering profile into account, it is not at all surprising that he/she is less network-oriented.
- The strategic behaviour of the family businesses seemed to imply a rather conservative behaviour and attitude. This is linked especially to the all-rounder and organiser types of entrepreneurs. Owner-manager's of this type are less prepared for exporting and other internationalisation strategies. In addition, family businesses are stable rather than dynamic in their respective economies, because their owner-managers are significantly less profit- and growth-oriented than managers in non-family firms (Donckels & Fröhlich 1991, 159). Also Littunen and Hyrsky (2000, 51) have pointed out, that owner-managers have abilities and resources to operate relatively successfully in the proximate market, often with an unique or differentiated product.

The results of the survey (STRATOS) revealed that family businesses and non-family businesses are different. There are also studies that have revealed that family firms have good basis and strenghts for success in strategic alliances, and capabilities needed creating business relationships (see e.g., Gallo, Arin, Manez & Cappuyns 2002, 141-153). It has been found that success in the formation and development of strategic alliances for internationalization in family businesses also requires the following: (1) an increase in management capabilities in a context where objectives are not shared, 2) the development of personal preferences toward the use of the alliances, and 3) the development of trust in the partner organization. (Gallo et al. 2002, 142.)

The three circle model of family business developed by Tagiuri and Davis (1982) has provided a rich conceptual framework to examine singular features of the different subsystems of family, business and ownership. This conceptual framework has become the paradigm in the family business field. Thus, studies in the field of family business require examinations considering all the subsystems and their overlapping areas as properly as possible. Looking at this study, the role of owner-manager is crucial and in many ways pinpoints the contextual issues and phenomenon of the study. An owner-manager is simultaneously a member of the management, of ownership, and of the owning

family, and she/he has to cope with the desires of each party. In addition to inter-firm co-operation and the processual view on the networking family firms, it may be easier to examine this study by concentrating on contextual issues, but not using the framework as such.

4.3 The Need for Co-operation in Family Business

There are lots of reasons why firms enter networks, alliances or inter-firm co-operation, in any particular networking relationships. Some authors have suggested that the transaction costs, market entering costs or legitimacy costs are a reasonable basis on which to integrate functions and acquire resources (see Williamson 1985). Other scholars have suggested that firms enter strategic alliances to learn new skills or acquire tacit knowledge (Hamel 1991). From the viewpoint of social context and embeddedness, it has become important to co-operate in order to share information and acquire capabilities. Manufacturing firms, recognising the need for change in order to remain competitive, are confronted with an array of templates of change which map out pathways for developing core competencies to achieve enhanced performance (Gulati 1995).

Recent studies of small businesses, e.g., in Italy have underlined the increasing importance of the following two phenomena: 1) the strengthening of the relationships among firms belonging to the same productive region through the formation of networks of firms, 2) the development of groups of firms whose ownership belongs to the same family or person. In the first case, it is above all, the need to co-ordinate activities that encourages firms to change their relationships, while in the second case, the aspect of control takes on the greatest prominence (Balloni & Iacobucci 1994, 310-311). Internationally well-known regions where entrepreneurship and especially family business are socially embedded, albeit for very different historical reasons, include, e.g., Emilia Romagna in Italy, Silicon Valley in California, USA, Västbo in Sweden (see among others Johannisson 1983, 1988; Piore & Sabel 1984; Lorenzoni & Ornati 1988; Porter 1990; Pyke et al. 1990). The socio-economic setting promotes intra-interorganisational production by way of flexible specialisation (Johannisson et al 1993).

The major explanation for the presence or absence of local synergies arising from networking strategies relates to the interplay between co-operation and competition in a region (Lorenz 1988; Pyke 1988). The authors have indicated that where firms situated in close proximity undertake joint projects leading to mutual dependency, the bonds of the exchange networks draw the trading partners closer together and the more savage elements of market competition are reduced. In industrial districts firms tend to merge, sharing a common culture where trust as a collective capital is largely a by-product of the common culture. For many socialised industrial districts, the desire for recognition and economic advancement tends to be manifested by the

aspiration for self-employment. (Becattini 1989, 38 cit. in Fletcher & Hardill 1995.)

Horizontal networking and inter-firm co-operation could provide more resources for R&D processes and also for marketing information. It helps firms to concentrate on their own core competencies and create added-value for their customers. Strategic alliances, joint ventures or other forms of networking and inter-firm co-operation reduce the uncertainty and competition found in an industry. The difference between competition and co-operation is, in certain cases, frequently treacherous – with especially horizontal co-operation models containing both elements. In the widest sense, the inter-firm co-operation and networking can be seen as a global net of interaction in which the complex relationships between the actors in the network form one single chain (Mattsson 1986).

In horizontal networks, the firms have an ability to co-operate with one or more product lines or market areas, and compete at the same time with the product line or market area of networking. In other words, when planning and establishing another business transaction, it is important to state clear and common goals for co-operation for future success and survival (Szarka 1990). Harrigan (1988) points out that firms that are coping with horizontal networking succeeded in their networking better than those firms that were vertically integrated. The reason for this was due to the firms in horizontal networking having a business level that is equal and homogenous.

The network enterprises' close links to external actors give access to advantages like new know-how (Powel 1987), goodwill (Gerlach 1987), risk sharing, and scale and scope of economies (Powel 1987; Gerlach 1987 cit. in Johnston & Lawrence 1988). Also, adaptation to environmental changes can be enjoyed, since fewer employers' connections need co-ordination (Miles & Snow 1986). From the standpoint of the management of business activity, co-operation involves concentration on physical operations, resources, knowledge, skills, and information, which are connected with the partners' tasks in the co-operative relationship (Paasche, Pettersen & Solem 1993, 79).

4.4 Contextual Issues Paving the Way for the Co-operation between Family Firms

The most durable and reliable relationships in a personal network are strong ties which are usually of a long duration. People rely on strong ties for advice, assistance and support in all areas of their lives. They are 'two-way' relationships and not governed by short-term calculations of self-interest. The long-term relationships are based on mutually oriented principles of the members of the network. Strong ties provide a shelter within which entrepreneurs can avoid the opportunism and uncertainty otherwise possible in market-oriented transactions. Strong ties are typically more reliable than other

ties, and they involve a strong degree of loyalty and trust and emotional closeness. Individuals tend to make heavy investments in these types of relationships, requiring fairly frequent contact with other members of the network. (e.g., Granovetter 1993; Aldrich & Brickman Elam & Reese 1995, 15; Johannisson 1988.)

In other words, in social situations like long-term networking and inter-firm co-operation, people are expected to deal with each other for a long period of time, and strong ties yield three benefits: trust, predictability, and voice. Trust tells founders whom they can count on in difficult situations and in joint efforts. This type of behaviour also enhances the predictability in relations between the members of the network. Predictability refers to how the others will behave if the situation will change. Using voice in a relationship means that the persons involved will make their complaints known and negotiate over them, rather than silently sneak away. (Hirschman 1972.)

A group or a network needs to be 'around' for a while for its members to develop mutual social understanding. The same applies in a family firm. A common set of shared values can be such an integrative link. This means, in many cases, less dependence on commands and a more frequent use of consensus (Bjerke 2001). Deal and Kennedy (1988) pointed out that "*although a value system may be most visible in the few words that make up an advertising slogan...the successful companies have a rich tradition of values, beliefs and themes that have developed over the years...*". One might argue where these values come from. They mostly come from experience from testing what does or does not work in the economic market.

Lorenzoni and Ornati (1988) and Larson (1992) argued that formal contracts were less important than informal agreements among firms, based on their history with one another. Long-term relationships based on trust and collective mutual understanding created partnerships in which there was a lack of explicit control and monitoring devices between firms. Incentives for economic action were jointly set, rather than being based upon formal buyer-seller relationships. In the network, the leading enterprise organises assignments for the other enterprises. By means of co-operation, additional value is created for the actors and actions, and in order to make this succeed, the enterprises have to have a common objective, mutual trust and united action.

Quite a few studies in the field of small and medium size business and family business networking argue that the culture of the firm has an influence on what is important for business. Cultural norms, values, basic beliefs and deep assumptions and artefacts permeate organisational boundaries, via the personal history each member brings to an organisation, and via the reproduction of practices from the surrounding society. Organisations are sites for the reproduction of cultural norms and practices, but they also regenerate them (Aldrich 1999). A firm having a strong culture can be a source of competitive advantage (e.g., Schein 1985, 1992; Dyer 1986; Fiol 1991; Bjerke 2001; Deal & Kennedy 1988). Culture shapes the individuals within a community, including the entrepreneurs, his/her family, friends, acquaintances

and role models. Thus, individuals are both the product and carrier of values and institutions (e.g., Aaltio-Marjosola 1991, 1992; Kyrö & Suojanen 1999).

Inter-organisational relations may serve as conduit for information about the practices of others. According to Mizruchi (1996), researchers have divergent opinions regarding whether the consequences of network ties are intended or blind. Some researchers argue that such relations simply allow managers to learn about and copy successful practices. In contrast, other researchers assert that imitating others is a socially conditioned response to uncertainty.

Congruence of aims and mutual trust can underpin network formation (Thorelli 1988; Jarillo 1988). Trust leads to co-operation, the opposite of control. Co-ordination is here understood as a situation in which a leading firm (Lorenzoni & Ornati 1988) or a "hub-firm" (Jarillo 1988) orchestrates the value-adding chain. The network is equal if the members of the firm have mutual interests, and agree on the roles of the resources of the network, as well as on the co-ordination and control of the different tasks in a network (Benson 1975). According to Jarillo (1988), highly significant advantages thereby accrue, that is: a lowering of costs, superior performance, and - last but by no means least - a sharing of risk. As with any form of venturing, certain preconditions for success remain, including good judgement and timing, the identification of suitable partners, appropriate skills, outlook and values, and a favourable environment.

Lazerson (1995, 35-59) studied Italian knitwear industry and stated that a modernised form of putting out, composed of interlinked microfirms, is compatible with large firms and their organisational efficiency. The success of the system rests on technological and marketing factors, the presence of cohesive family units, co-operative relationships between business and community actors, and an institutional environment supportive of family firms. The small firms are embedded in local networks of both large and small firms on which they depend for job experience, supply, subcontracting, and customers. The firms also contracting outside the nation and country seek new partners that are non-local suppliers and competitors (Young & Francis & Young 1993). A network, as a system, allows small firms to specialise in those components of the value chain in which they have competitive advantage, bonding out those activities in which they are disadvantaged to network partners, who do have strengths in the relinquished activities. (Jarillo 1998; Lazerson 1988.)

The dimensions of alliances can be categorised as horizontal, vertical and diagonal (Nooteboom 1999). However, the term 'alliance' is interpreted in a broad sense, covering a wide spectrum of forms of cooperation between firms, between the extremes of full integration within a single, centralized firm and fully independent firms engaged in pure market contracting. Usually, the spectrum is indicated along a single dimension of concentration or integration (Nooteboom 1999, 64), although integration has at least two dimensions, such as financial integration of ownership, entailing claims to profit, and organisational integration, entailing decision rights. According to Nooteboom (1999b), an alliance is the general term for a number of inter-firm relationships that go

beyond pure market transactions. The most pure strategic alliances are the non-equity modes, based solely on voluntary co-operation and the mutual access to resources. It is also worth mentioning that as the legal form at times is second to the content of the alliance, joint ventures are also considered strategic alliances (Sorensen 1999, 2-3.)

According to Wikström and Normann (1994, 42) the overriding purpose of strategic alliances in most cases is to improve the competitiveness of the participating organizations. But most alliances are intended to improve not competitiveness in general, but certain aspects of it. However, the very core of an strategic alliance is that the companies possess resources attractive to others and that the partners have access to the resources and capabilities of each other. Pooling and developing resources of the participating partners develop competitive advantages. (Sorensen 2001, 2.) There are several basic forms of alliance – joint ventures, collaborations, and consortia being the most common forms. Joint ventures are most appropriate for distinct businesses, collaborations where flexibility is the key requirement, and consortia where two partners are not enough to ensure competitive advantage. According to Child and Faulkner (1998, 111), however, these forms refer only to strategic alliances, and also ignore the other way of looking at form, namely, the scale alliance (cooperation between competitors to realize scale economies) and the link alliance (cooperation between firms at different stages of the value chain). The motivation and need for cooperation between enterprises can be seen to lead to different cooperative forms: those that seek organisational learning, and those that aim at skill substitution. The distinction between the two of these is somewhat normative, and could be reconsidered in a real-life context. Thus, the following list of the main forms of strategic alliances describes the multiplicity of categories of alliances: (Wikström & Normann 1994, 42³; Sorenson 2001, 3; Child & Faulkner 1998, 101-103.)

- *Strategic alliances* can be divided to equity alliances, such as majority joint venture, and minority joint venture. Non-equity alliances comprises such forms as, licences and franchising, management contracts, production contracts and subcontracting, and business-to-business cooperation arrangements (Sorenson 2001, 3).
- *Market alliances*: have the aim to improve the company's position on the market by more efficient distribution, a better product range, a stronger position vis-a-vis distributors, more resources for advertising and other opinion-building activities, by which, the representative knowledge process is reinforced.
- *Production alliances*: the aim is to improve the economics of production and the production technology by exploiting advantages of scale, greater production flexibility a stronger position vis-a-vis suppliers, etc., by which the productive knowledge process is reinforced.

³ A strategic alliance is an organisational arrangement which exploits the resources and competences of two or more organizations, thereby enhancing the competitive strength of them individually (Wikström & Normann 1994, 41).

- *Development alliances*: the goal is to increase development potential as a result of better development resources, better development organization, an extended contact network with the rest of the world, etc., the generative knowledge process is reinforced (Wikström & Normann 1994, 42-43).
- *Cooperative strategy of alliance*: 1) *learning relationships*, such as most forms of strategic alliances are, joint ventures, collaborations, consortia. And 2) *skill-substitution arrangements*, such as virtual corporations, keiretsu and networks. Generally, there exist technology-development coalitions, single-country and multi-country alliances, joint ventures creating a daughter company from two or more parent partners, minority share exchange agreements, licensing agreements, and no doubt others (Child & Faulkner 1998, 102).
- *Strategic alliances* divided into three principal types: shared upstream, and downstream integration, additive alliances in which each partner contributes assets to each other, e.g., research and development (R&D) manufacturing and distribution functions as appropriate, those involving complementary assets (Garrette & Dussauge 1995 cit. in Child & Faulkner 1998, 103).
- The types of alliance in Pucik's classification are: 1) alliances for technological reasons, e.g., cross-licensing, 2) co-production, 3) sales and distribution ties, 4) joint product-development programmes, 5) the creation of joint ventures. According to Pucik, all the types of alliances have the aim of 'attaining the position of global market leadership through internationalisation of key added value competencies' (Pucik 1988, 78 cit. in Child & Faulkner 1998, 104).

Furthermore, all these categorisations might also involve alliances that fall into several other categories at the same time, i.e., cardinal sin for taxonomists. Thus, flexible networks are collaborative and volatile to environmental changes, it is also worth considering the level of ascending integration of different cooperative forms by placing them into a hierarchy-markets continuum. In this light the highest level of interdependence short of hierarchy is the strategic alliance, which may cover a wide variety of functions but is normally one of the three basic structures: the equity joint venture, the collaboration (little or no equity exchange and no created boundary company), and the consortium. Put concisely, as Thorelli (1986) has stated, in the strategic alliance, companies merge a limited part of their domain with each other, and attempt to achieve through their joint value chains the competitiveness that individually might have eluded them. (Child & Faulkner 1998, 122.)

In this study, it can be suggested that if the networking family firms have set up a separate joint venture company it may have fit their cooperative strategy as a network and as individual companies as well. Hence, in this way the ideas based on Faulkner's study ((1995) cit. in Child & Faulkner 1998, 109) fit this study. Faulkner's (1995) research on strategic alliances suggests:

- 1) the scope of the alliance constitutes a distinct business.
- 2) the alliance assets are specific, easily separable from the parents, and need to be jointly managed.
- 3) the alliance objectives can be clearly measured in relation to the use of the assets.
- 4) there is a perceived need to tie in the partners.
- 5) it is legally necessary, for instance, to enter a national market.
- 6) the partners wish to allocate a predetermined level of resources to the venture.

- 7) the scope of the venture is not central to the partners' core business, or is at least geographically distinct.

A horizontal network can be seen as a result of long-term commitment and organisational learning, facilitating adoption of new processes and procedures (Hamel 1991). On the other hand, network participation makes it possible for the firms to learn more about themselves and each other, thereby enhancing competitiveness in dealing with firms outside the network. In this respect networks - like joint ventures - have a particular competitive advantage stimulating learning throughout the firms involved, because networks are based on norms of trust and long-term commitment (Jarillo 1988).

Horizontal alliances refer to collaboration between firms that are in a competitive relationship in some phase of the value chain. Competitors enter co-operation to enhance their core competencies through associate's that are competitor's, yet simultaneously limiting the partner's access to proprietary skills. R&D co-operation with universities and research centres is also regarded as horizontal, since it is usually targeted at core competence development. (Ali-Yrkkö 2001, 42.) Diagonal alliances, in turn, aim at 'market making', i.e., developing new applications or product combinations with companies in third industries. In Finland, for example, Nokia develops mobile banking services, intelligent home appliances and health-related applications together with respective service or product suppliers. Learning and innovation are core issues discussed in 'diagonal' alliances as well.

Vertical alliances, i.e., subcontracting based firms, and so called systems integrators are also one part of the vertical production chain by producing components for, e.g., the furniture and knitting industry, or compatibility in different technology industries (see Nooteboom 1999, 65; Ali-Yrkkö 2001, 42; Normann & Ramirez 1993, 65-77). However, in vertical alliances two fundamental shifts are in focus: Companies are in the business of their customer's values creating process. The classical value chain model (Porter 1985) as a mental model proves to be a special rather than a general case. In other words, the value chain has been extended and adjusted as to lose its validity compared to other models increasingly concerned with technology innovation, knowledge as well as reciprocal and synchronous value creation processes between inter-firm and alliance types transactions. (Wikström & Normann 1994, 29-31.)⁴

Social interaction refers to strong ties that facilitate learning, by making transfer of complex and tacit knowledge possible. Thus, customer networks (weak ties) may give novel perspectives and a broader knowledge base for a technology-based firm to draw on (see Yli-Renko 1999, 190; Ali-Yrkkö 2001, 12). In the case of some alliances which are set up as a new unit for a special purpose, such as a joint venture, the knowledge sought from partners may only be relevant to, and embodied in, the output of that unit. Generally, co-operation

⁴ The alliance palette includes 'horizontal' alliances between competitors, 'diagonal' alliances between companies in different industries and 'vertical' alliances between buyers and suppliers (Ali-Yrkkö 2001, 12).

can open up important opportunities for organisational learning which were not envisaged or given much importance when an alliance was first formed (Child & Faulkner 1998, 288-289). However, different structures of networks will result in different amounts of learning.

Provan and Human (1997) have studied organisational learning and the role of the network broker in small-firm manufacturing by looking at the secondary wood processing industry networks. The study applies interesting results of inter-firm networks and their members learning experiences and the idea of the capability development through learning in a network context. The study suggests that network participation provides opportunity for SMEs to learn about their capabilities and about their competitors in ways not available through market arrangements. The other findings suggest that network participation expands SMEs' awareness of other organisations in the network. Through the study the authors argue that the role of a network broker is the key to understanding network learning.

The learning environment in the typical small business is therefore one of "learning by doing" under the pressure of the development and survival of the business (Christenssen 1989 cit. in Gibb 1993). Gibb (1993) states that it is unwise to make clear distinctions between business development, organisation development and management development - the three go hand in hand with the owner seeking to maintain, develop, and adapt the organisation in an appropriate form for survival and growth dependent upon personal ambition. The success of this quest is largely dictated by the owner's ability to develop his/her appropriate knowledge and skills. The business is indeed the learning organisation for the entrepreneur. Most of the learning which will take place is a result of feedback from customers, suppliers, competitors, and peer group through a process of personal interaction rather than from formal instruction. (Gibb 1993.) A learning interpretation of inter-firm co-operation seems to lead to yet another approach. One could recognise that not all firms and not all networks are geared towards innovation, and that not all firms or all networks learn in the same way. There are both firm and network types (that are at a different level of their life cycles) that are oriented to and capable of 'exploratory learning', or oriented to 'exploitative learning', capable of only incremental learning, or even blocked into homeostatic learning cycles (see e.g., Nooteboom 1999, 1998; Child & Faulkner 1998).

There is still not much evidence of a uniting definition of capability among the network, management or social management scholars. In recent inter-firm co-operations studies, e.g., Varamäki (2001) has stated that networking capability is an action-based capacity of an individual (including, e.g., communication skills, co-operativeness, ability to share a vision, trust) or an organisation (e.g., ability to act as a network broker) and extra-organisational activities needed to transform resources into profitable use.

Also Lorenzoni and Lipparini (1999) point out that networking capability accelerates a firm's knowledge access and transfer with relevant effects on company growth and innovativeness. Chaston (1995) illustrates some evidence from the *Critical Events and Process Gaps in the Danish Technological Institute SME*

Structured Networking Model that suggests that networking success and failures are related to internal capability of firms and market condition factors. According to Johannisson (1988), the maintenance of adaptability in a turbulent environment will depend on a firm's capability for change. This capability is composed of resources controlled by ownership, and by other resources that can be reached by way of contextual and global networks.

4.5 Contextual Issues Promoting and Restricting the Co-operation between Family Firms

A commitment to values and values education is the most important contribution a family can make to the success of both the family and the business. A culture based on strong owning family values can benefit business in many ways. Values are associated with the family firms' performance and competitiveness. They influence decision making, strategic planning, motivating family members and employees to work harder and to get the best out of the capacities and competencies they have available. They also challenge the family and business constantly renewing and enhancing conventional thinking and innovation. Values are comprised and combined of both the social and economic interests of family and business goals. A strong family business culture can burnish the reputation of the business in the marketplace. Values can also strengthen shareholders' commitment to long-term goals rather than providing a vision to short-term financial goals or profits. (Aronoff & Ward 2000.)

In family business, values are often used in plural forms, and they have many dimensions. This means that owner-managers or founders of the family firms recognise the existence of a broader reality beyond their financial goals and outcome beyond their performance. According to Aronoff and Ward (2000, 3-4) family businesses have the vast potential advantage of a cohesive owning family with shared values. Consequently, the power of the values in family business is played out in many ways:

- laying the bedrock for corporate culture.
- providing a template for decision making.
- inspiring top performance.
- supporting a patient, long term view.
- reducing the cost of capital.
- challenging conventional thinking.
- adapting to change.
- improving strategic planning.
- executing strategy.
- forging strategic alliances.
- recruiting and retaining employees.
- lending meaning of work.

Aronoff and Ward (2000) have listed twenty winning values that are most often found in successful family firms as being:

- Accountability.
- Adding value.
- Collective good.
- Valuing input and interaction.
- Education and development.
- Ethical conduct.
- Focus on values and values education.
- Fun.
- Justice.
- Meritocracy.
- Openness.
- Practical realism.
- Risk-taking.
- Self-reliance.
- Servant leadership.
- Social purpose.
- Entrepreneurial spirit.
- Stewardship.
- Trust.
- Valuing stakeholders.

A closer look at some of these values is necessary, and need to be taken into consideration in the context of networking and inter-firm co-operation between the family firms. In a recent study by Salvato, Williams and Habbershon (2002, 41-66) values and competitive advantage has been studied by making deeper both the theoretical and empirical understanding of the cultural determinants of dynamic capabilities in family firms. Salvato et al. (2002) analysed how values are pushed into the actual organisational activities and routines of the firm, and how family influenced firms represent a distinct source or pool of value resources.

Figure 11 illustrates a grounded model of the cultural determinants of dynamic capabilities in family firms. Authors suggest that there is a direct link between values and culture on one side, and performance and competitive advantage on the other. Furthermore, trust among family members, norms of cooperation and obligations (cf. commitment) and expectations, and identification also improved the access to resources and the competencies to be recombined, and the necessary motivation to recombine resources. (Salvato et al. 2002, 59-63.)

Steier and Reay (2002, 371-388) discussed how capabilities are created and sustained in family firms looking at the family businesses as 'value incubators'. The recent exploratory study revealed the importance of values learned early in the small businesses, and showed that owner-managers of family firms placed a high value on transferring these values to the next generation.

In real-life business contexts values, such as beliefs, values, norms and artefacts can have both restricting and contributing (strengthening) dimensions as well. Aronoff and Ward (2000, 15) have described how values take shape in

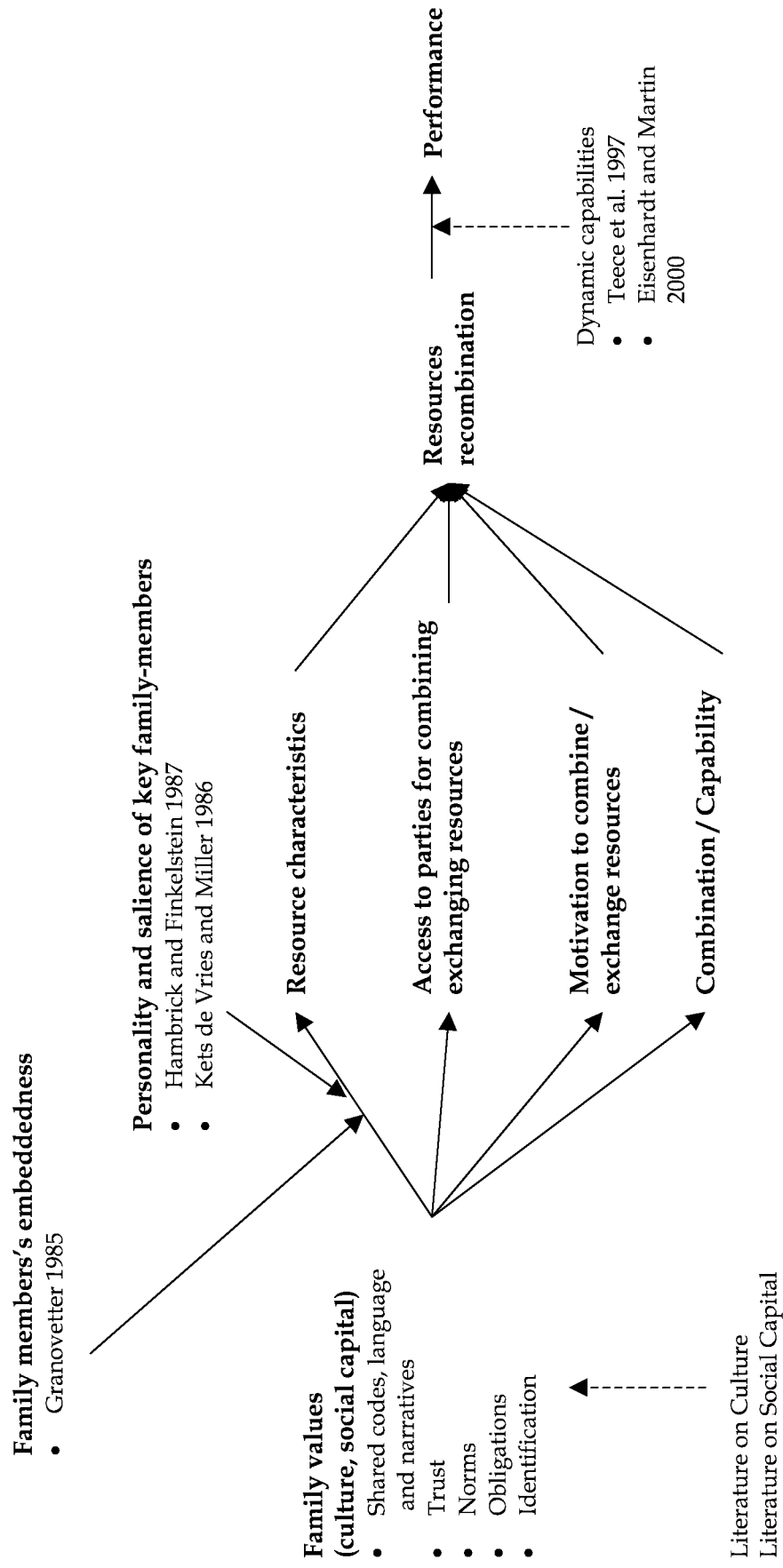


FIGURE 11 A Grounded Model of the Cultural Determinants of Dynamic Capabilities in Family Firms (Salvato, Williams & Habbershon 2002, 61)

practice (see Table 3). Table 3 illustrates how owner-managers or founders own will to power or, moral hazard, untrustworthiness, fear of loosing one's own independence or unwillingness to invest can all be the issues restricting inter-firm co-operation between firms. On the other side, cautiousness to invest, long-term orientation in business goals and visions as well as flexibility to cope with the changing markets have helped to keep the business a success. Nevertheless, according to Aronoff and Ward (2000) ... *"when an owning family's values form the heart of a business culture, some vital synergies can arise. Commitment to values is the greatest strength a family can bring to business ownership"*.

Trust can be seen as a two-way street involving both giving and receiving gestures. Trust, or lack of it, can be found in any relationships. However, its importance in the business environment, particularly in any business relationships and interactions is crucial for long term networking and cooperation. According to Shanker (2000, 13) *"trust is the source of long-term perspectives, the 'family-effect', loyalty, commitment, stewardship and much more"*. In the family business context trust can be both used and built. Trust can be seen as a coin covering both the social and economic capital that can be accumulated or depleted. Trust has been characterised and identified as, e.g., providing a useful road-map toward accumulating trust as five components (Shanker 2000) as follows:

- Integrity: having a reputation for honesty and truthfulness.
- Competence: possessing technical knowledge and interpersonal skill required to get job done.
- Consistency: acting with reliability, predictability, good judgement.
- Loyalty: willingness to protect, support, encourage.
- Openness: freely sharing ideas and information, freely allowing others access to one's thoughts.

However, trust as a word is not sufficient without behaviour and action. Owner-managers of the family firms are in a key position to keep the trust between the partners in cooperation, and within family relations. Shanker (2000,14) has stated that, a family business leader who rejects accountability, refuses to share information, and defines loyalty as obedience by others, is unlikely to create a legacy for future generations. The case can be seen analogous to inter-firm co-operation and networking between family firms. Similarly, in their research on trust being a catalyst in the family-owned business, LaChapelle and Barnes (1998, 1-17) pointed out four dimensions describing the essentials to trust at the individual level. These are, character, competency, predictability and caring. Each of these dimensions are described more in-depth as follows: (LaChapelle & Barnes 1998, 3.)

- Character captures a number of concepts inherent in the basic values of integrity, honesty, and credibility; being perceived as a 'good person'.
- Competency involves skills, expertise, and performance that implies generally sound judgement and decision-making abilities.
- Predictability refers to follow-through, kept promises, and a history of consistent responses and behaviour.

TABLE 3 How Values Take Shape in Practice (Aronoff & Ward 2000, 15)

<p>BELIEFS: All values spring from basic beliefs</p>	<p>Trusting others is a productive and rewarding way to live and do business. Information builds trust.</p>	<p>Self-reliance is the best security, (Or) entrepreneurs make society better.</p>	<p>Human beings will take advantage of one another whenever possible.</p>	<p>What goes around comes around.</p>	<p>Families and businesses do not mix.</p>
<p>VALUES: Philosophies or attributes assigned fundamental significance</p>	<p>Trustworthiness. Trust others when it is prudent to do so.</p>	<p>Independence and individuality.</p>	<p>Vigilance.</p>	<p>Long-term orientation.</p>	<p>Maximize current interests now.</p>
<p>NORM: A shared principle of right action or conduct</p>	<p>All salaries and family gifts are disclosed.</p>	<p>Free choice. All lifestyles or career choices are accepted.</p>	<p>Verify all dealings and commitments.</p>	<p>Invest in the future. Weigh-up all decisions based on long-term effect.</p>	<p>Take advantage of favorable market conditions to sell the business.</p>
<p>ARTIFACT: Practices, products, or stories that serve as signs of underlying values</p>	<p>Disclosure of financial information at annual meetings. A corporate annual report that discloses information even though the company is private.</p>	<p>Story about Grandpa's independence and how his self-reliance helped him survive the Great Depression.</p>	<p>Signed contracts in everything we do.</p>	<p>Story of how a handshake agreement produced a big return six years later.</p>	<p>Rule barring founder's children from jobs in the business. Stories about troubled families.</p>

- Caring is demonstrated through supportive acts that convey genuine interest in the well-being of others, as well as empathy and understanding.

The role of trust has been discussed in recent family business literature and research (see Salvato 2002; Steier 2001; Compagno, Visintin & Pittino 2002; Carlock & Ward 2001). Salvato (2002, 31) has pointed out that trust is affective, relational, and calculation based. Affective and relational kinds of trust mean that family firms are prone to make informal agreements ('handshake agreements') based on affection, and entailing a high level faith in the intentions of another party. Conversely, calculation based trust means that organisational relationships are based on legal agreements and managing the control principles. (Salvato 2002, 31.)

Steier (2001, 364) points out that, as trust is idiosyncratic or unique to a relationship, it is not easily transferable. Although trust deterioration is not inevitable it is very likely, given that trust is idiosyncratic to a particular relationship or network of relationships. It is worth noting that, for example, later generations may not trust other family members in the same way they trusted their parents. It can be argued that optimal trust will depend on family dynamics and the personalities of individuals. However, in the family business context, if relational contracting and trust are indeed sources of strategic advantage, the transfer of ownership and control could get messy. (Steier 2001.)

Carlock and Ward (2001) have stated in their book *"Strategic Planning for the Family Business"* that trust is based on individual experiences with family or business. A business family creates trust by planning and solving tough problems together. The difficulty in building and maintaining trust can make it a unique competitive advantage for family firms. Carlock and Ward (2001) have developed a family business balance sheet in order to identify actions (processes) that build trust (assets) and actions that reduce trust (liabilities). *Trust assets* are things such as, addressing conflict, shared vision, fair process in decisions, planning, governance structures and family agreements. *Trust liabilities* on the other hand are described as being things like, ignoring conflict, individual goals, unilateral decisions, reaction, family politics, and individual deals. Trust seemed to reduce the risk in investments and creates stronger owner-management relationships. (Carlock & Ward 2001, 11.)

In family business the owning family's guiding ideas exert strong influence over strategies implemented. (see e.g., Corbetta & Montemerlo 1995, 254; Lansberg & Astrachan 1994, 39-43.) Decision making in family firms is centralised because important decisions are generally the preserve of family members. Centralisation produces quick decisions, and this can be a considerable advantage when reacting to market opportunities in a changing world. However, the pre-eminence of the controlling family, centralised decision making and long-standing management teams can also often result in static thinking. It can make it less likely that new ideas which are essential for long-term development will emerge, and family firms are often reluctant to use outside advisers preferring the counsel of the family when exploring business matters. (Bridge, O'Neill & Cromie 1998, 130.)

The crucial role of the leader lies in the management of meaning. The main restrictions on what can be accomplished by individuals and organisations are then their own preconceptions of what is possible to do, and what is possible to learn from actions once taken (Johannisson 1988, 86-87). A comprehensive foundation to this approach is provided by Weick (1979). Focusing on organising as an ongoing process, Weick (1979) identifies four sub-processes: ecological, change, enactment, selection, and retention (Weick 1979, 130 cit. in Johannisson 1988, 87). The first two elements are interrelated in mutually causal loops, and they generate variety; raw material for the construction of a person's reality. In the selection and retention sub-processes, meaningful and successful interpretations of equivocal information produce enacted environments. A feedback mechanism, in turn, helps individuals to influence the choice of sources of variation to be considered. (Johannisson 1988.)

Weick (1979, 134) argues that, although his model originates in a cognitive framework, it has wider applications. "...*Organising is also built around feelings, actions, and desires and collective attempts to understand them...*" According to Johannisson (1988) this extended view is crucial. The unrestricted use of organising capabilities requires self-confident people with internal loci of control and evaluation, who are prone to act as complex human beings. Most managers are caught up in their own mental structures or the institutionalised patterns of behaviour in their own corporations, or the established recipes in their sector of industry (e.g., legal restrictions). Managers represent also their firms or organisations, not only themselves. They are partially included in and split between several formal structures. Entrepreneurs are obviously furnished with the personal attributes needed to enact with the particular environment. Their egocentricity brings both vision and strategy to the creation of a reality of their own. (Johannisson 1988.)

From the viewpoint of small enterprises, the form of the agreements has a central effect on how the risks and costs and possible profits that occur are divided. Mentally, the level of trust is also important, if opportunistic behaviour is to be avoided. The formality of the co-operation on the level of small enterprises depends on the line of business and on the complexity of co-operative conditions that have to be fulfilled within it, and the complexity of the activities. The power can be measured in the terms of a larger company's influence on decision-making within a smaller firm in areas such as pricing or investments. In other words, domination or control characterises one form of a network's constitution. (Szarka 1990, 13.) Furthermore, the use of personal power has been considered as an antecedent of stewardship behaviours. Institutional power is the basis of influence in agency relationships. In contrast, personal power is the basis of influence in stewardship relationships. In this light individual power is neither affected by position nor by organisational membership. It is based on one's own will to use or not to use power in certain situations. In the family business context, power is strongly related to ownership, governance and management participation (Astrachan, Klein & Smyrnios 2002, 48). It is also generally agreed that power characterises relationships among social actors, i.e., individual, family member, subunit or

organisation. Thus, power is context or relationship specific. Power has also many dimensions anchored in resources and individual preferences such as knowledge, skills, tasks, money, strategy, management, just to mention but a few. It can also be seen, that consensus oriented net (network) management provides additional power for its partners (see Pfeffer & Salancik 1981, 123).

Notwithstanding the present popularity of co-operative organisations, there is also ample proof of failure in co-operation. An important factor from the viewpoint of successful management is the position of the enterprise in the network, and how the enterprise utilises this position in relation to the other members of the network. One might argue that management is one of the critical issues in the success of inter-organisational relationships. There exists some evidence of this presented by Miles and Snow (1992) and the Finnish researchers Vesalainen and Murto-Koivisto (1994). Both studies brought up some ideas of management mistakes in orchestrating, operating, and designing networking. Also, insufficient experience in working as a group is more critical to small entrepreneurs in management than merely technological aspects. It is also worth noting that, in a network perspective, it becomes natural for owner-managers (Deeks 1976 cit. in Johannisson 1988) as well as managers in general (Mintzberg 1973; Kotter 1982 cit. in Johannisson 1988) to operate their businesses by getting personally involved in a multitude of activities of short duration. (Johannisson 1988.)

In the market, short- and long-term relationships can be divided into two contractual exchange systems, temporary and permanent. The advantage of permanent relationships lies in their long-term character, and in the fact that they involve investments. Temporary relationships, on the other hand, are prone to lead to opportunistic behaviour in the markets. Van de Ven (1992) states that choice in relation to structure depends on two factors, which are risk and trust in the enterprise exchange. The co-operation between enterprises can thus assume different forms of organisation, depending on whether the relationships are formally or informally agreed on. Trust brings a lot of benefits to a firm. When both parties trust each other, they can share information and invest in understanding the business (Kumar 1996).

In the network, the relationships among the actors play an important role. Usually the actor controlling the most critical resources will rise to be the leader and power-wielder. According to Tjoswold and Weicker (1993), those who have more power help other enterprises to learn and to find new ways of implementing business plans, and they also motivate others to work harder. Long-term relationships enhance these benefits and increase the likelihood of further interactions of co-operation and networking. Frequent contacts between the members of the network or any form of business relations lead to the development of strong bonds, tacit knowledge and informal control of the other members of the network. (Jones et al. 1997.)

The firms also depend on the development of industry and an ever-changing market. Co-operation and networking do not exclude competition; on the contrary, successful co-operation leads to an enhancement of competitiveness (Szarka 1990). The degree of dependence is connected with

critical resources, which determine the relations between the enterprise and its growth (Normann 1975, 77 cit. in Szarka 1990). In a strategic sense, the aim of co-operation is that, by uniting, greater competitive advantage is achieved in relation to competitors than an enterprise could achieve on its own. (Szarka 1990.)

Organisational knowledge develops over the processes shared by the members of the network. The value of organisational or inter-firm co-operation may be damaged because of internal pressures towards homogeneity of belief. Campbell (1969a) argued that activities within organisations come to have more and more of an internal relevance relaxing the fit between the organisations and its context. In small groups, the likelihood that members will move toward greater homogeneity of belief grows when they already share much in common. When members hold similar common information, they are biased toward sampling shared information and tend to ignore non-shared information. As a result of this inter-firm behaviour of the firms sharing the gathered information, they explain themselves and their actions to others, which creates a powerful homogenising force among members of the group. (Aldrich 1999.)

Johansson and Hagg's (1987, 73) study of contacts between spin-off ventures and their holding company shows that trading links are cemented by relationships marked by '*common spirit*', which makes them part of the same culture. In other words, better understanding of the costs and benefits of network constitutions requires more research into overlays of exchange, communication and social networks.

As knowledge has become a crucial asset in modern systems, the ongoing creation of new knowledge has become a key process when trying to increase/sustain competitiveness (Maskell & Malmberg 1995, 3). Sometimes the process of knowledge creation takes Schumpeterian (1934) proportions, and in such cases it: "*...reforms or revolutionises the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source of supply of materials or a new outlet for products by reorganising an industry...*" (Schumpeter [1911] 1934 cit. in Maskell & Malmberg 1995, 4.)

Concentration of ownership and control around the family system could prove to be a risk for the perspectives of a group's growth in the long run, not mainly because of financial constraints, but because of the availability of symmetric entrepreneurial ability in the different units comprising the group. A continuous and sustained growth of a group is only possible if the owner family can generate an inside quantum of entrepreneur skills in line with growth opportunities. (Balloni & Iacobucci 1994.)

Porter (1990) argues against encouraging joint ventures between domestic competitors, because this reduces the incentive to maintain a competitive advantage. However, collaboration and development of long-term relationships with customers and suppliers can help reduce costs and enhance competitiveness (Bridge, O'Neill & Cromie 1998, 201). The formality of co-operation is defined in terms of enterprise type (legality), communication and information systems, reciprocal control, and the structure of the enterprises. In

the constantly changing world, operative costs lead to virtual co-operative groups. Referring to the literature, it seems that the possibility of small enterprises increasing their market share does depend on improving their competitive power by concentrating on their core competencies in a network. (e.g., Jarillo 1992, 1988; Bronder & Pritzl 1992.)

4.6 Summary of Chapter 4

The purpose of this chapter was to describe the context of the study. The special characteristics were illustrated in reference to the earlier research on networking studies in general and more specifically, in the context of family business. The role of the founder-owner or the owner-manager is crucial in many ways. Personal abilities and resources are important for managing and planning the strategies for the future. Founders' values and family values seemed to play a crucial role in building both the social and economic capital in family firms. Family affects the (business) strategy and vice versa. Thus, the family business system has an influence through its actors on network relationships and networking in general.

Looking more closely at the context of the family firm, one can easily notice that the impact of the family business *culture* is the most extensive. Owner-managers' attitudes, beliefs and values reflect and influence the family business system and its operating environment. Even the personal abilities and resources of the owner-managers are crucial in order to create social and business networks; it is also worth noting, that the family business system has a great influence on the decision-making and the long-term commitment that is required of relationships such as networking and co-operation. According to the literature most of the family firms operate in a local (proximate) market, and they are neither very growth-oriented nor ready to take risks or innovate. These kinds of results are based on the previous researchs, although they are suggestive or congruent with small or random samples of particular industries.

Furthermore, the values, beliefs and attitudes have an influence on the family business *culture*, creating and sustaining the inimitable competitive advantage in the context of networking family firms. Shared values are a common ground of family and business goals. Values have a strong influence strengthening shareholders commitment to long-term goals. However, values take shape in practise, and they can be viewed from various dimensions. Owner-managers have to maintain the trust and openness between family members and business partners in order to commit owning relationships. Thus, trust has many dimensions and components, such as integrity, competence, loyalty, and predictability, to mention but a few. All these elements are crucial to strategic assets for inter-firm co-operation and networking relationships.

Contextual discussion has also revealed that the strategic fit between family firms and SME's in general is clearly based on complementarity of assets

and competencies, in order to enhance the competitiveness of the partner firms and network. These kinds of strategic capabilities can be viewed as financial, marketing and organisational resources. A cultural fit between the firms is based on the family and business values, local business culture, similarities at individual, firm and network level, as beliefs, norms, artifacts, language, openness, experience, personal competencies, and entrepreneurial spirit. Looking at the family business context, there are prevailing issues both restricting and contributing co-operation between the family firms. However, family, business and ownership make the analysis of the system more challenging.

To conclude with: in the light of the contextual discussion, it seems that family firms have a good basis for co-operation and networking.

5 THE INTEGRATED MODEL OF STUDYING INTER-FIRM CO-OPERATION CAPABILITY IN THE CONTEXT OF NETWORKING FAMILY FIRMS

5.1 Synthesis of the Conceptual Part of the Study

In the first stage of this study, (see Figure 13) the integrated model of inter-firm co-operation capability was constructed as a synthesis of the conceptual part of the study (Niemelä 2002, 78). This conceptual study started with the description of the networking and co-operation capability combining both the fields of the inter-organisational studies and education. The study was positioned mainly in the network approach (theories) and learning theories. The phenomena were analysed highlighting the view of the owner-managers in the context of networking family firms. The concept of inter-firm co-operation capability was preliminarily defined to cover both the skill and will factors as well as the personal abilities and empowerment of the owner-managers in the context of networking family firms. From the viewpoint of education, the concept of learning covers all the dimensions of the affective, conative and cognitive constructs. From the viewpoint of a network approach, the trust and commitment define and describe the inter-firm co-operation in the context of networking family firms. (Niemelä 2002, 74-78.)

The network approach underlined the importance of trust and commitment as being a key concept of the inter-firm co-operation capability. In general, (see Figure 12) the concepts of *trust and commitment* overlap, interplay and are associated with many of the chosen network approaches. Trust refers to the structure of the network and the network management in general. Trust is needed in order *to manage* the relationships in the context of networking family firms. Commitment refers to the relationships and the rules between the partners. Commitment also implies the readiness *to share* the risks, make investments, and to share the results of the inter-firm co-operation. The

affective, conative and cognitive constructs underlined the importance of concepts such as the 'view of life', motivation and volition and knowledge and skills as a basis for describing the co-operation capability, of the owner-managers. The 'view of life' refers to the owner-managers attitude towards the co-operation and their openness to new ideas, their willingness to co-operate efficiently in order to achieve one's own and joint goals as well as agreement on control principles, and abilities to use resources and produce new knowledge and resources as well as the problem solving skills. The affective and conative dimensions include the openness and willingness *to learn*, and the cognitive dimensions describe what kind of abilities are needed in order to learn new things in co-operation. (Niemelä 2002, 74-78.) The context of the study underlined the personal abilities and resources of the owner-managers. The *values, attitudes and beliefs* of the owner-managers reflect their family business culture. The *family business culture* seemed to be associated with the system and its operating environment.

As a conclusion and synthesis of the conceptual study, it is suggested in this study that the inter-firm co-operation comprises three concepts: *learning, trust and commitment* in the context of networking family firms (Niemelä 2002, 74-78.)

To conclude with: inter-firm co-operation capability is defined in the context of networking family firms as consisting of the following capabilities:

- Social 'Networking' Capability
- Management Capability
- Learning Capability

Inter-firm co-operation rests both on individual and firm-specific capabilities. As a result of the conceptual study, affection, conation, and cognition are the basis for the theoretical frame of reference of inter-firm co-operation capability as illustrated in Figure 13. In Figure 12, the emphasis is only on the individual level (owner-manager). It is also worth noting that the set-up of the study combines the individual and organisational (firm and network) levels in order to conduct the empirical investigation (see Figure 2).

Thus, *The Integrated Model of Inter-Firm Co-operation Capability* is a result of the synthesis of the conceptual part of study. The empirical part of the study begins in chapter 7, and the synthesis of the empirical results is illustrated in *The Revised Conceptualisation Model of Inter-firm Co-operation Capability* in Figure 20 in chapter 8. The revised conceptualisation model will illustrate and enhance the understanding of the 'integrated' and 'real-life' inter-firm co-operation capability in the context of the networking family firms.

The conceptual synthesis, more specifically the key concepts of the inter-firm co-operation capability in the context of networking family firms (see Figure 13) will be empirically investigated (tested) in chapter 7. Next, the concepts of learning, trust and commitment will be operationalised for the empirical qualitative analysis.

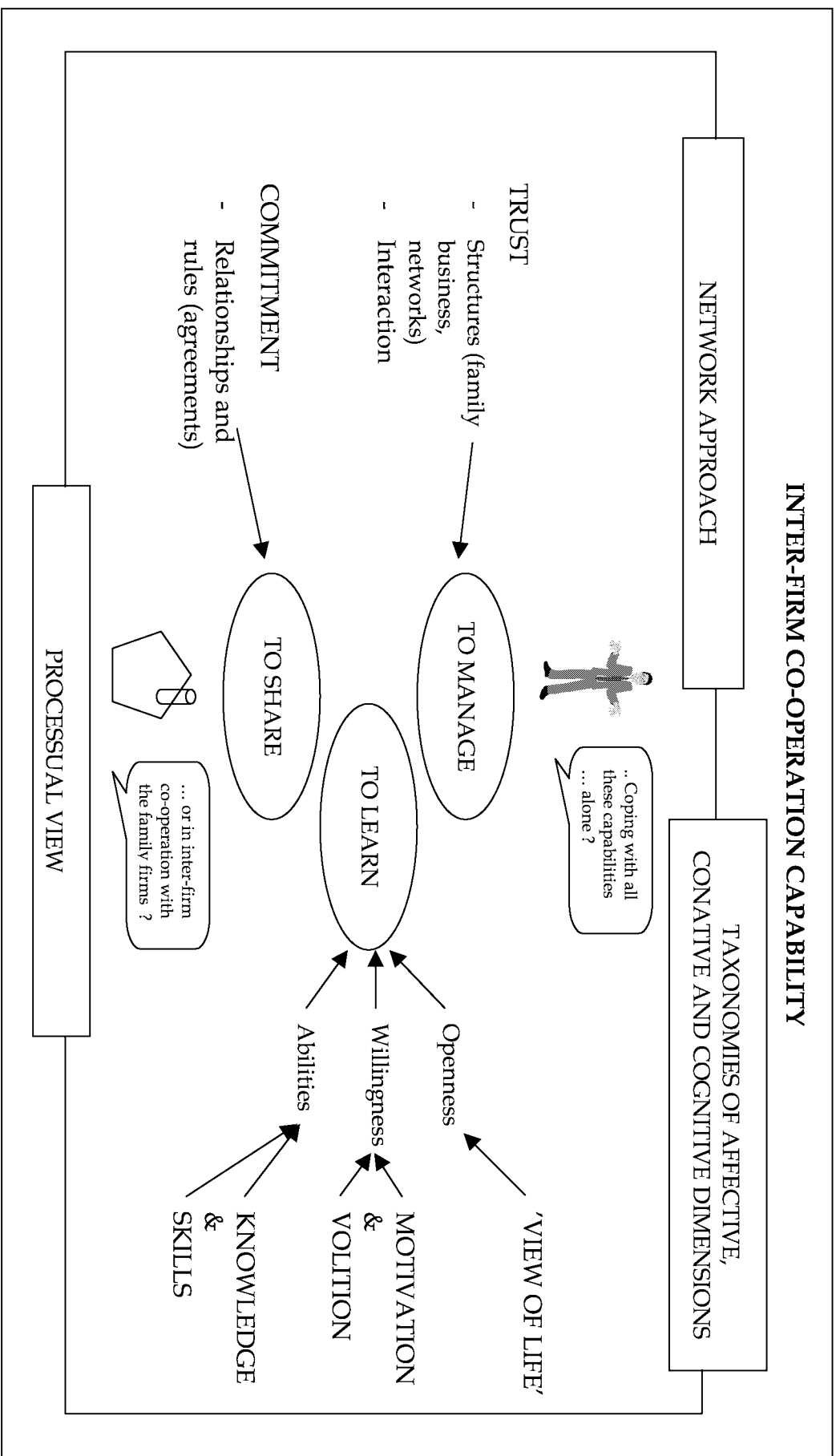


FIGURE 12 The Synthesis of the Key Concepts of Inter-Firm Co-operation Capability in the Context of Networking Family Firms (Niemelä 2002, 76)

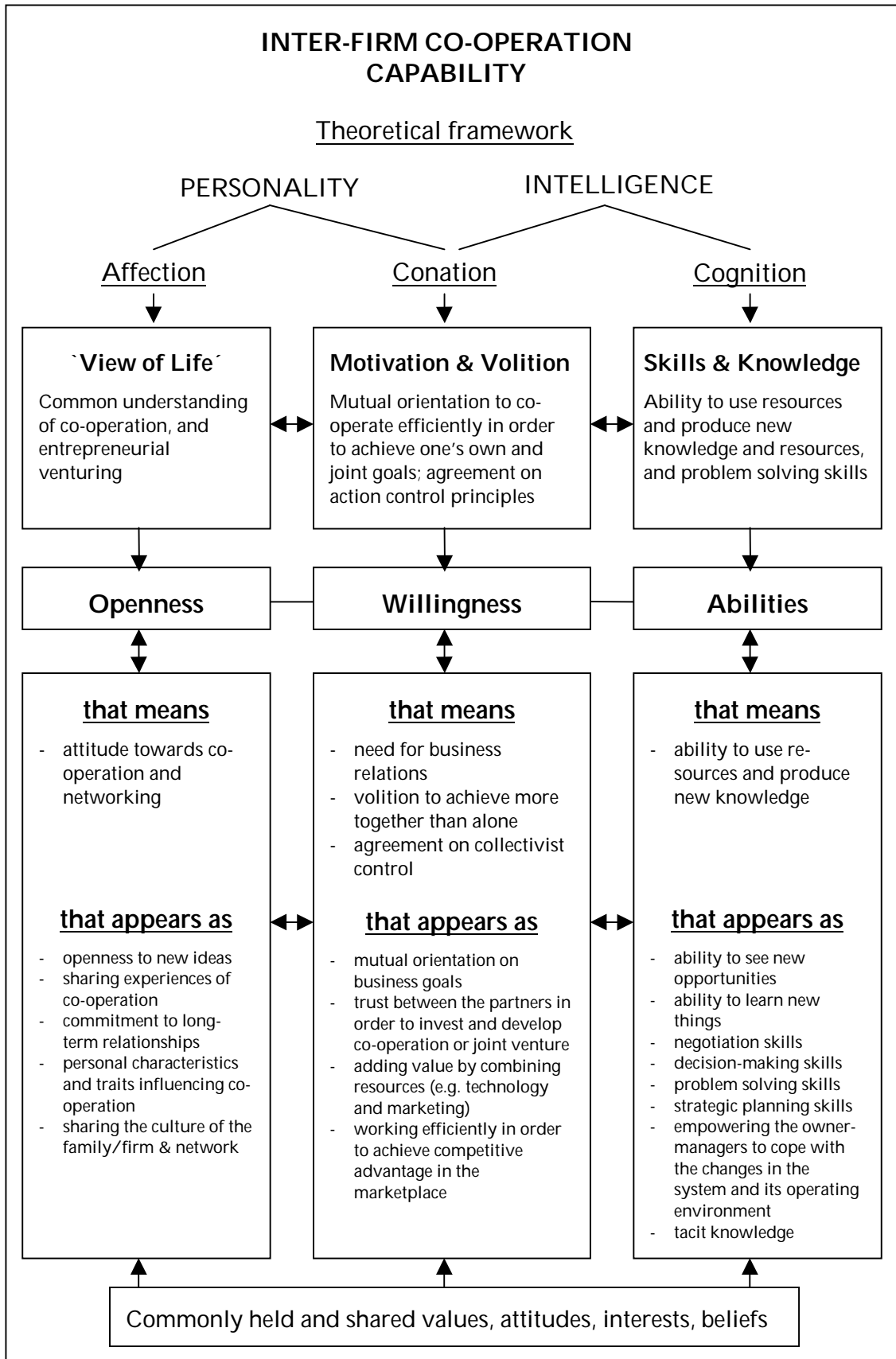


FIGURE 13 The Integrated Model of Inter-Firm Co-operation Capability in the Context of Networking Family Firms (Niemelä 2002, 78)

5.2 Operationalising the Concepts of Learning, Trust and Commitment for the Empirical Qualitative Analysis

In this section, the concepts of learning, trust and commitment are 'operationalised', i.e., described in the light of the earlier literature for the empirical qualitative investigation. Table 4 at the end of this section summarises and illustrates some of the descriptive meanings, signs and signals of various components related to learning, trust and commitment.

5.2.1 Learning

The concept of learning is based on the reflections of affective, conative and cognitive constructs discussed in chapter 3 of this thesis (e.g., Snow, Corno & Jackson 1996; Ruohotie & Koiranen 2000; Ruohotie 1998, 2000; Peltonen 1986; Gibb 1999). Learning implies knowledge and skills, and the ability to use resources as well as to produce new resources and knowledge. Owner-managers are empowered to cope with the changing environment and its operating systems. The theme *"What kind of knowledge and skills have been essential in the inter-firm co-operation"* serves to describe the essential abilities associated with the inter-firm co-operation and networking process of family firms. The role of learning implies the creation and transference of knowledge between partners in networks or customer relationships (e.g., Yli-Renko 1999; Nooteboom 1999; Johannisson 1998; Doz & Schuen 1995; Doz & Hamel 1998). Organisational learning consists of both cognitive and behavioural elements (Child & Faulkner 1998, 283.)

Evolutionary processes in partnerships are best described by using an organisational learning perspective, as a series of learning sub-processes, responding to evolutionary forces and leading to a periodic re-evaluation of expected outcomes. The readjustments of the collaborative behaviour happen through a series of iterative cycles or loops over time. (Doz & Schuen 1995.) Partners need to learn in five key areas in order to sustain successful co-operation, including the environment in which the alliance or group will operate, the tasks to be performed, the process of collaboration, the partner's skills, and their intended and emerging goals (Doz & Hamel 1998). Partners benefit from learning together about their current environment and about the likely future environment. This means that the partners have the abilities to make observations, to seek, grasp, and seize new opportunities and ideas. A joint effort in learning about the competitive technological and market environment is crucially important. Joint learning helps the partners to develop mutual trust and shared understanding and reduce the risks of framing gaps. (Doz & Hamel 1998). Core competencies are further specified as *"the collective learning in the organisation, especially how to coordinate diverse production skills and integrate multiple streams of technologies"* (Prahalad & Hamel 1994). The tasks are essential to the partners' mutual success, and they are likely to evolve over

time. Both on the individual, firm, and network level, improvements are needed in order to learn to perform successfully. Task learning tests and conditions the feasibility of the partnership (Doz & Schuen 1995, 10). Furthermore, the efficiency and effectiveness of the co-operation process hinges on learning about the process itself, and being more attuned to each other (Axelrod 1984 cit. in Doz & Schuen 1995, 11).

Process learning means learning to co-operate more effectively with the partners, and as the co-operation proceeds, partners discover each other. Recognition of the partners' structures, decision processes, action routines, beliefs and norms may lead these partners to overcome, or even to take advantage of, these differences in the collaboration process. Partners learn to trust and to co-operate more efficiently. The term 'types of knowledge' implies organised knowledge, structures or schemata.

Schemata encompass both the structure and the content of knowledge. Utilising the past reflects the two largest memory systems of the brain: the semantic memory (meaning) and procedural memory (skills), which, taken together, make it possible for us to learn skills and acquire habits and customs. However, the conscious remembrance of one's personal past includes some particular features that make it different from other ways of memory usage. In order to experience the information brought back to the mind as a 'memory', it must be remembered in a certain temporal and spatial context, and it must include references to the self (i.e., the person who is 'remembering') as a part of what has happened. The psychologist Endel Tulving has suggested that these sorts of memory experiences are based on a system called episodic memory. When analysing episodic memory, the object of the analysis must be the subjective experience of the person who is remembering. The idea of remembrance as an 'imagined journey through time' makes a significant point: being able to remember, we may free ourselves from the constraints of time and space, and we may re-experience the past and define our attitudes to the future according to our own wishes. (Schacter 2001, 29.)

Schemata are grounded in early socialisation experiences, and thus depend upon fundamental cultural rules, but they also change throughout people's lives as they learn from experience (Aldrich 1999, 90). Much of the knowledge needed for constructing new organisations or settings exists as stored information and experience in the memory of entrepreneurs and people working with them to create an organisation.

Wickström & Normann et al. (1994, 12) have specified four sources of knowledge: information, skill or know-how, explanation, and understanding. Putting this concisely, information can be regarded as a piece of knowledge of an objective kind, i.e., details about an event or a situation in the past, the present or future. Information provides stimuli which generate action, which in turn requires skill. Information can also refer to fragments of a knowledge 'pattern' which engenders an understanding of a connection.

Skill or know-how, unlike information, is embedded in the individual. It means that a person knows what to do in a particular situation, in order to achieve a certain result; how to cleverly resolve issues. (Ruohotie & Koironen

2000.) In this light, this kind of knowledge is often referred to as tacit knowledge, not written down anywhere, just learnt by doing, discovering, observing what other people do, and by trial and error. Even if a skill is a practical matter, it will also possess theoretical elements, i.e., the actions are based on generally accepted knowledge (e.g., parameters, grammar). Explanation refers to causal relationships and regularities that are grounded in the traditional positivistic scientific knowledge. Explanatory knowledge helps us to solve problems, and it is not person-based (Wickström & Normann 1994, 11-12). Understanding is the most profound, and it arises when people recognise principles and connections. Thus, understanding is also embedded in the individual. Wikström and Norman see understanding as learning something new: that is, understanding can mean the creation of new knowledge. In a modern society, computerised expert systems contain information and explanatory knowledge. Both are needed, alone neither as such is sufficient for understanding. (Wickström & Normann 1994, 12-13.)

Knowledge processes are fundamental to the conception of the firm as a knowledge system. New knowledge is generated by activities aimed at solving problems, and these processes can be called 'generative processes'. The new knowledge is then used in productive processes, i.e., providing a basis for offerings and commitments in circumstances of the 'tailor-made offerings', for instance. This kind of productive knowledge, which is used and manifested, generates new knowledge for the firm. In a production context a combination of generative knowledge is derived from product development and technological development. The representative knowledge refers to how the knowledge process is transferred to the market or combined with other products or services. (Wickström & Normann 1994, 14-15.)

Competence is to be considered in relation to goals or demand; thus, in order to tackle something successfully, you need competence. Competence embraces knowledge in all its forms, but it also concerns specific personal capacities such as social 'nous', perseverance, and tolerance of stress. Competence is thus associated with the individual, although the idea can be extended to organisations, where it would refer to the combined competence of the individuals in the organisation, a network, this knowledge being stored in firms, organisations, networks in the shape of systems, culture, prescriptions, to mention but a few. Competence includes cognitive, emotional and social components. At an individual level, competence is understood as a question of the capacity to utilise knowledge for given purposes. The roots of this capacity lie in the personality. (see Wickström & Normann 1994, 15.) However, knowledge and competence is achieved through learning. Learning is a way in which knowledge is acquired, yet knowledge is not created solely by oneself but in co-operation with other people. Creation of knowledge occurs simultaneously with learning.

Partnerships also often provide 'windows' into the partners' respective skills, and opportunities to learn from each other (cf. Hamel 1990, 1991; Doz & Hamel & Prahalad 1989 cit. in Doz & Schuen 1999, 11). Partners have to learn how to commingle, combine and merge their skills. However, as each partner is

learning from the skills of the other, rivalry often makes such learning difficult. Furthermore, the goals of the allies are prone to fail, if the partners feel mistrust and are suspicious of each other. (Doz & Hamel 1998.) The balance and durability of the partnership thus hinges on skill learning capabilities (Doz & Schuen 1995, 11). Goal learning implies that partners are allowed to clarify, revise and refocus their goals in the evolution of the partnership process. Goal learning also reveals the partners' goals to each other, and motives beyond or besides the explicitly shared goals of the co-operation. The goal congruity between the partners is thus reassessed over time, as goal learning takes place.

Learning along the five paths: environment, tasks, processes, skills, and goals provides partners with the insights they need to improve on the initial conditions of their alliance. *"This learning is a precondition to successful adjustments, even when it reveals the limits of cooperation"* (Doz & Hamel 1998, 181). In a successful alliance or network, one learning cycle leads to another. Each cycle results in a higher level of learning, re-evaluation, and readjustments and even higher expectations of the value creation on the part of partners in a network, and starting a new cycle from the revised conditions. (Doz & Hamel 1998.) Gibb (1999, 16) states that most of the learning of individuals in society results from experience (tacit knowledge), as opposed to the more formal coded (explicit) learning delivered by the education sector. The predominant learning field of the entrepreneur and manager is the market: the major vehicle, as noted above, are the relationships with the stakeholders.

Polanyi (1966) distinguished between tacit knowledge and explicit knowledge as well. The former is usually regarded personal, intuitive and context-specific. Explicit knowledge is specified and codified (Child & Faulkner 1999, 284). Andreu and Ciborra (1996) distinguish learning as being in three equivalent loops: such as, routinization learning loop. Most of the learning at this level will be technical in nature. The capability learning loop is a result of development of organisational routines, and the need for new organisational routines. The third and highest learning loop is the strategic loop. Processually, capabilities evolve into core capabilities that differentiate the firm strategically and provide it with a competitive advantage. (Andreu & Ciborra 1996, 126.)

The firms learn new skills by recombining their capabilities, and growth occurs by building on current social relationships (Kogut & Zander 1992 cit. in Lorenzoni & Lipparini 1999, 334). The ability to orchestrate multiple resources of learning is seen here as occurring with strategic intent, and not as a result of unplanned strategies (Burgelman 1983 cit. in Lorenzoni & Lipparini 1999, 335). The way and means of learning in, e.g., entrepreneurial education is dominated by action, i.e., learning by doing, problem solving, opportunity grasping, copying from others, experimentation, learning from mistakes, and by feedback, to mention but a few (Gibb 1995).

Unlearning the past is essential in any business. Prahalad and Hamel (1994, 60) pointed out that creating a 'learning organisation' is not sufficient, just as important is creating an 'unlearning organisation'. How is the same achieved by sport coaches or teachers that put so much emphasis on the early development of 'right habits'? One might even argue that learning is easier than

unlearning. Prahalad and Hamel suggest, that to create a future, a company must unlearn at least some of its past. The point is that a company must work as hard to forget as it does to learn. Still, the future does not require a company to abandon all of its past. However, selective forgetting of the past is difficult to do for two reasons - one being emotional, and the other economic. Owner-managers as 'senior managers' typically have a lot of emotional equity invested in the past. *"An organisation's commitment to and capacity for learning can be no greater than of its members"* (Senge 1990 cit. in Vesalainen & Strömmer 1999, 114).

However, Nonaka & Takeuchi (1995, 70) stress that the creation of knowledge for organisational use is a *"continuous and dynamic interaction between tacit and explicit knowledge"*. Four knowledge modes describe the different ways of learning as follows:

- 1) Socialization= a process of sharing experiences and thereby creating tacit knowledge such as shared mental models and technical skills.
- 2) Externalisation= a process of articulating tacit knowledge into explicit concepts.
- 3) Combination= a process of systematizing concepts into a knowledge system.
- 4) Internalisation= This process is closely related to 'learning by doing'. It involves the embodiment of explicit knowledge into individuals' tacit knowledge bases in the form of shared mental modes of personal technical know-how (Child & Faulkner 1998, 298-299).

Collaborative learning can take place in at least two ways in strategic alliances. One is learning from the partner, the other is with the partner. Organisations are therefore likely to learn the most together when they all choose collaborative learning strategies involving high levels of openness and receptivity to new knowledge – being a good partner in strategic alliances. (Larsson et al. 1994, 16 cit. in Child & Faulkner 1998, 292-293.) Nevertheless competence and previous experience are important to collaborative learning and competitiveness of enterprises in strategic alliances or joint ventures. Cohen and Levinthal (1990) stated that a firm's absorptive capacity is a crucial competence for its learning and innovative capabilities. Absorptive capacity means firm's ability to recognize the value of new, external information, assimilate it, and apply it to commercial ends. This kind of competence is largely related to the firm's prior related knowledge.

Experience is always a two-edged sword. It is expected that previous experience of cooperation will normally enhance the partners' capacity to learn because it gives them greater knowledge of how to manage, monitor, and extract value from their alliances. The benefits of previous joint experience will tend to extend the openness shown by the partners towards each other, and hence add to the effectiveness of the learning process. Nevertheless, the value of previous experience as a capability which promotes learning in alliances between organizations will depend on the relevance of that experience (Child & Faulkner 1998, 298). Powell, Koput and Smith-Doerr (1996) provide strong evidence for the contention that industries which are complex and expanding, and where the sources of expertise are widely dispersed, innovation will be

found mostly in networks of learning firms rather than in individual firms. (see Child & Faulkner 1998, 298-299.)

5.2.2 Trust

The concept of trust is based on the literature and earlier studies on networking and inter-firm co-operation discussed in chapter 2. The varied approaches, models and theories focused on the networking and inter-firm alliances highlighted the importance of trust to motivation and volition to inter-firm networking, and the need for business relationships, and willingness to achieve more together than alone (e.g., Williamson 1975; Johannisson 1998; Axelsson & Easton 1992; Ring & Van de Ven 1992; Cook & Emerson 1984; Pfeffer & Salancik 1978). The themes "*What kind of issues have 'pushed' and 'pulled' family firms to inter-firm co-operation*", and "*What kind of issues have promoted and advanced the inter-firm co-operation of family firms*" are to describe the owner-managers' willingness to inter-firm co-operation and networking.

Trust can be taken to mean various issues on an individual level, and organisational and group levels (network). The perspective in this thesis is that trust (with its limits due to opportunism) plays a role, and that trust is a relevant dimension of governance in addition to coercion and incentives (Buckley & Casson 1988). In this thesis trust is understood, according to social exchange theory (Blau 1964; Cook & Emerson 1984), to refer to both the economic (extrinsic utility) and social dimension (intrinsic utility) of exchange and co-operation. In various studies trust has been found to be the glue that keeps business partners together (Lorenz 1988; Killing 1988; Nooteboom 1996, 1999).

Trust can be found both in the management and sociological literature to mean a business risk view based on confidence in the predictability of one's expectations (Luchmann 1979; Zucker 1986 cit. in Ring & Van de Ven 1992), and based on confidence in another's goodwill (Ring & Van de Ven 1992). The first view highlights that the parties hedge against uncertain states of nature, adverse selection, and moral hazard through a variety of formal contractual means such as guarantees, laws and agreements, and organisational hierarchy. Goodwill implies moral responsibility and positive intentions toward the other as well as caring and concerning, showing the emotional basis for trust (Blomqvist 2002, 195).

Shared values promote synergistic social behaviour and firm-specific investments (see e.g., Lorenzoni & Lipparini 1999; Dyer & Singh 1998). Shared values and trust increase a person's willingness to stretch his/her role in an organisation. Social and character similarity breeds trust (Granovetter 1992). Social similarity may be based on character, competence, and personality (trait) at the individual level. Consequently, on the firm or network level, character similarity may be characterised by compatible firm culture and values. Both the socialisation and shared meanings create trust (Zucker 1986; Oliver 1998).

The second emphasises faith in moral integrity or goodwill of others, which is produced through interpersonal interactions that lead to social-

psychological bonds of mutual norms, friendships, and dealing with uncertainty (e.g., Ring & Van de Ven 1994). Reciprocity is found to be sufficient (Gouldner 1959 cit. in Ring & Van de Ven 1994, 3) as well as fair rates of exchange between costs and benefits, but equality is not necessary for fair dealing (see also Blau 1964).

Furthermore, trust is accepting or neglecting the possibility that things will go wrong (Nooteboom 1999, 25). Whatever things might go wrong - concerning goods or products, people involved in the system - has been left open in many studies. The acceptance or neglect of the possibility of things going wrong includes both cognitive and affect-based trust (McAllister 1995 cit. in Nooteboom 1999, 26). To accept trust is to conduct an explicit, rational evaluation of the probability of things going wrong and ensuing implications. Neglect of the possibility of things going wrong may be based on habit or routine. Between calculation and habit, Uzzi (1997, 43-44) has proposed the use of the notion of a 'heuristic': that is, quick and parsimonious rules for choosing action on the basis of their success - which are thereby close to the notion of 'routine'. Such rules arise from trial and error, survive on the basis of the owner-managers' success, and are thereby close to the notion of routine. Neglect, in this connection, may also be based on naivety, or an unwillingness to face risks due to fear. It may be also based on the ethics based on trust that can be related to affect: emotions connected with the notion of justice and decency (Uzzi 1997, 43-44; Nooteboom 1999, 26). Trust may also concern a partner's ability to perform according to agreements (competence trust) or his/her intentions to do so (goodwill trust) (Nooteboom 1996, 990).

Trust emerges from the prior contacts and references that are based on the premise that through ongoing interaction, firms learn about each other and develop trust around norms of equity, or knowledge-based trust (Shapiro, Sheppard & Cheraskin 1992 cit. in Gulati 1995). According to McAllister (1996) previous organisational researchers have assumed competence, responsibility, reliability and dependability to be important sources of cognition-based trust. Affect-based trust, by contrast is founded on the emotional bonds between people that is developed and deepened over quite a long period of time. Trust is also, for a large part, equal to understanding, i.e., putting oneself in another's shoes. When both sides trust each other, they can share information and invest in understanding each other's business (Kumar 1996, 97). Trust is rarely all-encompassing, that is, on an individual level one may trust the partner on some issues but not on others, i.e., there exists some information, skills, and technologies that are to be protected, and some that are to be shared (Kumar 1996, 98). To treat the vulnerable partner fairly is the key. Fairness encompasses two types of justice: distributive justice, or the perceived fairness of the outcomes received; and procedural justice, or the perceived fairness of the powerful party's process for managing the relationships (Kumar 1996, 99).

Trust is developed when extra effort is voluntarily given and reciprocated, i.e., the case of often so called 'favours' appearing as placing an order, saving deals or promoting the access of certain customer networks. Trust is also based

on reliability, that is, keeping promises and expressed norms of keeping promises (Uzzi 1997, 43).

Behavioural trust (individual level) and confidential trust (trust in social and natural systems) are related to trust of firms or networks that are produced in the process of certain characteristics that appear in firm (organisational) culture, reputation, networks of suppliers, customers, owner-managers, memberships, and so forth. The relation between the organisational and the individual level arises in the assignment of people (actors) to roles and the conditions and directions given for playing these roles, in the form of firm (organisational) structure, procedures, and culture. At the organisational and context level one can speak about the 'system trust', going beyond behavioural trust, in terms of organisational structure, culture and survival conditions. Competence or incompetence refers to certain abilities to conduct the job or role, or intentions expected to be more uneasy, or fear of opportunism. Trust is also surrender of risks, and trust will not always enhance efficiency (Zucker 1986). Production of trust can be very costly, and the embeddedness can limit the flexibility and obstruct innovation. Nooteboom (1997b) ponders if the trust-based economy meets obstacles in radical innovations; subsequently Hill (1990) points out that the trust-based societies have a competitive advantage and will prevail in the evolution of global competition (Nooteboom 1999, 28).

In this thesis, the perspective is that a personal embeddedness is a necessary condition for process-based trust. This means that trust takes care of interests of both the egotistic and non-egotistic sources of behaviour and competencies, and the self-interests as much as loyalty, and sanctions and material interests and advantages between co-operative firms (intermediaries) as well as friendship, commitment, and habituation. Process based trust builds on prevailing customs and norms. To go beyond the self-interest is to take into account the interests of others, even if this may to some extent damage one's own interest. Process trust is as much the outcome of a relationship as the basis for it. Intermediaries can perform important roles in the development of trust relations (cf. Sydow 1996; Nooteboom 1998b cit. in Nooteboom 1999, 34). Evolution and bonding are essential elements of trust-based relationships in analysing the development of strategic alliances. Needless to say, alliances between firms are based on cooperation between partners whose interests (goals) do not usually wholly coincide and who, in the case of horizontal alliances, could become competitors at a future point in time. In this light, the phases of alliance development, such as formation, implementation and evolution go 'hand in hand' with the key elements in trust development, that is, calculation, mutual understanding, and bonding. (see Child & Faulkner 1998, 56-57.)

5.2.3 Commitment

The concept of *Commitment* is based on the literature and the earlier studies on networking and inter-firm co-operation discussed in chapter 2. The varied approaches, theories and models have stressed the meaning of commitment to

long-term business relationships, and attitude towards co-operation, the social and psychological side of the networking and co-operation, and likewise trust (e.g., Johannisson 1988, 1987, 1984; Pfeffer & Salancik 1978; Uzzi 1997; Axelsson & Easton 1992). The themes "*What issues have strengthened and weakened the inter-firm co-operation of family firms*", "*What issues have contributed to (helped in) utilising the networking and co-operation in the progress of the inter-firm co-operation*", and "*What issues have restrained the utilisation of inter-firm co-operation of family firms*" are to describe the openness to inter-firm co-operation and networking. Commitment is a concrete base for trust. Commitment may materialise in relation-specific investments, e.g., time of key boundary spanners and management (Blomqvist 2002, 197).

Commitment of family members has been considered as one of the most important attributes of family businesses and understanding this will be helpful for these organisations (Belausteguigoitia & Galicia 2001). Commitment implies a link between the individual and the organisation. Allen and Myer's (1991) distinguish three components in commitment, i.e., affective commitment, continuance commitment, and normative commitment. Affective refers to the degree to which an individual is emotionally involved with his/her organisation. The affective component refers to the emotional linkage built between people and their organisations, when they perceive that the firm or organisations have satisfied their needs and expectations. In this light, people are willing to enjoy staying in the organisations. (see Belausteguigoitia & Galicia 2001.)

Continuance commitment refers to the degree to which an individual perceives that she or he has to stay in his or her organisation. With regard to this component of 'needing to stay or leave', a person may believe that his/her investments in time and effort etc. could be lost if she/he decides to leave the firm or the job. Due to the high financial, psychological and physical costs, the person will remain committed. This type of source of commitment represents a calculating facet that deals with relations (chemistry), costs and benefits associated with leaving or staying in the firm or group. (see Belausteguigoitia & Galicia 2001.)

The normative commitment refers to the degree to which an individual feels she/he is morally obliged to stay in an organisation. This component also deals with loyalty. An individual might have received some benefits from the firm or working in the network and, she/he is indebted to it. The norm of reciprocity is that one who receives some benefit acquires the moral duty to 'pay back'. This suggests that intention to stay at least could be due to desire, duty or necessity. (see Belausteguigoitia & Galicia 2001.)

In co-operation, when inter-linking resources, and especially when the inter-linking transactions include credit, implicit relationships based on trust relations are formed, supported by credible commitments (Dei Ottati 1994a cit. in Dei Ottati 1994, 467). Koiranen and Varamäki (2002, 3) illustrated the inter-firm co-operation as centripetal forces of added value, trust, openness, and motion. Openness refers to relationships and structures that enhance innovativeness, increase trust in the relationships between various actors, but it

also illustrates the open-ended amoeba-type structure of the group and how it functions as an open system interacting with the outside world. Openness is also associated with the attitude that reflects the managerial philosophy and core ideology of the individuals. This means that attitudes, values and beliefs of the individuals are connected to affective, i.e., emotional level of trust that appears as care and concern. Organisational culture and values can be seen in the consistency of organisational behaviour, decision and values. (Blomqvist 2002, 196.)

TABLE 4 'A Road Map' of Various Exemplary Means for Learning, Trust and Commitment when Investigating the Networking Process of Family Firms

Sources and components	Authors	Signs and Signals
LEARNING		
<p><i>Process Learning</i></p> <ul style="list-style-type: none"> - learning from environment, tasks, skills, goals, collaboration (individual, firm, and network level) - capability learning loops, cycles 	<p>Doz & Schuen (1995) Yli-Renko (1999) Nooteboom (1999, 1998) Axelrod (1984) Gibb (1995,1999) Doz & Hamel (1998) Andreu & Ciborra (1996)</p>	<p>Recognition of partner structure, decision processes, action routines, beliefs, norms, culture, value creation, re-evaluation, readjustments. Problem solving, negotiation, strategic planning skills. Opportunity seeking, seizing, grasping.</p>
<p><i>Types of Knowledge</i></p> <ul style="list-style-type: none"> - procedural (congenital, use-specific, discovered, learned understanding (e.g., tacit or implicit knowledge) - declarative (abstract) - declarative: facts, events, propositions, principles, industry specific recipes 	<p>Aldrich (1999) Cohen & Bacdayn (1994) Nonaka & Takeuchi (1995) Gibb (1995) Snow, Corno & Jackson (1996) Ruohotie & Koiranen (2000) Child & Faulkner (1998) Aldrich (1999) Kogut & Zander (1992) Polanyi (1966)</p>	<p>Stored information and experience; routines, skills, competencies, ability to use knowledge and produce new ideas, efficiency and effectiveness, learning by doing, discovering observing, mistakes. Much of the procedural knowledge is tacit or implicit and thus hard to codify.</p>
<p><i>Knowledge Processes</i></p> <ul style="list-style-type: none"> - a firm as a knowledge system - competence and capacity (personal, and combined at, a group level) - unlearning 	<p>Wickström & Normann (1994) Pralhad & Hamel (1994) Senge (1990) Powell, Koput & Smith-Doerr (1996) Cohen & Levinthal (1990)</p>	<p>Generative, productive, representative processes. Mutual understanding, skills to orchestrate resources. Personal capacities: 'nouns', perseverance, personality traits, experience. Unlearn selectively from past.</p>

(continues)

TABLE 4 (Continues)

TRUST		
<p>Capability or competence</p> <ul style="list-style-type: none"> - reputation - favours - equity - fairness - reliability 	<p>Uzzi (1997) Cook & Emerson (1984) Ring & Van de Ven (1992) Johannisson (1998) Luchmann (1979)</p>	<p>Obeying agreements, references, contacts, saving deals, well known partners, learning to trust and developing trust around norms, of equity, knowledge, sharing information, invest, keeping promises, roles of the actors, tasks, social and character similarity, ability to conduct a job or role, structure, procedures and culture, prevailing customs and norms, self-interests, material and advantages, sanctions. Loyalty, friendship, commitment, habituation, moral responsibility, emotional trust, evolutionary trust, neglect trust (unwillingness to face risks, fear risks), routines, habits, naivety, social similarity, competence and personality, justice and decency.</p>
<p>Behavioural trust</p> <ul style="list-style-type: none"> - competence (individual level) - confidential trust (system trust) - cognition, affect, and identification based trust 	<p>Zucker (1986) Nooteboom (1998, 1999) Blomqvist (2002) Hill (1990) Lorenz (1988) Killing (1988) McAllister (1995)</p>	
<p>Goodwill and Social Responsibility</p> <ul style="list-style-type: none"> - care and concern - reciprocity - goals and vision - shared values - homogeneity of organisation 	<p>Ring & Van de Ven (1994) Kumar (1996) Granovetter (1992) Lorenzoni & Lipparini (1999)</p>	
<p>Process based trust</p> <ul style="list-style-type: none"> - egotistic - non-egotistic 	<p>Ring & Van de Ven (1994) Nooteboom (1999) Sydow (1996)</p>	
COMMITMENT		
<p>Affective Continuance Normative</p>	<p>Belausteguigoitia & Galicia (2001) Dei Ottati (1994) Koiranen & Varamäki (2002) Blomqvist (2002)</p>	<p>Shared information between the partners, managerial philosophy, emotional linkage to firm/ organization, calculative attitude, financial, psychological, physical factors and efforts of individual Costs and benefits wherever judging whether to 'stay or leave' Personal relations (chemistry) moral obligation, responsibility, loyalty, reciprocity.</p>
<p>Commitment as an Affective construct at the individual level:</p> <ul style="list-style-type: none"> - 'view of life' - values - attitudes - motivation 	<p>Rokeach (1973) Snow, Corno & Jackson (1996) Paajanen (2001)</p>	
<p>Affective construct at the group level:</p> <ul style="list-style-type: none"> - organisation culture - organisation climate - group spirit - group alertness 	<p>Ruohotie (1998) Peltonen (1986)</p>	
		<p>Desire, duty or necessity to stay or leave, view of world, view of human being. Attitude towards religion and society, power of emotional feelings: characterise the personality of the owner-managers. A value is a type of belief guiding behaviour, ideals, person's beliefs of ideal models and goals. Value: learned and socially accepted desires/wishes. Attitudes: individual interests, tendency and willingness to acquire knowledge, positive attitudes into enduring preferences for particular topics or tasks. Co-operation and group identity.</p>

6 METHODOLOGICAL BASE

In this section, the methodological choices and key interests at the paradigmatic level of the study will be presented. The research interest and the key choices of paradigm, methods and conceptual and empirical basis are discussed. The methodological choices are derived from the objectives of the study. In this thesis, the research strategy is based on the longitudinal nine years research and qualitative case study.

6.1 Research Strategy

Typically, utilising the network approach presupposes a crossing of the borderlines of science (Easton 1992). Different scientific approaches conceptualise reality in different ways. In this study, 'reality' is seen as a socially constructed entity, and human beings as intentionally creating their own reality (Eisenhardt 1989; Arbnor & Bjerke 1994). Research methods are directly linked to assumptions about ontology, epistemology and human nature. This net that contains the researcher's epistemological (how knowledge is produced), ontological (what a reality is) and methodological premises may be termed a paradigm (Cuba 1990, 17 cit. in Denzin & Lincoln 1994, 13) or an interpretative framework, *"a basic set of beliefs that guides action"*. All research is interpretative, guided by a set of beliefs and feelings about the world and how it should be understood and studied. Burrell & Morgan (1979, 1-4) have distinguished and characterised ontology, epistemology, human nature and methodology from polarized perspectives of the subjective-objective dimensions (see Figure 14). According to Burrell & Morgan (1979, 4) *"different ontologies, epistemologies, and models of human nature are likely to incline social scientists towards different methodologies"*.

The Subjective –Objective dimension

The Subjectivist approach to social sciences		The Objectivist approach to social sciences
Nominalism	ONTOLOGY	Realism
Anti-Positivism	EPISTEMOLOGY	Positivism
Voluntarism	HUMAN NATURE	Determinism
Ideographic	METHODOLOGY	Nomothetic

FIGURE 14 A Scheme for Analyzing Assumptions about the Nature of Social Science (based on Burrell & Morgan 1979, 3)

Every discipline has its own paradigms that influence the ontological, epistemological and axiological choices of the researcher. Also, the objectives of a study have an influence on the choice of research methodology, although the anonymous statement ‘anything goes’ in regard to methods may serve as a justification for other arguments, too. (cf. Varamäki 2001, 21.) Looking at the subjectivistic- objectivistic continuum, in this study, the approach is slightly closer to the subjectivistic rather than the objectivistic and natural school approaches (Morgan & Smircich 1980, 492). A subjectivistic research approach includes a nominalist assumption for ontology, an antipositivistic assumption for epistemology, a voluntaristic assumption of human nature, and importantly, an ideographic assumption of methodology. For the antipositivists, the social world is essentially relativistic and can be only understood from the point of view of individuals (e.g., owner-managers) who are directly involved in the activities which are studied. (Arbnor & Bjerke 1997, see also Vesala 1996.) Human beings create their own realities in order to make their world intelligible. Humans are also able to give meaning to their actions and thoughts. It may not be possible to measure this meaning, but it can be understood and explained by giving room to the actor’s awareness and the context (Uusitalo 1991, 79).

In a recent work on methodologies for industrial network research (Easton 1995), four key epistemological orientations can be identified in social research that are: realism, positivism, conventionalism, and constructivism. Family business owner-managers operate on many levels of the complex systems and their operational environment. It can be assumed that owner-managers construct their own view of the world, i.e., reality throughout family, business, and culture, for instance. Therefore, the ‘reality’ in real-life context of inter-firm co-operation of the networking family firms is developed through their shared and lived experiences both in the social as well as economic (environmental) context. From the epistemological point of view; truth is seen as a social construction or a pattern of meanings given by different subjects involved in human action and interaction (Arbnor & Bjerke 1997⁵). Meaning is context

⁵ Arbnor & Bjerke (1997, 33) see three specific ways of interpreting meaning: 1) Meaning=significance (importance) (Something has a meaning=something is significant/important.) 2) Meaning=Purpose (orientation) (Something has a meaning=Something has a purpose.) 3) Meaning=Understanding (content) (Something has a meaning=Something is not empty, somebody has given it a content. It can be understood by this content.)

dependent (cf. Nooteboom 1999). Basing on the ideas of philosopher Kant, we do not observe the world as it is "*in itself*". In other words, we have no way of judging the extent to which our thought is consistent with the real world, since we cannot descend into our minds to see how it is hooked onto the world. Subjectivism is limited and extreme relativism is evaded, by processes of interaction of people and their physical and social environment, which yields some commonality of cognition to the extent that it has developed in a shared environment. Intelligence is '*internalized action*' (Piaget 1970, 1974 cit. in Nooteboom 1996, 13). Truth can be seen as value-based and person-specific. Therefore, truth is seen as subjective depending on the respondent's experiences, ability and willingness to interpret the world. In this study, the actor's approach is chosen to a base approach, in order to describe different meanings given by the owner-managers, concerning their nine years networking process. Figure 15 illustrates the synthesis of scientific research approaches and research approaches related to this study. Based on Figure 15, this study is centred around the subjectivistic, relativistic research approach, and approaching the owner-managers' view on the networking process. Also the system approach is applied in a sense of the context of this study. The circle drawn on Figure 15 illustrates the methodological base, i.e., positioning, choices and approaches of this study.

In network research, the trend is from nomothetic, quantitative studies towards hermeneutically oriented qualitative research. The aims of the network approach in this study are descriptive, not explanatory. In this study, the research strategy is anchored on a qualitative, hermeneutically oriented, subjectivistic, actor's approach. Hermeneutics is closely related to phenomenology in its concentration on language. The hermeneutic circle emphasises the iterative processes, returning to the data, time or situation and again, through that the observer (e.g., researcher) comes to better, or perhaps simply different, understandings of the phenomena.

The network research approach has been seen as a mainstream and a natural choice for a theoretical basis in order to describe and analyse SMEs and their interaction in networks (e.g., Johannisson 1995). Researchers most often employ a form of case research methodology when carrying out research into industrial networks (Easton 1998, 73). It has also been noted, that more longitudinal and process oriented studies are needed.

When studying inter-firm co-operation it is accepted and recommended to use complementary and even overlapping research approaches, e.g., analytical approach, system approach and actors approach in creating business knowledge. The earlier phase of this thesis (conceptual study) was aimed to set-up frames for the empirical investigation. The present phase of this thesis, is aimed to investigate empirically the inter-firm co-operation capability and networking process of family firms. However, this thesis is compiled of features of the analytical approach (conceptual part of the study) (cf. Arbnor & Bjerke 1994; Burrell & Morgan 1979), and the system approach (family business system), although, the base approach is the actor's approach (owner-managers of the family firms).

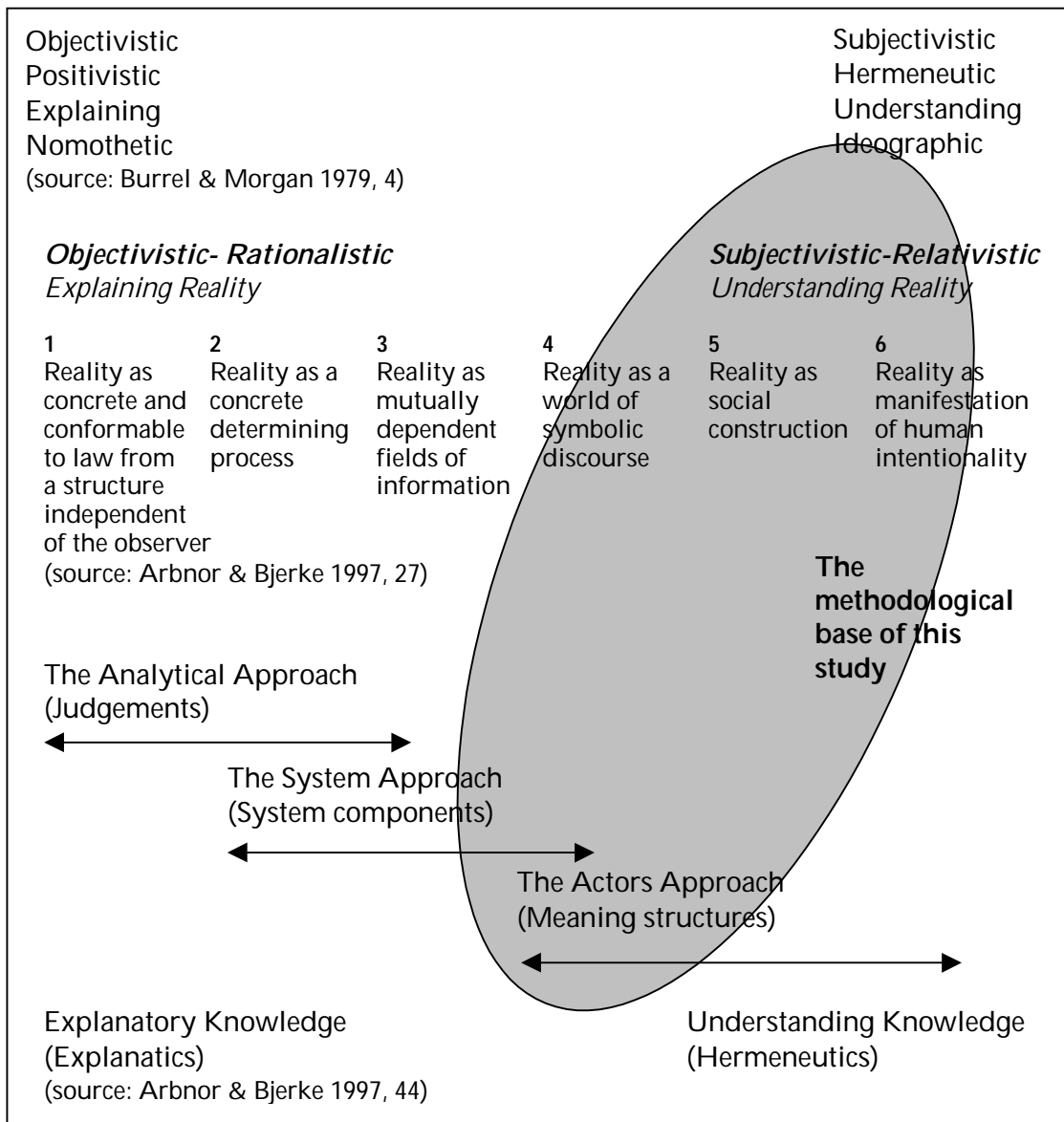


FIGURE 15 The Synthesis of the Scientific Approaches and Research Approaches Related to This Study

The study integrates a literature review on the network approach and the individual taxonomies of affective, conative and cognitive constructs. Actors - such as owner- managers have capabilities, not firms as such. In this respect, the actor's viewpoint is the central unit of the conceptual study as well. The main difference between a literature review and a conceptual analysis is that the latter aims at constructing new conceptual systems, whereas the former emphasises the description and explication of existing concepts. However, it is difficult to draw a clear line between an extensive literature review and a conceptual study.

As the research approach was mainly conceptual in the first phase of the study, the aims were to discover elements and frames that were associated with the inter-firm co-operation capability. According to Näsi (1980), in a conceptual

study, the aim is to create new conceptual constructs on the basis of earlier conceptual and empirical studies. This refers to the fact that the applied method is the method of reasoning which is used in constructing a new synthesis out of the existing concepts and in making redefinitions.

This report complies with hermeneutical and processual qualitative case research strategy. In this study, the base approach relies on actor's approach. The different meanings by which owner-managers interpret their socially constructed reality concerning their shared experiences of their inter-firm cooperation and developmental process on networking are synthesised, and interpreted using the multiple case research. This study will also utilise the earlier research of the researcher, and other studies made in this entrepreneurial branch of research (Vesalainen & Murto-Koivisto 1994; Kaleva 2000). This analysis also provides interdisciplinary approaches, combining educational and interorganisational (network approach) theories and approaches.

6.2 Qualitative Research Methodology

Qualitative research is an approach rather than a particular set of techniques, and its appropriateness derives from the nature of the social phenomena to be explored (Morgan & Smircich 1980, 491). Qualitative research, as a set of interpretative practices, privileges no single methodology over any other. Qualitative research is inherently multimethod in focus. However, the use of multiple methods reflects an attempt to secure an in-depth understanding of the phenomenon under study. Objective reality can never be captured or arrested. The qualitative researchers put weight to socially constructed reality, and that is also the case in this study. (see Denzin & Lincoln 1994, 2-3.)

Qualitative research provides a possibility to gain a holistic view of the issue under study (Brunåker 1996; Tikkanen 1996). Qualitative research has separate and distinguished histories in education, social work, communications, psychology, history, organisational studies, medical science, anthropology, and sociology (Denzin & Lincoln 1994, 15). Discussions regarding research methods in business economics and social sciences are linked directly to assumptions about ontology, epistemology and human nature. Qualitative research is endlessly creative and interpretative. There is space for both meanings and practices. (Silverman 1998, 3.)

Most qualitative research has preferred to describe the meaningful social world. The researcher does not just leave the field with mountains of empirical materials and then easily write up his or her findings. It is also worth noting that when, in doing qualitative research, there exists no single interpretative truth. There is no standard approach among qualitative researchers, either. Blackburn et al. (1993, 14) have pointed out that if networks and networking are primarily cultural phenomena then a more qualitative approach will be required than has previously been utilised. The interpretative paradigms in

qualitative research, such as constructivist, are more interested in the terms, such as trustworthiness, credibility, transferability and confirmability and replace the usual positivist criteria of internal and external validity, reliability, and objectivity. The constructivist paradigm assumes a relativist ontology, i.e., there are multiple realities, a subjectivistic epistemology, i.e., knower and subject create understandings, and a naturalistic set of methodological procedures.

Qualitative research findings can be presented in terms of the criteria of grounded theory (Glaser & Strauss 1967). The early work of Glaser and Strauss (1967) seems to share both a phenomenological and positivistic emphasis. On the phenomenological side Glaser and Strauss have always emphasised going directly to the 'real world' to look for what emerges. On the positivistic side, the authors seem to suggest the method takes a life of its own, independent of its proponents and independent of the researcher. However, the more recent work, e.g., of Strauss and Corbin (1991) provides evidence of a strong orientation towards a subjective approach to research with an ontology based on constructivism with a strong anti-positivist epistemology. (Strauss & Corbin 1991.)

Glaser and Strauss (1967, 2) have stated that the basic theme in the grounded theory was the discovery of theory from data systematically obtained from social research. The authors contrasted this position with theory generated by logical deduction from a priori assumptions. A grounded theory is discovered, developed and provisionally verified through systematic data collection and analysis of data pertaining to the phenomenon under study. Therefore, data collection, analysis and theory stand in reciprocal relationship with each other. (Strauss & Corbin 1991, 23.) A well-constructed grounded theory will meet four central criteria for judging the applicability of theory to a phenomenon: 1) fit, 2) understanding, 3) generality and 4) control. If theory is faithful to the everyday reality of the substantive and carefully induced diverse data, then it should fit that substantive area. Because it represents that reality, it should also be comprehensible and make sense (to support understanding) both to the persons who were studied and to those practicing in that area. If the data upon which it is based are comprehensive and the interpretations conceptual and broad, then theory should be abstract enough and include sufficient variation (generality) to make it applicable to a variety of contexts related to that phenomenon. Finally, the theory should provide control with regard to action toward the phenomenon. (Strauss & Corbin 1991, 23.)

Analysis is grounded and composed of three major types of coding. These are: 1) open coding, 2) axial coding, 3) selective coding. Strauss and Corbin (1991, 61) defined an open coding as the process breaking down, examining, comparing, conceptualising and categorizing data. A category is classification of concepts and it is discovered when concepts are compared one against another and appear to pertain to a similar phenomenon. Thus the concepts are grouped together under a higher order, more abstract concept called a category. Two analytic procedures are basic to the coding process. The one is making comparisons, and the other is asking questions. There are several different ways

of approaching the process of open coding: a line-by line analysis or to code a sentence or paragraph or take an entire document, observation or interview and to code it.

Strauss and Corbin (1991, 96) defined an axial coding as a set of procedures whereby data are put back together in new ways after open coding, by making connections between categories. This is done by utilising a coding paradigm involving conditions, context, action/interactional strategies and consequences. Causal conditions are defined to events, incidents, happenings that lead to occurrence or development of a phenomenon. In axial coding as in all coding researchers are constantly moving between inductive and deductive thinking. That is, researchers deductively propose statements of relationships or suggest possible properties when working with data, then they actually attempt to verify what they have deduced against data as they compare incident with incident. There is a constant interplay between proposing and checking. This back and forth movement is what makes our theory grounded. Concepts and relationships arrived at through deductive thinking must be verified over and over again against data. Initially they are held as provisional and if not supported they are discarded. Their final theory is limited to those categories, their properties, and statements of relationships that come across. (Strauss & Corbin 1991, 111-112.)

Selective coding is the process of selecting a core category. In selective coding, integrating their material is a task that even seasoned researchers find difficult. Integration is not much different than axial coding. It is just done at a higher more abstract level of analysis. There are several steps through which this is accomplished. The first step involves explicating the core category. The second consists of relating subsidiary categories around the core category. The third involves relating categories at the dimensional level. The fourth entails validating those relationships against data. The fifth and final step consists of filling in categories that may need further refinement and/or development. It is important to understand here that these steps are not necessarily taken in linear sequence nor are they distinct in actual practise. (Strauss & Corbin 1991, 118.) In this study, the data have been investigated and carefully coded in order to find themes and patterns that can be compared and investigated by using the chosen theories and key concepts of the study.

It has also been noted that the interpretivist persuasions aligned with ontological hermeneutics transcend the phenomenologist's concern with 'capturing' the actor's point of view, with verification, with discriminating between emic and etic perspectives. Taylor (1987[1971]) points to the bid go beyond dualisms of this kind: He claims that if our interpretations seem implausible or if they are not understood by our interlocutors, *"there is no verification procedure we can fall back on: we can only continue to offer interpretations; we are in interpretative circle"* (Taylor 1987 cit. in Denzin & Lincoln 1994, 121).

For hermeneuticists there is a specific meaning of understanding that must be clearly separated from its general meaning, *'the ability to comprehend'*. In order to stress this the German terms *Erklären*, (explain) and *Verstehen*

(understand) are sometimes used. (cf. Burrell & Morgan, 1979⁶) Understanding starts with its specific point of departure, what is specific is the individual/subject. In this order, the task of understanding becomes trying to grasp objects and events as “life manifestations” of individuals or understanding the ‘meaning’ of social phenomena. (see also Denzin & Lincoln 1994, 119.)

In this thesis, a processual view, time and context are also taken into account. Gummesson (1991, 21-28) has pointed out the importance of gaining access to the research area: “ *Access refers to the ability to get close to the object of study, to really be able to find out what is happening...that the access gained through qualitative research normally is substantially higher than when using the quantitative research...*”. In this light, it is worth noting, that at the start of the research, a researcher might have a pre-understanding of the research field, although s/he is not familiar with the subject matter nor phenomenon. (cf. Varamäki 2001, 22.)

6.3 Processual View on the Networking Process of Family Firms

The process has been illustrated with phrases and words such as follows: flow of events, chronology, time, language, context, outcomes, linking things together, individual and collectivities, history, change and long period, consistent story, just to mention a few (Pettigrew 1997, 338). According to Van de Ven (1992, 169) process is used in literature in three ways: 1) as a logic used to explain a causal relationship in a variance theory; 2) as a category of concepts that refer to activities of individuals or organisations; and (3) as a sequence of events that describes how things change over time. Processual models provide rich explanations of development. Time and history are at the centre of any process analysis (Pettigrew 1997, 339). The aim in analysis is not to produce a case history but a case study. The processual perspective of development draws attention to the content of the process and its conceptual description. The process may, for instance, be described in dynamic concepts that are themselves defined in relation to temporal modes: to the past, present and future (Easton 1998, 118). This releases the researcher from using a chronological time dimension, and gives a chance to concentrate on, e.g., describing life-cycles, critical incidents or development of relationships or events in specific context.

But, what is the purpose of the processual view for this study? The longitudinal case study offers to provide an holistic view of the networking process. This kind of developmental process can be approached and analysed by focusing on the ‘lived’ experiences told by the owner-managers. The processual view is captured by the conducts and meanings of individuals. Different processual models help analysis and interpretation. Van de Ven and

⁶ Hermeneutics is an approach to the analysis of texts that stresses how prior understandings and prejudices shape the interpretative process (see Denzin & Lincoln 1994, 15). Interpretation is the central concept of hermeneutical thinking (Turunen 1987, 54).

Poole (1995) distinguished four ideal types of theory that underlie studies of the strategy process; namely, life-cycle, evolution, teleology, and dialectic. When business relationships involving two or more actors are studied, the evolutionary and dialectical theories fit best. The dynamics of business networks, that include several companies, are usually explained using these theories (see Axelsson & Easton 1992). All in all, there are multiple alternatives available to study business networks and relationships development. Longitudinal studies, combining both retrospective and real-time methodology would function well together in order to analyse the inter-firm co-operation and networking process of family firms.

Much of the work done in organisations is accomplished by groups of workers working co-operatively together (cf. Dyer 1994, 118). Group or network level analysis has been revealed in prior research, by several theories and models related to group formation, group process, and inter-group conflict, that were applied also to the study of family firms. Several models have been developed to outline the stages or phases of development. Tuckman (1965, 396) provides four developmental stages: forming, storming, norming and performing. *Forming* is establishing relationships and testing norms and boundaries. *Storming* consists of conflict and resistance to group influence. *Norming* is that part of the process in which leadership emerges and clear norms are established. In the final stage *performing*, group members work collaboratively together (Dyer 1994, 119). Naturally, inside the net, partners need to go through many internal and adaptation processes in order to proceed in the development of net or network. (see also Ring & Van de Ven 1995.)

In this thesis, the empirical analysis is intertwined and focused on three levels, i.e., individual level (owner-manager), firm level (family firm) and network level (horizontal networking/joint venture). Figure 16 illustrates the multilevel analysis of this report, bearing in mind, that the emphasis is mainly on the individual level, but all three levels must be taken into account in the empirical analysis.

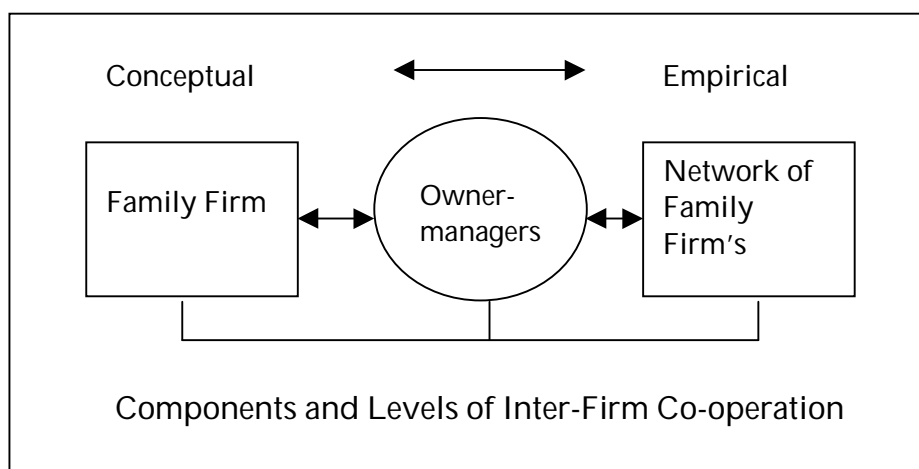


FIGURE 16 The Three Levels of Analysis on Inter-Firm Co-operation

6.4 Case Study as the Main Method and Abductive Logic

Researchers most often employ a form of case research methodology when carrying out research into industrial networks. The traditional methodology, inspired by works of the so called Uppsala School and IMP-Group, for instance, has been a mixture of relationships or focal organisation surveys and case research. The holistic nature of case research has been emphasised, and the case method with its attention to changes over time is well suited to provide longitudinal data. Case research cannot depend upon numbers for its epistemological justification. The case research method is useful in researching processes (Chetty 1996, 82).

Although, the *how* and *why* questions lead to a type of explanatory, conceptual analysis in character, instead, the case study method has been an essential form of research in the social sciences and management. It has been used in researching businesses and organisations, education, upbringing, family business, technology development, and so forth (Yin 1994). Eisenhardt (1989) identifies other uses for the case study method to provide description, test theory and generate theory (see e.g., Uusitalo 1991). Case studies can be both descriptive and explorative research (Yin 1994). The phenomenological approach uses qualitative methods on a small sample. Studies are most often inductive and exploratory (Murray 2001). Multiple case studies generate either literal replication, i.e., cases produce similar results, or theoretical replication, i.e., cases produce contrasting results but for predictable reasons. Multiple case studies are more robust and compelling (Murray 2001).

The case study method is used in order to find out what is going on under the surface. Hollander (1983) points out, that a case study can consist of *"description and analysis of a single person, event, institution or community (including) inferences, intuition, fact and synthesis "* (Murray 2001).

Further, it allows for generation of hypotheses to be tested in later research and of new ideas (and) is designed for use in areas where there is little pre-existing knowledge. Yin (1989, 1994) defines a case study as an empirical inquiry that:

- investigates a contemporary phenomenon within its real-life context ; when
- the boundaries between phenomenon and context are not clearly evident; and in which
- multiple sources of evidence are used. Both single and multiple cases can be studied, and when
- "How" and "Why" questions are being asked about a contemporary set of events over which the investigator has little or no control.

Easton (1995) pointed out that how and why questions are more explanatory in their character and likely to lead to dealing with operational links needing to be traced over time, rather than mere frequencies or incidences. The multiple case research has been criticised. According to Dyer and Wilkins (1991), a single case

study is a better way to form theories. Eisenhardt (1991, 620) asserts that: "*Multiple cases are a powerful means to create theory because they permit replication and extension among individual cases*". By replication she means, that individual cases can be used to corroborate specific propositions. She defines "extension" as the use of multiple – cases to develop elaborate theory. (Easton 1995, 80). The case study method has also been criticised due to potential lack of rigour and bias in the researcher's work; how can we generalise from one case. The case study method is fairly time consuming and resource-intensive as well, and also creates masses of data unsuited to statistical analysis (Murray 2001).

In this thesis, the researcher's understanding of case study as a method follows fairly well with the ideas of Gummesson (1988, 79) who has pointed out, that the aim of case studies is not "*a superficial establishment of correlation*" but, "*to reach a fundamental understanding of ...structure and process*". The base approach of this study is anchored on the actor's approach (owner-managers' viewpoints) of the development of the networking process of their family firms. The main method is a case study method in order to study the phenomenon of inter-firm co-operation capability and networking process as holistically as possible.

An understanding of the characteristics and consequences of case studies based on *abduction* thus requires an integrated approach, because the main difficulty of case studies is handling the interrelatedness of the various elements in the research work. In this study, the researcher has a possibility to expand her understanding of both theory and phenomena of inter-firm co-operation capability in the context of networking family firms. The single case study has not been linear, but an integrated process of various stages and phases that have occurred in this study. The phenomenon has been 'abducted' and data have been collected and analysed in different phases and stages during this process. This research process has been a continuous confrontation throughout the research process. (see Dubois and Gadde (2002, 555.)

As discussed briefly in chapter 1, the theory and reality are constantly overlapping and intertwined. Matching is, thus, going back and forth between framework, data sources, and analysis. The matching process constitutes one of the foundations of systematic combining. Glaser (1978) points out the importance of fit between theory and reality, and argues that data should not be forced to fit preconceived or pre-existent categories, asserting rather that the categories are to be developed from data. (Glaser 1978, 4 cit. in Dubois & Gadde 2002, 556.) This study is in line with this argument.

The efforts to match theory and reality can take a researcher in various directions. The process can not be known in advance. Direction and redirection refers to methods and data analysis. According to Dubois & Gadde (2002) the emphasis on verification, i.e., checking the accuracy of data, is not the main issue. The purpose is rather to use multiple sources that can contribute to revealing aspects unknown to the researcher, i.e., to discover new dimensions of the research problem. It has also been noted, that most of the data collecting activities have been directed towards the search for specific data in line with the current framework, the data that fit the existing or current framework. Data

activities need to be completed by efforts of aiming at discovery. Discoveries might result in redirection of the whole study. Interviews can generate new questions and deepen insights into data. The unanticipated data, so called deviant cases can contribute to further development of the framework, but also trigger the search for complementary theoretical concepts. Observations made, e.g., during the interviews have added new dimensions to the subject, which have resulted in a new view of the phenomenon itself.

Theory is important, but it is developed over time (Dubois & Gadde 2002). However, Strauss & Corbin (1991) have pointed out that there is no need to review all of the literature beforehand, although to do that might pose obstacles to the desired process. For developing theory rather than generating it, such as abductive case research poses, literature plays a different role. In this study the need for theory is created during the research process. This means, that in the beginning of this study, the researcher would not have been able to identify all the important literature focusing on networking and inter-firm co-operation capability since the empirical fieldwork parallels the theoretical conceptualisations.

Miles and Huberman (1994) distinguish between two types of frameworks. The one is classified as tight and prestructured. The other is loose and emergent. The analytical framework is of great importance in this study. Too loose a framework might lead to indiscriminate data collection and data overload, and too tight a framework might reflect the degree to which a researcher articulates his/her preconceptions. The evolving framework has been a cornerstone in this study. A rather tight and evolving framework has guided both the researcher's preconceptions of the study and inspired changes of the view of theory. (Miles & Huberman 1994, 16; Dubois & Gadde 2002.)

However, in this study, it has been important to be open-minded to the multitude of meanings that concepts can give rise to. It has also been important to construct the preliminary conceptions very carefully at the early stage of the study in order to guide the empirical work, as well as trying to reconceptualise the conceptions of the study over the researcher process. In this research process, the evolving case study has been regarded as a 'tool' to learn more about the empirical world but also to learn to observe and interact with and between the theoretical 'ideas' and empirical findings. The first data display a language of the first stage of interpretation and further discussions of trying to combine the theories and interpretation. The reports made have both combined the empirical and theoretical language interpreting the results of the study, and provided room for reinterpretation during this research process. However, several delimitations have been done over this researcher process. Studies focussed on processes have to come to an end, whereas processes in the real world continue. This holds in this case study as well.

This study initially describes a single case study with five embedded cases, that is, networking family firms. These cases have been analysed in their shared context, that is their joint network context (joint venture) and their long-term networking process. The purpose has not been to compare the firms as such, but the perspectives distributed by the owner-managers of the

networking process. Figure 17 describes abductive reasoning applied in this study. The purpose of the Figure 17 is to describe and illuminate the research process of this study, although the data collection and data analysis are to be described in section 6.4.

6.5 Data Collection and Data Analysis

Empirically the study is processual and longitudinal, and it has covered a nine to ten years' time span beginning in the early 90's. The empirical data have been collected from the geographical area of the old province of Vaasa. This area is famous for its entrepreneurial spirit and drive, and the number of family firms in general, and dense SME-cluster and industrial districts as well. Ostrobothnia is famous for many traditional industries, i.e., small furniture and wood processing companies, small-scale food production, subcontracting companies, especially in the furniture and metal industries. Also, some years ago the textile industry as well as the housing construction industry were important employers. The agricultural industry still dominates, though, and is a powerful source of livelihood in many municipalities and towns. It is also worth mentioning that previous research concerning the furniture industry in the same area of the Ostrobothnia region has been performed. (see also Murto-Koivisto & Vesalainen 1994; Vesalainen & Murto-Koivisto 1995; Rinta-Pukkila 1995; Kaleva 2000; Varamäki 2001.)

The empirical data deal with five furniture producers and their *horizontal* networking. The interviewed firms (n=5) are in their second or third generation. The data have been collected in two stages. The first interview round was made in 1995, and the second in 2001. More specifically, this study was initiated as an M.Sc. study as early as 1995 when the first round of the data collection was conducted. The first phase of the thesis was started in 2000, and was conducted by early 2002, as a conceptual study in order to set up a frame of reference and setting for the present study: the empirical investigation.

The interviews were semi-structured in the sense that there was a question list prepared beforehand, but it was used freely and openly as in-depth questions were also needed (see appendix 1,2). Furthermore, some newspapers, magazines, and www-pages are also used. All the interviews were conducted personally, by the researcher herself. The interviewees, i.e., owner-managers of family firms were the same during the period of the whole research process. Interviews were tape recorded and transcribed.

The interviews were mainly held in some office on the premises of the firm, and the interviewee was the owner-manager (director) of the family firm. The interviewees differed considerably from each other by their degree of openness. However, access and contacting was very easy, nevertheless some sort of "warm-up" was still needed, i.e., the interview often began with a company visit, getting acquainted with the personnel, products and machines.

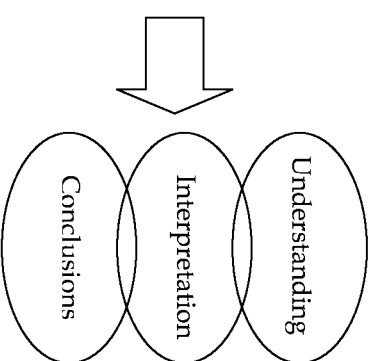
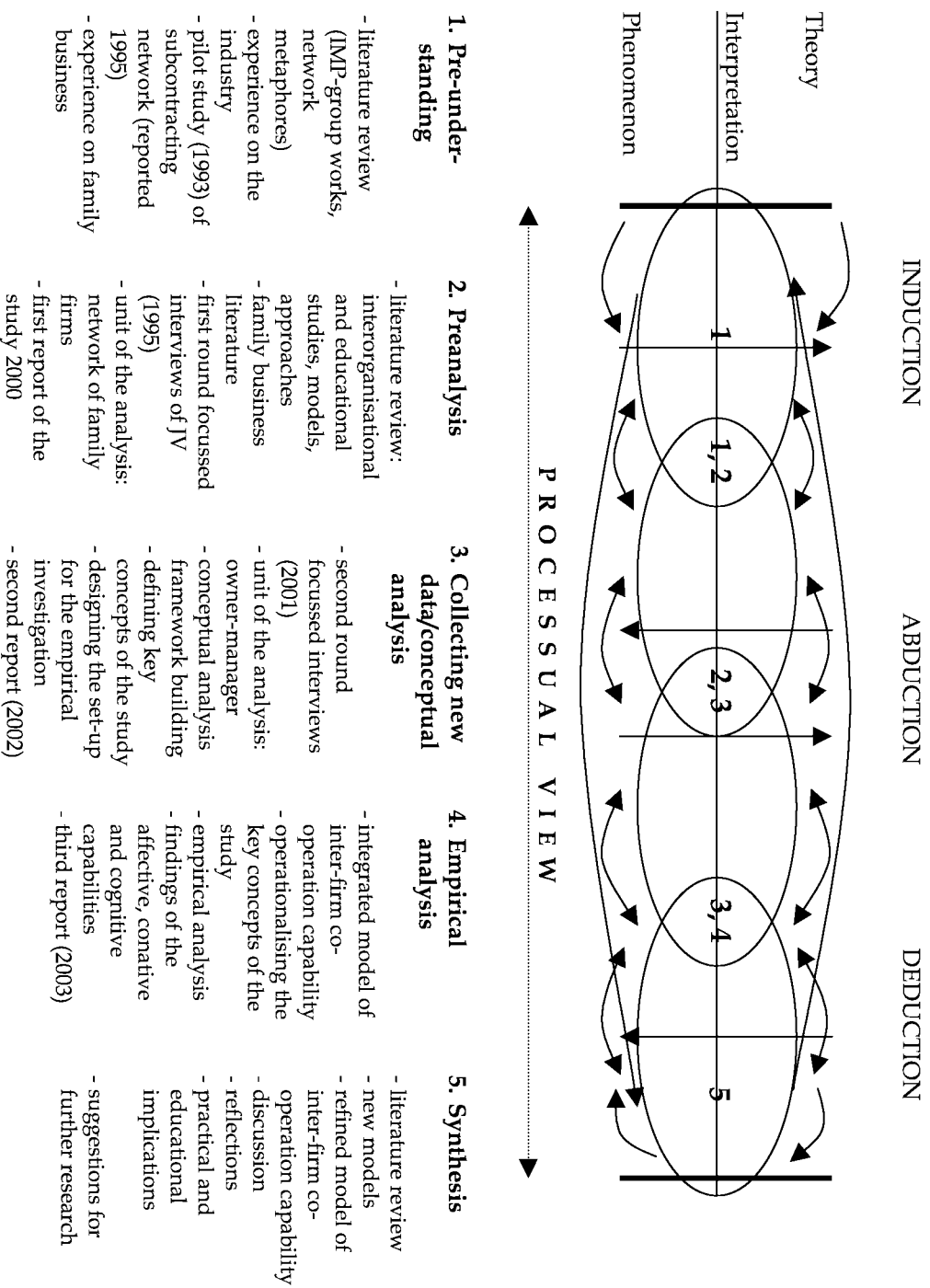


FIGURE 17 Description of the Research Process in This Study

The interviews were conducted in an open and trusting atmosphere. In order to show her trustworthiness and sense of confidentiality the researcher suggested to the interviewees that they could read the transcriptions made of the tape recorded interviews, but all the interviewees felt it unnecessary. However, every now and then, the interviewer was asked to stop the recorder, when the discussion was addressing confidential or just irrelevant questions.

The interviews lasted 1,5 - 2 hours each, and sometimes longer. The first round interviews were conducted in 1995, beginning from the first joint projects in the 90's and characterising the early phases of the inter-firm co-operation and networking. The unit of analysis in the first round of interviews (in 1995) was the network of family firms. The latest interview rounds in 2001 put more emphasis on the development of networking by looking back on the years 1993 to 2001, i.e., enhancing the knowledge of the development of the networking process, and performing. Thus, the owner-managers of the family firms were allowed and encouraged to discuss as freely and openly as possible about their own family firms, the phases of the networking and inter-firm co-operation, describing the early joint projects, experiences, outcomes, and expectations. This seemed to work fairly well in getting a picture of how the owner-managers came to a decision to start networking, how they have organised their transactions and control systems, how the networking as a process has been developed over the years, and what issues have been central in keeping their horizontal networking in operation. It is also worth noting, that the human mind is retrospective, and the human memory assimilates "experiences" under the studied phenomenon.

To conclude with: data collection has been conducted by using interviews, and more specifically focussed interviews. Knowing what to ask and how to ask is ultimately difficult when one tries to capture as much knowledge from the informants as possible during one or two long discussions. However, in a genuine interview the objective is to discover the interviewee's subjective reality, not the researcher's own. The issues to be studied are as an open system. Tamminen (1993,100) points out the following precepts for a genuine interview:

- no leading questions.
- no previously planned questions.
- no criticism.
- not too sensitive questions in too great number.
- tolerance of silence.
- concrete topics.
- avoidance of forbidden questions.

Owner-managers have their own constructed reality and experience of the networking process. Thus, it is worth noting that interpretation of the data analysis is based on the experiences of the owner-managers. When describing and interpreting the data, the experiences can be both espoused and 'lived'. There are two differences between these. Espoused experiences are constructed at the time when they are memorised and told. Someone has 'learned' to tell the story in its best way. The other is that 'lived' experiences are individual on one

hand, and on the other, cohesive in the sense of the shared and joint time in a networking process. Shared and lived experiences are based on the joint reality of the networking process.

The case selection (multiple case design) and interviewees have been selected and chosen by the researcher herself. The interviewees and their family firms were familiar with her. The researcher also has experience in the furniture industry, and has been a shareholder in one family firm. The aim right from the beginning has been to learn as much as possible from the networking and inter-firm co-operation by focusing on the social and economic features of networking, i.e., to understand more about the structure, relationships and process of networking, although the emphasis has been on the processual description of networking.

It is quite natural that during a long process of researching and designing, data reduction is a matter of choices. According to Miles and Huberman (1994) data reduction refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appear in written-up field notes or transcriptions (Miles & Huberman 1994, 10). Before this research process was even started some kind of data reduction had already been made. The reason for this is based on a researcher's decisions of which conceptual framework, what kind of firms or cases, what kind of research questions, what kind of method or data collection approach she will choose. Data reduction is a form of analysis that sharpens, sorts, focuses, discards, and organises data in such a way that 'final' conclusions can be drawn and verified (Miles & Huberman 1984, 21). Evidence from each case should be constantly compared with the frame iterating towards a theory that closely fits the data. Eisenhardt (1989, 541) further notes that a close fit is important because it takes advantage of new insights possible from data and yields an empirically valid theory.

In this processual case study, the data reduction project was as follows:

- The data was collected completely as semi-structured focused interviews, which were tape-recorded,
- and transcribed to text. Furthermore, observation (during the interviews), and other data (i.e., magazine articles, research reports) have been utilised in this study.

The researcher read those papers, and picked up relevant parts that were related to interview questions and research problems. Important issues were written above the transcribed text in block letters (i.e., coding). This kind of format enabled a simple overview of the interviews. Quite a lot of 'handwork' has been done, because any computer aided statistical programmes, e.g., NUD.IST or ATLAS.TI has not been applied here. However, this format (transcribed text with codes etc.) enabled the researcher to analyse and conceive the text in order to find similar constructs and patterns between the interviewed cases.

6.6 Validity and Reliability

The quality of scientific research may be judged by various criteria. Such as: reliability, credibility and validity. Validity is the extent to which a researcher is able to use his/her method to study what s/he intends to study rather than studying something else. Thus a theory, model or category should describe reality with a good fit in order to be valid (see Gummesson 1991, 80-81). In a qualitative research, there has been lots of discussion on whether validity and reliability are relevant when evaluating the quality of the research (e.g., Eisenhardt 1989). Reliability means that the operations of a study can be repeated with the same results, in other words, that other researchers can replicate the study with similar results. Reliability shows the degree to which a finding is independent of accidental circumstance, i.e., the researcher could him/ herself be the greatest source of random errors. Credibility of the study is increased if the final interpretation is subjected to the scrutiny of those individuals upon whom it is based (Johnston et al. 1999, 209). Silverman (1993, 79) points out the importance of obtaining information of good quality when gathering material during the research process.

The concepts of validity and reliability are less applicable when assessing a conceptual study, when compared to, e.g., statistical studies. When looking at the validity of the conceptual study, attention should be paid to the following issues (Huuskonen 1989, 29-30, see also Näsi 1980, 6-8):

- Are the concepts or constructs of concepts chosen carefully, taking into account the context and the study as a whole? More specifically, are all the central elements of the studied domain considered and taken into account in the study?
- Are the interplay and the interdependencies (reciprocities) of the elements considered to be taken into account in the study?

Considering the reliability of the conceptual study, the following questions should be carefully examined:

- Are the concepts identified and labelled correctly?
- Are the contents of the concepts understood correctly?
- Is the reciprocity of the concepts understood correctly?

Construct validity refers to the degree to which inferences can legitimately be made from the operationalisations in the study to the theoretical constructs on which those operationalisations were based. Like external validity, construct validity is related to generalising. Construct validity may be improved by gaining knowledge of the interviewed persons and the related earlier theories ex-ante the research interviews (Hirsjärvi & Hurme 1991, 129). External validity refers to the conclusions that involve generalisations. In other words, external validity is the degree to which the conclusions of the study would hold true for other persons in other places at other times so that one would like to generalise from them.

In qualitative research there is much discussion on the validity and reliability of the evaluation of the research (Silverman 2000; Eisenhard 1989; Yin 1994). There are no generally accepted guidelines for the assessment of conceptual studies, or for modelling frameworks. As a notion of social sciences, there exist some sets of criteria for judging the quality of the research process. Yin (1994, 33) has cited Kidder and Judd (1986, 26-29). The test could be seen as validity as Kidder and Judd (1986) analysed them:

- Construct validity: establishing correct operational measures for the concepts being studied.
- Internal validity (for explanatory or causal studies only, and not for descriptive or exploratory studies): establishing a causal relationships, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships.
- External validity: establishing the domain to which a study's findings can be generalised.
- Reliability: demonstrating that the operations of a study – such as the data collection procedures can be repeated, with the same results.

In this study, construct validity is a necessary condition for theory development (e.g., conceptual explicitness and clarification of concepts) and for empirical investigation. Construct validity was developed in psychology to reflect the tenets of philosophy of science pertaining to theory construction and development. For example, the philosophical stances as well as concepts of measurement, terminology, and procedures often differ among such areas as economics, psychology, and sociology. It has also been stated, that construct validity has been eschewed among technology and other disciplines because of its measurement problems. Constructs are viewed as no more than labels for different measures (Peter 1981, 133). Basically, the philosophical view of constructs is similar to what Nagel (1961) and Cronbach (1971) call 'instrumentalism' (Cronbach & Meehl 1955 cit. in Peter 1981, 133-134).

Constructs have at least two types of meaning: systematic and observational (Kaplan 1964 cit. in Peter 1981, 134). Systematic meaning refers to the fact that the interpretation of what a construct stands for depends on the theory in which the construct is embedded. Looking at the conceptual part of the study, (literature review) that is to be able to know what the researcher means when she describes/discusses the construct 'capability' or 'interfirm co-operation', it is necessary to know what theory of capability or interfirm co-operation the researcher is using or combining. On the other hand, observational meaning refers to the notion that a construct must be capable of being directly or indirectly operationalised, if it is to have explanatory power, and it should be embodied in at least a loosely specified theory in order to be of legitimate inter-organisational and educational interest. (cf. Peter 1981, 134; see also Churchill 1979; Venkatraman & Grant 1986; Venkatraman & Ramanujam 1986.)

All in all, the term 'construct validity' is generally used to refer to the vertical correspondence between a construct which is at an unobservable,

conceptual level, and a purported measure of it which lies at an operational level (Peter 1981, 364).

More specifically, looking at the conceptual part of the study, quality criteria for the construct validity are defined as follows:

- The representativeness and distinction of concepts.
- The concepts are clarified in the progress of the analysis.
- The conceptual consistency and logic in and between the sub-concepts and key concepts.
- Many of the sources referred to in this study are evaluated among the 'best papers' and refereed journals in the field of entrepreneurship, family business, inter-organisational studies, education, entrepreneurship education, marketing, psychology and sociology, to mention but a few.
- The phenomenon of the conceptual study (interfirm co-operation capability) has been discussed by using the literature and empirical studies anchoring on several disciplines.

The internal validity is an important part of the research process whereas external validity would refer to the ability to generalise about the issues that have been studied. Alasuutari (1994) has pointed out that the relevance of the research work is more important than generalisation.

Looking at this thesis as a whole, quality criteria for the qualitative case study are defined as follows:

- Concepts, theories and models are empirically realistic, and applicable to the studied phenomenon, i.e., inter-firm co-operation capability in the family business context.
- Researcher's basic assumption related to research questions is based on the knowledge of the field, taking into account the earlier studies of the field.
- Interviewed owner-managers of family firms were selected by accounting for their experience and knowledge of the research issue.
- Because of the longitudinal nine years qualitative study, natural changes are evident concerning all the parties involved in this process namely: researcher, interviewees (owner-managers), and the researched issues.

Learning might have happened in different forms and at different levels during the time-span. These changes and occurrences will naturally effect the analysis of the data. Time plays an important role in acquiring trustworthy data. *Time* has both increased the trustworthiness of the data (reliability) in this study, but it has also produced limitations. Human memory is *retrospective*. The fact, that some issues or details might have been forgotten, some of them are biased, and there are some differences in how the owner-managers remember the issues, or how they would like to remember certain issues, can all have an effect on the reliability of the study. These kinds of problems can be avoided if the researcher uses multiple sources of evidence, and interviews several people, in order to avoid the bias of obtaining desirable or 'favourable' answers.

The content validity could be poor if the researcher is unable to discuss the phenomenon with the sufficient and relevant themes, concepts, constructs or questions. The classification of the data has been made as a synthesis of the multiple cases, i.e., by interviewing the owner-managers of the networking

family firms. In this thesis, the content validity was enhanced by both the researcher's preunderstanding and experience of the phenomenon (networking and inter-firm co-operation), and the context (family business).

- Rich description, citations from the interviews have been used to increase the external validity, thus the reader is able to compare the emic (meaning given by the subject) and etic (meaning given by the researcher). This has also been taken into account by empirically testing the concepts and constructs in the earlier studies of the researcher, concerning the very same network of family firms. (cf. Toivonen 1999, 128-129.)
- The researcher's own reflection on the conformity of reality has to be taken into account.

Naturally, a researcher's own attitude, interests, choices, and values are associated with the research design and procedure, how s/he collected, analysed and interpreted the data gathered. Can other persons replicate the results of the same study; theoretically they should, but it is also noteworthy, that case studies provide an opportunity to 'see' and to 'comprehend' (experience) the studied phenomenon and the context from different perspectives. Although, in this study, if another researcher would listen to the recorded tapes, read the transcriptions, and other gathered materials, and notes, rather similar findings could be arrived at.

- The conceptual and empirical discussion should be limited to the family business context only, i.e., only analytical generalisations are possible, and therefore, should be made very cautiously beyond the context (cf. Yin 1989/1994; Niemelä 2002).

Improving validity and reliability means how many clues or issues speak for the explanation or description of the present phenomena (Alasuutari 1994). A qualitative study can be evaluated accurately only if its procedures are sufficiently explicit so that readers of the resulting publication can assess their appropriateness. Also, the scientific canons that the researcher has assumed should be appropriate to the study. The canons or standards by which quantitative studies are judged are quite inappropriate to qualitative studies (see e.g., Strauss & Corbin 1991, 249; Alvesson & Sköldbberg 2000, 276; Silverman 1993, 144; Grönfors 1982, 173). 'Grounded theorists' share their conviction that the usual canons of 'good science' should be retained, but require redefinition in order to fit the realities of qualitative research, and the complexities of social phenomena that we seek to understand. According to Strauss and Corbin (1991, 250-251) the usual scientific canons include: 1) significance, 2) compatibility, 3) generalizability, 4) consistency, 5) reproducibility, 6) precision, and 7) verification. These canons are mainly explicitly discussed, but there exists also other canons, such as, a) precision, b) consistency, c) and relevance that are implicitly assumed. (Popper 1959 cit. in Strauss & Corbin 1991, 250.)

It has been argued, that any given study should be capable of being replicated, so if the findings of the original study are reproduced in the

succeeding ones, they then have more credibility. Conversely, probably no theory that deals with a social/psychological phenomenon is actually reproducible, insofar as finding new situations or other situations whose conditions exactly match those of the original study is impossible thought many major conditions may be similar. Another way of denoting reproducibility is as follows. Given the same theoretical perspective of the original researcher and following the same general rules for data gathering and analysis, plus a similar set of conditions, another investigator should be able to come up with the same theoretical explanation about the given phenomenon. Generalizability is one of the usual canons redefined for qualitative research. (Strauss & Corbin 1991.)

According to Alvesson & Skoldberg (2000, 276) good research should be characterized by the following features:

- Empirical arguments and credibility.
- An open attitude to the vital importance of the interpretative dimension to social phenomena.
- Critical reflection regarding the political and ideological contexts of, and issues in, research.
- An awareness of the ambiguity of language and its limited capacity to convey knowledge of a purely empirical reality and awareness about the rhetorical nature of ways of dealing with the issues (the representation-authority problem).
- theory development based on the mentioned issues.

Silverman (1993, 156) has stated that most of the claims (criteria, methods and techniques) to validity in field research are usually inappropriate to qualitative research. Field research studies are usually based on one or more cases. It is unlikely that these cases will have been selected on a random basis. More likely, a case will be chosen because it allows access. Silverman (1993) points out, "*as our understanding of social processes improves, we are increasingly able to choose cases on theoretical grounds - for instance, because the case offers a crucial test of a theory*".

Silverman (1993, 160) has pointed out that it is important to recognise that generalising from cases to populations does not follow a purely statistical logic in field research. Silverman refers to Bryman who argues: "*the issue should be couched in terms of the generalisability of cases to theoretical propositions rather than to populations or universes*". Silverman (2001) has pointed out that data triangulation and member validation are usually inappropriate to validate field research. Instead, Silverman (2001, 248) has suggested five ways of validating such research. These are:

- Analytic induction.
- The constant comparative method.
- Comprehensive data treatment.
- Deviant-case analysis.
- Using appropriate tabulations.

The standard method of testing a hypothesis in field research is *analytic induction*. The basic idea is that researcher should begin by defining a phenomenon and generating some hypothesis, and then she/he take a small body of data (a single case study within/embedded multiple cases in this

study) and examine it. This can be done according to Fielding (1988, 7-8 cit. in Silverman 1993, 161) as follows: “ *while a small number of cases support ‘practical’ certainty, negative cases disprove the explanation, which is then reformulated. Examination of cases, redefinition of the phenomenon and reformulation of hypotheses is repeated until a universal relationship is shown*”. It is important to notice, that doing qualitative research there is no random error variance, that is, all exceptions (deviant cases) are eliminated by revising hypotheses until all the data fit. The result of this procedure is that statistical tests are actually unnecessary once the negative cases are removed (see Fielding & Fielding 1986, 89 cit. in Silverman 1993, 161).

The constant comparative method means that the qualitative researcher should always attempt to find another case through which to test out a provisional hypothesis. The constant comparative method involves simply inspecting and comparing all the data fragments that arise in a single case (Glaser & Strauss 1967 cit. in Silverman 2000, 179.) All parts of researcher’s data must be inspected and analysed, and this forms a part of what is meant by comprehensive data treatment. It has also been stated that “ *findings are based on a subjectively selected, and probably biased, ‘sample’ of cases that happen to fit the analytic argument*”. (Paul ten Have 1998, 135 cit. in Silverman 2000, 180.) Quite similarly Mehan has pointed out that “ *...all cases of data ...[are] incorporated in the analysis*”. (Mehan 1979, 21 cit. in Silverman 2000, 180.)

Accordingly, comprehensive data treatment implies actively seeking out and addressing deviant cases. The qualitative researcher should not be satisfied with explanations that appear to explain nearly all the variance in their data. In qualitative research every piece of data has to be used until it can be accounted for. Thus, pieces of data are never intrinsically deviant but rather become so in relation to the approach used. This theoretically defined approach to analysis should also properly apply to the compilation and inspection of data in tabulated form. (Silverman 2000, 184.)

Looking at the validity of the interviews and data in general, the validity of ‘owner-managers experiences’ should also replace the idea of ‘objectivity’. This, and other objectivity and subjectivity related questions leads to discussion of biases of this research process. Alvesson and Sköldböck (2000, 72) raises the question what is crucial to the criticism of bias is always to ask who is speaking, and with what purpose? Within positivistic work there is an assumption that bias is a problem because of both bad interviewers and bad interviewees. Reasons behind this kind of argument relies on, e.g., the assumptions on that respondents untrustworthiness and lack of comprehension of social language.

These fears of bias are reflected in interactionist concerns about how informants may distort social reality, or conceal what the interviewer most wants to know. However, from the interactionist viewpoint, which this study stands for, it has been suggested that researchers do not need to hear interview responses simply as true or false reports on reality. Instead, one can treat those responses based on the owner-managers experiences on their networking process as displays of perspectives and moral forms. On the other hand, interviews can be seen either as potentially ‘true’ reports or as just as situated

narratives. In this light, the lived and expoused experiences told by the interviewees account for their moral realities, perspectives on the joint networking processes, and experiences of the outcomes, or future expectations. Thus, deviant cases are necessary to analyse in order to test hypotheses and the fit between theory and empirical world.

To sum up the discussion of quality of the qualitative research process, some notes on the triangulation is worth to reconsider. Denzin (1978) has identified three other types of triangulation: 1) data triangulation - the use of variety of data sources for a study, 2) theory triangulation - the use of a variety of multiple perspectives to interpret a single set of data; and 3) methodological triangulation - the use of multiple methods to study a single problem. In this study, only theory triangulation and methodological triangulation have been used.

Validity and reliability are based on careful research design and procedure. In this study the criteria for quality are focused in the work as a whole: perspective consciousness, internal logic, and ethical value, as well as richness of meaning, structure, theory development, and empirical investigation. This has been taken into account by clarifying the heterogeneous concepts introduced in earlier inter-firm co-operation and (related terms) in network studies and educational studies, and trying to find a basis for theory triangulation and multiple perspectives for theory building and analysis (see Denzin & Lincoln 1994; Larsson 1993) as well as empirical and multiple perspectives derived from the empirical research. Both the conceptual analysis and empirical analysis has a meaning for validity, reliability and credibility if the whole research process is taken into account.

According to Pfeffer (1982) "*good theory*" should be characterized by logical coherence. In case studies logical coherence has to do with the adequacy of the research process and the empirical grounded theory (Strauss & Corbin 1991). According to Eisenhardt (1989) it is important to provide the reader with information that makes it possible to evaluate the adequacy of the research procedure and its outcomes. Good theory should also be parsimonious enough. The case description and the research process have been discussed and illustrated in more detail in chapter 7.

6.7 Summary of the Methodological Chapter

Qualitative data analysis is an interactive and iterative enterprise (Miles & Huberman 1994, 12). The subjective nature of human knowledge makes the data analysis challenging. In this case study research, the researcher tries to deepen understanding of the context of the study, i.e., family business, and the phenomenon of inter-firm co-operation capability processually by interviewing the owner-managers of the networking family firms. The so-called subjectivism

is accepted considering the informants, and their epistemological, ontological and axiological basis.

In order to get a more holistic picture of the studied phenomenon, multiple sources of evidence have been used, i.e., the owner-managers of the family firms have described the networking process focusing on their joint venturing, and inter-firm co-operation, and some newspaper articles, magazines, studies made by other seasoned researchers. Thus, these multiple case analyses (n= 5) have been combined to illustrate the worldviews of the owner-manager's and the contextual characteristics of their family firms and their joint venture. Although, this research process has been a voyage of discovery, and a learning process for doing qualitative research. Abductive case research has provided alternatives to weight the reliability, validity and credibility discussion of this nine-year qualitative research process. Research strategy has developed over the years, by directing and redirecting perspectives, and guiding principles of this study, and focusing the scientific, and research and methodological approaches of the research.

As a conclusion of the methodological chapter, the central methodological choices of this study are summarised briefly in Table 5.

TABLE 5 Summary of the Methodological Approaches of This Study

SCIENTIFIC APPROACH	RESEARCH APPROACH	METHODOLOGICAL APPROACH
<p>Ontology:</p> <ul style="list-style-type: none"> - Nominalistic basic assumptions - Relativistic/constructivistic worldview of the owner-managers' - Multiple realities <p>Epistemology:</p> <ul style="list-style-type: none"> - anti-positivism: relativistic world-view - reality is socially constructed - owner-managers create/construct their own world of view/reality - shared understanding of the networking and inter-firm co-operation - taking into account abductive logic/reasoning - uniqueness, case research <p>Human nature:</p> <ul style="list-style-type: none"> - voluntarism: co-operation and networking is based on voluntariness <p>Ideographic:</p> <ul style="list-style-type: none"> - understanding knowledge creation, history and time boundness <p>Philosophy of Science:</p> <ul style="list-style-type: none"> - applying the ideas of philosopher Immanuel Kant - subjectivism is limited: all the knowledge has developed in a shared environment 	<p>Network paradigm/network approach:</p> <ul style="list-style-type: none"> - the main scientific research approach of the study <p>Actor's approach:</p> <ul style="list-style-type: none"> - the base approach of this as study - interpretative reasoning - phenomenology (using language in interpreting the phenomenon of inter-firm co-operation and networking) <p>Hermeneutics:</p> <ul style="list-style-type: none"> - understanding knowledge creation, meanings, context and time of the study <p>Processual view:</p> <ul style="list-style-type: none"> - on the development of the networking process of family firms - multilevel analysis: individual, family firm, network level - group analysis: forming, storming, norming, performing (cf. Tuckman 1965) - processual research analysis (Pettigrew 1997) 	<p>Qualitative approach:</p> <ul style="list-style-type: none"> - Single case study embedded multiple cases (n= 5) <p>Case study method:</p> <ul style="list-style-type: none"> - as the main method of the study - conceptual level (literature review) and empirical level analysis - using abductive 'logic' (reasoning) conducting the research process <p>Data Collection and Data Analysis:</p> <ul style="list-style-type: none"> - data collection, analysis, data reduction - using focussed interviews, observation, documented material (research reports, articles, magazines, www-pages) - descriptive/interpretative analysis <p>Validity, Reliability, Credibility:</p> <ul style="list-style-type: none"> - construct validity - content validity - trustworthiness, credibility, transferability, confirmability when scrutinising the quality of the research - researcher's preunderstanding, replication and reflections

7 THE DEVELOPMENT OF INTER-FIRM CO-OPERATION CAPABILITY IN THE CONTEXT OF NETWORKING FAMILY FIRMS

In this chapter the empirical study on a networking process of family firms is described. The setting is overviewed in section 7.1., and the case description is introduced in section 7.2. Finally, findings of the affective, conative and cognitive capabilities on a networking process of family firms are investigated in section 7.3, and summarised in section 7.4.

7.1 The Setting

The purpose of the empirical part of the study is to investigate what has been the role of learning, trust and commitment in the inter-firm co-operation and networking process of family firms. The empirical process has been analysed by using a descriptive analysis based on the affective, conative, and cognitive dimensions of inter-firm co-operation and the integrated model of inter-firm co-operation capability introduced in chapter 5. The findings of the affective, conative and cognitive capabilities are described based on the experiences of the owner-managers of the networking family firms.

The main empirical research question was formulated as follows:

What has been the Role of Learning, Trust and Commitment in the Inter-firm Co-operation Process?

The following themes and sub-questions were discussed in order to describe the networking process of family firms.

- What kind of knowledge and skills have been essential in the inter-firm co-operation?

- What issues have 'pushed' and 'pulled' family firms into inter-firm co-operation?
- What issues have promoted and advanced the inter-firm co-operation of family firms?
- What issues have strengthened and weakened the inter-firm co-operation of family firms?
- What issues have contributed to (helped in) utilising the networking and co-operation in the progress of the inter-firm co-operation?
- What issues have restrained the utilisation of inter-firm co-operation of family firms?
- How are the values, attitudes and beliefs of the owner-managers associated with the inter-firm co-operation?

The overall networking process has been described and comprised as follows:

- describing the longitudinal networking process of family firms covering the years of 1993-2001.
- describing the affective, conative and cognitive capabilities leaning on the experiences of the owner-managers in the inter-firm co-operation and networking process.
- applying the 'operationalised' conceptual frame, and theoretical frame of reference introduced in chapter 5 when analysing the data.

7.2 The Case Description

The networking process of the family firms in this study began in the year 1993. All the family firms were, even before the foundation of their joint venture (JV), engaged and embedded in many occasional transactions, i.e., subcontracting, strategic alliances and normal buyer-seller relationships. The co-operation was intensified during the time when they were engaged in a fairly extensive joint furnishing project in Moscow in 1992. One of the family firms operated as the main contractor, and the others as subcontractors. The successful joint project promoted the additional development of inter-firm co-operation of the firms. Particularly, in 1992 the firms decided to jointly participate in the furniture fair in Cologne. The results of the joint display led to the idea of planning a joint product assortment, i.e., a collection of the joint venture. The original idea of the family firms belonging to a 'strategic alliance' was, in the first phase, to co-operate as a loose export circle. However, when the first orders and joint invoices were received, and other legal issues concerning the collection and contracts appeared, the need for division of work and legal responsibilities had formed.

The loose export circle was not attractive considering, e.g., the division of work, sharing the risks and profits, investing in research and development (R&D), and outsourcing the lacking competencies. Consequently, a legally independent marketing based joint venture was founded in 1993. The ownership was divided into equal shares, and the limitations of liability and the responsibilities norming the joint operations were legally confirmed. In the founding phase of the networking, approximately 340 000 euros were budgeted

for product innovation and development, of which the family firms were contributing one half and the Finnish Ministry of Trade and Industry the other half. An outside designer, export manager and agent network group was employed to work for the joint venture. The financial subvention (approx. 168 000 euros annually) was granted by the Finnish Foreign Trade Association, that covered nearly half of the expenses of export operations and the salary of the export manager.

Costs and effects of the networking process have varied over the years. Looking at the first five years after founding the JV, the overall performance was still in the red. However, after collaborating ten years, the result of the joint venture is that overall performance is almost back in the black. Access to the export market has not been such an easy task as was planned. Thus, the first year the annual turnover was over 504 000 euros, even though the target was set up as being around 840 000 euros. In 2001, the annual turnover concerning the joint venture has climbed up to 1.68 million euros. Nevertheless, the annual growth of the turnover of the JV has not increased as fast as expected. Consequently, the co-operation has needed additional financing from the owning family firms. Every now and then, tangible and intangible resources, i.e. money, time and raw materials are needed to keep things moving along, and floating capital efficiency. The rate of investing in joint venturing has been in line with the firms' own resources considering the development of one's own firm. Owner-managers have also considered whether the exporting of one's own family firm could be organised through the joint venture. The family firms also have a proximity advantage, because they are situated close to each other geographically, in a circle with a diameter of approximately 55 kilometres.

After eight years of networking and inter-firm co-operation, none of the family firms have 'divorced' themselves or opted out of the scheme. Yet, the stocks of the joint venture are equally owned, and more financial capital and investments have been needed from the owning family firms to boost performance. The family firms have made considerable investments in both their own firms and the network by expanding production, buying machinery and rationalising the transportation. Concentrating on their core competencies and reducing unprofitable and uneconomic elements of activities and investments of the inter-firm co-operation and networking have helped to utilise the networking and inter-firm co-operation.

Withdrawing from home furnishing markets in German speaking countries in Central Europe has provided resources to refine new challenges on the project furnishing, i.e., that is also focused on both the domestic and export markets. A lot of work has already been done, by trying to make a brand for the joint collection, and creating an image for the joint venture. New ideas are still needed on how to more efficiently arrange the logistics, transportation and pricing. Some of the owner-managers have identified the reason for the unsuccessful networking to be based on the competence to work with solid wood and lack of marketing and export marketing skills.

The policy of the family firms is to produce quality products, i.e., by using ecologically sound raw materials and wood of renewable Finnish pine and

birch forests. The waxes and dyes are made from natural raw materials, and as a consequence of this, most of the furniture will be painted with time, thus enhancing its value for the next generation.

The *horizontally* networking case firms can be introduced by applying the model of the family business definition for the purpose of this study as follows:

Firm A was established in 1932. The ownership of the firm is in the hands of the family members (family members and kin), and the governance is based on the board members of the family, and the firm is managed only by the family members. The firm is in its second generation, and the third generation is already working in the business. Two brothers are in the management position, and several family members, kin and relatives are actively working in the firm. The firm is deeply committed to continue as a family firm. The core values and entrepreneurial spirit influences the firm's vision and future prospects. The core competence relies on producing period furniture, such as tables, chairs, and cupboards. Nearly half of the production is targeted to export markets (mainly Russia, Germany, Poland) but also to the domestic market, i.e., furnishing and providing interiors, e.g., to various public institutions, hotels and ships. One of them was Mäntyniemi, the Residence of the Finnish President, wherein the firm was producing chairs. Firm A produces the period furniture, especially chairs, for the joint collection.

Firm B was established in 1957. The owning relationships are divided equally between the siblings, i.e., five brothers and three daughters. The governance is in the hands of the board members of the family, and the firm is managed by the family members, i.e., the oldest brother of the firm is the managing director. The firm is in its second generation, and the third generation is already working in the firm. Firm B is in the transition of succession process at the moment. All 8 siblings are actively working in the factory in different tasks. Values, assumptions and entrepreneurial spirit reflect on family and business culture. The firm provides sawn wood for the other firms of the JV, and produces edge-glued panels for the other partners of the network. The firm also produces solid pine wood dining tables (settees). Nowadays, the main markets are domestic markets, however, there is minor exporting to Japan and Germany. Firm B produces and delivers all the edge-glued panels that are needed when the chairs, dining tables, and cupboards are produced by the other family firms.

Firm C was established in 1963. The four brothers have equal owning relationships, and the oldest brother is the managing director of the firm. The governance is in the hands of the board members of the family. The firm is in its third generation, and the fourth generation is actively, and part-time, working in the business. The values, and entrepreneurial thinking reflect the business values of the owning family. The family is committed to continuing as a family firm for the benefit of its next generation. The firm produces bedroom sets (e.g., beds, cupboards, bedside tables), and their role in the network is to produce all the wooden products of the joint collection. Family firm C exports to Germany, Poland, Russia and Estonia. Furthermore, Family Firm C produces all the solid wood parts of the joint collection, i.e., dining tables, wardrobes, and beds.

Firm D was established in 1967. The managing director (owner-manager) is the only controlling member of the firm. The owning shares (relationships) have been, and are still controlled and partly owned by a venture capitalist of the furniture branch. Firm D can be seen as a closely knit family firm with changing owning relationships in the life cycle of the firm. The governance is still in the hands of the board member of the family, although controlling non-family members are also board members. The firm is in its second generation, and the owner-manager and his son are actively working family members in the business. It seemed that the firm is committed to continue as a closely knit family firm. Firm D is transferring its traditional production such as cupboards and chipboards (veneered) into a subcontracting business, by contracting out to shipyard business, and for the major furniture chains in Finland. Firm D produces cupboards, chipboards, and set of shelves (bookcase) for the joint collection. Firm D can be seen as a closely held family firm with changing owning relationships in the life cycle of the firm.

Firm E was established in 1967. The firm has gone through a management buyout (MBO) in 1993, after that, the son of the founder took charge of the firm. The firm is owned and controlled by the owner-manager, with some stocks owned by his father. The governance is in the hands of the board members of the family. The firm is in its second generation, and the owner-manager of the firm is the only actively working family member in the business. The values and assumptions and the entrepreneurial spirit are overlapping, and reflected from the founders' core values. The firm seemed to be committed to continue as a family firm. The owner-manager of firm E is also the managing-director of the joint venture of the networking family firms. Firm E is targeting both the domestic market and in export, using mainly subcontractors to produce upholstered furniture, such as sofas and chairs. Firm E produces mainly for the joint collection, and the products are sold by the joint venture. Firm E also controls the total quality of the production of the joint collection. The role of Firm E is to produce all the upholstered furniture for the joint collection. This also involves the sampling and choosing the fabrics, the upholstery of cushions, and the assembling of chairs.

The background characteristics of the networking family firms are summarized and illustrated in Table 6.

The *Joint venture (JV)* was established in 1993, for conducting the marketing operations and exporting the joint collection of the networking family firms. The JV is the central unit where the assembly, packaging and transporting, as well as marketing and selling are taking place. JV also has an agent network for marketing and sales promotion in Central Europe.

TABLE 6 Background Characteristics of the Networking Family Firms

Family Firm	Year of establishment /generation	Personnel	Annual net sales (Millions Euros)	Division of work in the JV
A	1932/2 nd	65	6.7	Period furniture, dining tables, chairs.
B	1957/3 rd	30	2.5	Production of edge-glued panels, and sawn wood.
C	1964/3 rd	30	1.68	Dining tables, beds, solid wood parts of joint collection.
D	1967/2 nd	95	8.41	Chipboard, cupboards.
E	1968(1993) 2 nd	5	0.50	Upholstered furniture, sofa settees, armchairs Total Quality Management.
Joint Venture	1993	5	1.68 /2001	Export, Marketing, Assembling.

7.3 Findings of the Affective, Conative and Cognitive Capabilities in a Process of Networking

In this section, the networking process is interpreted by analysing the owner-managers' experiences of their inter-firm co-operation and networking process. Findings of the affective, conative and cognitive capabilities are described separately, and are summarised in section 7.4.

7.3.1 Findings of the Affective Capabilities

The affective capabilities are investigated using the integrated model of inter-firm co-operation capability in the context of networking family firms (see Figure 13). The synthesis of the conceptual part of the study revealed that commitment is one of the key concept of inter-firm co-operation capability (see chapter 5). Affective dimension of inter-firm co-operation was defined as 'social networking capability'. The affective constructs underlines, the importance of concepts such as the 'view of life' and attitude towards networking of the owner-managers of the networking family firms. The themes '*What issues have*

strengthened and weakened the inter-firm co-operation of family firms', 'what issues have contributed to (helped in) utilising the networking and co-operation in the progress of the inter-firm co-operation' and, 'what issues have restrained the utilisation of inter-firm co-operation of family firms' serve to describe the openness to inter-firm co-operation and networking process of family firms. (see Figure 2).

Networks and networking take shape within the natural catchment areas of human social interaction. To make networking and inter-firm co-operation more robust in the face of uncertainty or a series of earlier market setbacks, all of the five family firms are still committed to their joint venturing and developing their inter-firm co-operation. The owner-managers' personal relationships and networks have been of great importance in forming and moulding the inter-firm co-operation and networking process. The geographical proximity has also contributed to the flexible arrangement of logistical co-ordination, and occasional convening of the owner-managers. Thus, owner-managers have known each other for almost the whole of their lifetime, they have experience on working together, and they have similar thoughts and views on business venturing and networking. Their attitude towards co-operation is based on the similar culture, i.e., shared value system and mutual assistance.

"... [it] isn't just a matter of a certain group joining together, a certain solidarity and homogeneity are extremely important ... in this joint venture (and networking) the advantage is that we all have known each other for a long time ... the idea of co-operation looked interesting and the entrepreneurial spirit ... belonging together ... you belong to the same team and that ... homogeneity is important ..." (E, 1995.)

"... In this co-operation (JV) conception we all believe in ... we believe in the same things ... and we believe that this co-operation will not affect all of us equally, that is the cold truth ... we are aware of the problems involved in the activities and are able to predict problems that the future will bring ... we speak the same language, a dialect, we understand each other well, for the entrepreneurial culture is similar ... we know each other as human beings and we know each other's enterprises ... we have never competed with each other ..." (A, 1995.)

Openness to share the expectations (even though they have been rather ambitious) and facing disappointments have helped to refine new ideas and improve actions. The 'view of life' is essential when looking at the forming stage of the networking process. Common understanding of entrepreneurial venturing, previous experiences on co-operation, and other joint projects have all affected on a personal level the attitude towards co-operation. Alongside the firms' histories, a lack of resources has prompted them to search for access to allies, i.e., inter-firm allies, furniture chains, and joint ventures that are more advantageous or specialised in marketing and exporting.

"... The enterprises should have a common purpose ... we are not all equally strong here in the JV networking but we have on the whole a common entrepreneurial culture and a long entrepreneurial history ... the resources and the volume of production are small ... we discussed those Italian and Danish models of co-operation ... so let's concentrate on manufacturing parts ... that is in my opinion where the future lies ... but these matters will have to be discussed at length ... they haven't developed in ten years down there in Italy either ..." (C, 1995.)

"... in this joint venture the distribution (of profit) will then, in time, take place in proportion to the number of shares owned ... but we can be pretty certain that no profit can be expected within the next ten years ... this is a tough game ... if we can buy from outsiders more advantageously than ... what we produce here in this chain ... well then, we'll buy it from outsiders ... this is not any kind of mother-child relationship " (B, 1995.)

"... I see lots of resources, not yet utilised resources ... and I am concerned about this region (South-Ostrobothnia region) ... we have competence ... but articles that we produce ... are they right ... selling with low prices (dumping) in one way or another it could be important to this whole industry to improve the quality of the production in carpentry and bring reputation to it ... " (E, 1995.)

Different personalities reflect the owner-managers' traits and preferences, and the ways in which they build bridges within the system or to the outside world. In this respect, personality traits and characters are reflected in behaviour, i.e., on how to manage with the relationships between family members, employees, networking partners, or customers, and how bold you are to tackle new challenges in inter-firm co-operation. Owner-managers seemed to be rather cautious with their promises, and optimistic in their visions and expectations. Characteristics such as persistence, flexibility, patience, and humanity seemed to be needed when coping with the entrepreneurial venturing and inter-firm co-operation relationships.

"... all these market signals have given us the belief that we are doing the right things ... you have to be ready to wait and believe ... " (A, 1995.)

"... co-operation should be more open ... " (C, 1995.)

The position of the owner-managers adds the value within the system of the family, the business, and the network. The position is empowered by the experience, abilities, and commitment to joint efforts. A common understanding of the responsibilities, possibilities, and risks has strengthened the mutual understanding of networking. The openness to discuss one's own experiences, expectations and competencies in developing joint projects has helped in utilising the inter-firm co-operation. It is worth noting that family reputation speaks for the rules and informal agreements, and it has also helped in elaborating the legal arrangements of the joint venture. Owning relationships are associated with the positions of the owner-managers in the network. The owning relationships - and using one's voice in the board of directors - are a form of taking responsibility of the economic as well as the social wealth of the family business and network.

"... and I also know that there are issues that are better to be or rather not to be discussed with the group ... that the others (owner-managers) will not accept such things ... and I also see that I can push the decision if I want to just by presenting certain issues in a certain way ... but I also know that the decision will not come from my heart and that will affect one's behaviour ... " (E, 2001.)

"... I have 30 years experience of running this family firm ... and I know how to use these weaknesses and strengths as an advantage at certain times ... this is serious business and it ... asks for the ability to tackle with your brothers ... this is not an easy task to conduct ... we are fortunate that each of us (owning brothers) has found his own role and place in this family firm ... in a natural way ... I would say ... according to one's own abilities ... but these abilities should be evaluated before you are planning any kind of co-operation with outsiders ... " (B, 2001.)

"... I'm pessimistic with regard to these co-operative patterns forcefully imposed, if a permanent development is to take place, then everything ought to happen a little at a time ... I don't know ... Sometimes you feel that here we are too eager to keep up a social group ... the group should decide on its own what is to be done ... and money is the dominating factor ... generally when some chain is established ... " (B, 2001.)

Personal commitment of the owner-managers has strengthened the networking and inter-firm co-operation relationships. Commitment has required a lot of sacrifices at the personal and firm level, i.e., investments in the networking process. Such investments can be characterised as intangible and tangible resources, i.e., time and knowledge, personal relations of networks, financial capital, owning shares, material, and machinery, for example. However, results does not come at the first place, even profit is expected, when comparing the divergent resources.

"... Considerable amounts of both personal and economic resources have been invested in this inter-firm co-operation and joint venturing ... I think that none of us has given so much time to any other matter ... even though we are so deeply engaged in our own business ... but we will still have to wait a few years before the results (in the form of money) will start flowing into the co-operative enterprise ... I would think that the joint venture will reach balance in about a year ... " (A, 1995.)

The importance of culture is extensive. Owner-managers do not easily admit outsiders to their 'club'. This means, that getting access to the network is a two-way process. Owner-managers are willing to give as well as receive, and they are willing to approach people who are known, and to whom they are referred to as friends or "entrepreneurs", as well as whom they think will have the same attitude and world-view. Owner-managers see many such advantages in their shared culture, i.e., the size of the companies, technical competence, language, dialect, business climate, but also different perspectives and perceptions concerning the artefacts, a way of doing things, the way of thinking about entrepreneuring, and joint responsibility. Even though the social interaction is highly valued, the economic factors are, to some extent, still the dominating factor when looking at the outcome of the networking process. Uncertainty and traditions are deeply rooted in culture. In other words, culture makes it difficult for people to control their position and achieve their personal goals or ends. Thus, the owner-managers seemed to be cautious as regards to enlarge their businesses. Even though the turnover has not increased nor exceeded the expectations of the owner-managers over the last nine years, the inter-firm co-operation itself has been increasing all the time. This seems to have strengthened the commitment to joint venturing, and to developing the networking.

"... you just need to learn how to keep the distance with family issues and business issues ... taking facts as such ... " (E, 2001.)

"... but if we are operating more than 100 kilometres from this region ... there is a whole different culture and a way of doing business than ours...the culture of the firm is important...looking at the whole business but also looking at the chain of producers ... that we could feel as if we belong to the same culture ... " (B, 1995.)

"... probably our main problem has been ... that we have been almost too discreet and delicate with each other ..., and this might be a fear of pushing the partners away from this co-operation ... and if there is something to say, we should deliver it right away, otherwise we are repeating our mistakes ... " (B, 2001.)

"... if you are just looking at the turnover of our joint venture, it is not the whole truth of our co-operation, in addition there are our inter-firm operations ... inter-firm co-operation is a remarkable part of our networking ... and it has created more challenges for our own business ... " (E, 2001.)

"... you can not hire a person from outside the family into the board of directors because s/he will not understand our motives here ... in our co-operation ... we can do a lot more things , and we have done a lot more things concerning our networking and co-operation (JV) ... and we have developed this inter-firm co-operation ... and this co-operation has been developing faster than our own family firms ... not perhaps if we consider production, but looking at the managing of the structure of the network ... " (E, 2001.)

Owner-managers have tested the firms' operational capacity and liability in previous contracts and transactions. They have stressed the commitment to subcontracting relationships by favouring long-term relationships. This means that if some of the family firms have not got the capacity or competence to respond to a client's offer, the deal is transferred to other partners of the network. This kind of behaviour has strengthened the inter-firm co-operation between the family firms. Furthermore, firms have gained competitive advantage by concentrating on one's own core competencies, combining the complementary resources and utilising personal networks of the owner-managers.

"... in this co-operative undertaking, when our own capacity has not been enough, it's been usual to buy help from another firm in order to keep up the sales ... " (A, 2001.)

Personal efforts have been the most important issue in the early phases of the networking process, and they still are. Personal commitment and giving one's time to joint efforts has enhanced the group spirit, and also the feeling of being honoured to belong to this network. Thus, the more one is capable of investing one's own resources, the stronger is the commitment to inter-firm co-operation.

"... in this joint venture (co-operation) is based on transaction ... first we have to commit the general and mutual agreement of the business-to-business rules and conditions of the purchase ... " (E, 1995.)

" ... it is not worth trying to ask or engage your enemies to a partnership ... commitment to all general things in operation ... the degree of commitment is low if you will not invest (your) own money ... " (B, 1995.)

"... inter-firm co-operation and joint venture should restrain neither the development of the owning family firms nor their exporting efforts ... " (E, 2001.)

"... if I would be asked now whether to join networking ... I would definitely refuse ... " (D, 2001.)

One common understanding concerning the entrepreneurial venturing in the furniture branch is that the owner-managers have not accounted for growth in the domestic markets concerning their own and joint businesses. The experiences describing the effect on inter-firm co-operation and networking are ultimately context-dependent. A long-term networking process requires initial conditions that shape and reformulate both the content and context of the networking of family firms.

It is also worth mentioning that in the furniture industry the subcontracting culture is still quite young in Finland. This was stressed by nearly all of the owner-managers. As a reason for the limited extent of subcontracting, it was mentioned that the earlier experience of the effectiveness of subcontracting, the independence of the deliveries, the quality and the subcontracting agreements, had not come up to the expectations and conceptions of trustworthy and mutually useful co-operation. Especially the small enterprises in the furniture branch still experience the subcontracting relationships as a restraining (to an extent) form of co-operation, and one that is dominated by the main contractor.

"... the worst drag on co-operation (from the standpoint of the subcontractor) is that no network economy has been developed ... in the lacking product market this works ... perhaps the whole word subcontractor should be changed, so that one wouldn't feel so subordinated ... " (C, 1995.)

"... it is not reasonable to demand more of your subcontractors or of this joint venture than what we are capable of ... but these competencies and capabilities should, in the first hand, you have to estimate and value your partners when starting any kind of transactions ... " (B, 1995.)

Family members are loyal and committed to each other. Family members are also rarely bold enough to fire their own family members or employees, when it comes to the ability to manage relationships and operations. Some of the owner-managers pondered whether they have succeeded in creating a different kind of culture in their joint venture. The interviews suggested that the joint venture could offer a different environment to develop oneself as a human being, to be more open to new ideas; to realise one's own intentions and dreams; and to carry out those plans and practices that are somehow not possible nor feasible to carry through in one's own family business. Furthermore, inter-firm co-operation and joint venturing can play a different role for the owner managers of networking family firms. The shared culture and value system provide a 'social and business club' in the form of the joint venture. This could also be seen as a 'escape' from one's own family businesses,

traditions, routines, etc. However, joint responsibility is associated with the wealth of the family and of the business.

"... one reason ... I guess ... that we have stuck together, is that our own interests have never taken the first priority ... " (B, 2001.)

"... we are too gentle and polite here towards one another...and we wait and see too long, wait for things to change ... " (C, 2001.)

"... I suppose that our culture (culture of the firm) will not change ... but perhaps we have transferred too much of it (culture) with us to our co-operation and joint venturing ... I really do not know ... " (C, 2001.)

However, the owner-managers have very different perspectives on their networking process, and the ideas concerning the development of the operations, and performance in general. Business have affected family and family has affected business, and reciprocal relationships between family and networking relationships appears to exist marginally. It can also be noted that business can shape family as well as family can affect business. Thus, some of the features of family influence are alike 'mediating' issues that are difficult to identify or separate from the business 'talk' and family issues 'talk'.

"... the outcome of the inter-firm co-operation has been rather weak for us ... for all of us ... the enthusiasm to develop this co-operation is highly dependent on the turnover, what you get from this ... it has been only 10 per cent for us ... it reflects and speaks for how much you are ready to develop the operations in this co-operation ... " (C, 2001.)

"... as regards logistics and other such things, the decisions that have been made [on the network level] have not been clear-cut enough ... and, of course, [as an owner-manager] you yourself have the responsibility, as you're part of the board ... (C, 2001.)

"... I believe that they [values and attitudes of a family enterprise] are in our blood, but the basic sort of thinking ... the kind of entrepreneurial attitude we've all picked up from within our own family, and not necessarily in the family business itself but in the home atmosphere, in mother's milk so to speak, and the environment one has grown up in ... and that this co-operation has, through JV, surely developed our understanding of certain things and provided us with new capabilities, new solutions... but on the whole I think it has not changed the basic way of thinking in any way ... " (B, 2001.)

"... We [at home] keep a certain distance with JV ... and then our family firm, it is a typical family enterprise ... and that's very personal ... too personal at times, and I've been trying to detach myself from that ... so as not to take everything so personally ... take the time when my parents were there, it was all very personal and that is quite taxing ... when you are in the middle of the things 24 hours per day ... I've consciously decided to live at such a distance that I have to take the car to get to work ... I do want to to keep my family and free time separate from my work, as I've experienced that also as a burden, it being so taxing; you should just see things as they are - facts are facts ... and you should keep some distance ... " (E, 2001.)

"... A family entails a clash of interests ... I've got an easy situation in my firm as I'm by and large the sole owner and my father participates by holding some shares ... and does not get involved in the activity of the firm at all, but if we consider these other family firms ... [e.g., family firms A and C], for instance ... who have five to ten members of their own families in leadership positions ... the decision-making is much, much more complicated ... they need to

take the family interests into account as well ... however, each firm is different from each other, of a different type ... not cast in the same mould ... I believe that JV is ... like ... a good alternative there, when it comes to dealing with things ... I mean, as in board management ... and in this way that you have a managing director from outside [the family] and that the other job entails one's own family firm, with the family ties and relationships affecting on the way things are done ... " (E, 2001.)

There exist many issues that have strengthened and weakened the inter-firm co-operation of family firms, as well as issues that have restrained the utilisation of inter-firm co-operation, or contributed to utilising the inter-firm co-operation and networking in the progress of networking and inter-firm co-operation. Table 7 illustrates the findings of the affective capabilities of the networking process of family firms.

As a conclusion, the affective capabilities are summarised as follows:

- Capability to accept a similar view of life. This refers to a mutual understanding of the inter-firm co-operation and networking between the partners. This means a positive attitude towards inter-firm co-operation and joint venturing. This appears as prior references and experiences on working together, and as a commitment to continue and develop the networking process.
- Capability to accept the joint responsibility. This refers to the owning relationships of one's own family business and the equally owned joint venture. This means commitment to long-term agreements on shared rules and norms, and legal agreements. This appears as personal and firm level sacrifices (intangible and tangible resources), and empowerment to use one's voice on the board of directors, as well as taking care and concern of the family business and networking systems. Furthermore, sharing the responsibility of the future development of the networking.
- Capability to accept the similar cultural bedrock of networking family firms. This refers to local business culture, culture of the networking family firms, and the values, attitudes, and beliefs of the owner-managers. This means sharing the entrepreneurial spirit and history, the experiences of the industry and running one's own family firm, and the personal relationships and networks. This appears as a common language (dialect), friendship, solidarity, trustworthiness, and reputation concerning the third parties, visions of the industry, proximity advantage, production oriented strategy, and the carpenter tradition. Values, attitudes, and beliefs reflect the owner-managers' personality traits and competencies as well as group identity. Values, attitudes and beliefs of the owner-managers reflect their family business culture, i.e., the particular culture of each family firm seemed to have an influence on the culture of the network.

7.3.2 Findings of the Conative Capabilities

The conative capabilities are investigated using the integrated model of inter-firm co-operation capability in the context of networking family firms (see Figure 12). The synthesis of the conceptual part of the study revealed that trust is one of the key concept of inter-firm co-operation capability. Conative dimension of inter-firm co-operation was defined as 'management capability'. The conative constructs underlines the importance of concepts such as the

TABLE 7 The Findings of the Affective Capabilities

View of Capability	Means	Appears as
<p>' View of Life'</p> <ul style="list-style-type: none"> - mutual understanding of inter-firm co-operation and networking - entrepreneurial way of thinking, acting and behaving 	<ul style="list-style-type: none"> - owner-manager's positive attitude towards networking, and their co-operation 	<ul style="list-style-type: none"> - references such as prior co-operation, joint projects, fair displays - commitment to continue the networking, developing the relationships, respecting one's own family values, 'upbringing' into family business
<p>Cultural bedrock of the Networking Family Firms</p> <ul style="list-style-type: none"> - local business culture, local business climate, culture of the family firms and their own 'networking culture' - family affect - family relationships <p>Values, Attitudes, Beliefs</p> <ul style="list-style-type: none"> - personality traits - personal competencies - group identity 	<ul style="list-style-type: none"> - entrepreneurial spirit and shared history, experiences of the industry, and running one's own family business, personal networks and relationships - family reputation - integrity, leadership 'style' - perseverance, persistence, patience, independence, cautiousness to (re) invest, and taking risks - bridge building, running one's own family businesses - self reference - socialisation and informal meetings - convergence of philosophy of JV and one's own family firm - joint collection, name, location, fame 	<ul style="list-style-type: none"> - language, dialect, carpenter tradition, homogeneity of the family firms, solidarity - proximity advantage and informal convening of the owner-managers, friendship, loyalty, well-known partners, trusted by the customers, adaptability - reputation as competent factor (family and business) - feeling honour to belong to the same team, - habits, routines, - shared norms, similar status - need for developing one-self and achieve one's own dreams/desires at personal level as well
<p>Joint Responsibility</p> <ul style="list-style-type: none"> - agreements and rules - mutual assistance - commitment to long-term investments 	<ul style="list-style-type: none"> - owning relationships (family businesses and their equally owned JV) - reciprocity, equity /input-output - fairness, trust - commitment to long-term investments (intangible and tangible) 	<ul style="list-style-type: none"> - using one's voice on board of directors - care and concern of the health of the systems, keeping one's promise - saving one's deals, credible commitments, unilateral investments - sharing the expectations, setbacks, bad investments, failures

motivation and volition, and also willingness towards networking, of the owner-managers of the networking family firms. The concept of trust is operationalised for the purpose of the empirical analysis in chapter 5 in this study. The themes '*What kind of issues have 'pushed' and 'pulled' family firms to inter-firm co-operation*', and '*what kind of issues have promoted and advanced the inter-firm co-operation of family firms*' are to serve to describe the willingness to the inter-firm co-operation and networking process of family firms. (see Figure 2).

The development of inter-firm co-operation and networking of the family firms seems to be built on strong bonds of trust – this was brought to the fore by the owner-managers. However, trust is most frequently impossible to measure, and it seemed to be intertwined with the earlier episodes, i.e., experiences of networking and inter-firm co-operation. Trust, likewise commitment, has promoted and brought advantage to the inter-firm co-operation between the family firms.

The central force leading to inter-firm co-operation was the idea of utilising solid wood in a joint assortment, and targeting the export market. Eventually, experiences of fair participation both in the domestic market and abroad increased the demand for the joint collection, and convinced the owner-managers to proceed with the networking. However, when the first orders arrived, the specific agreements concerning the division of work, expenses and marketing operations needed to be organised. Consequently, agreement on the responsibilities and principles of agreement control led to the founding of a joint venture.

"... at the moment, ... this joint venture plays such an insignificant role for all parties (owning family firms) that you can just about earn or make a profit on it ,... and that is the case with our agents and in general ... " (A ,1995.)

"... we have a partnership agreement ... but it focuses on economic issues, but the forms or procedures, that is how to interact or transact in this co-operation, have not been agreed on in any agreement ... if you have mutual values ... it will work between us [the family firms] ... " (B, 1995.)

The goals and the strategy of inter-firm co-operation are essentially related to what kind of results can be expected and how the resources invested in the co-operation produce additional value to the owning family firms, and to the network as a whole. The results of co-operation are not seen - in a short perspective - as a rapid influx of money to the owning family firms.

Motivation to seek new markets was utilised and promoted by combining resources and by working efficiently, thus adding value for customers, and trying to achieve a competitive advantage in the export market. The co-operation of the family firms started with the intermittent subcontracting and joint projects. The co-operation was founded on a voluntary basis, with a vision of joint production by utilising the critical mass, i.e., the production capacity and the know-how of the five family firms. The earlier export experiences of the family firms encouraged entering the export market. Furthermore, family firms

are frequently producing components and delivering raw material suitable for each other's needs. Customers have learned to trust the family firms, and that has promoted the inter-firm co-operation. A common volition to inter-firm co-operation, based on business transactions, has pushed the firms towards co-operation.

"... the idea of co-operation has gradually developed over the course of years ... we have had mutual co-operation and always manufactured things for each other according to need and whenever there has been an available capacity ... we have known each other all our lives ... then there was this depression in the 1990s in Finland and it affected the furniture industry ... " (C, 1995.)

"... here in exporting we constantly have to emphasise these holding companies ... the agents will often be obliged to verify our joint venture, possibilities of supplying and performing on the export markets ... (JV) is as big as we are all together ... " (A, 1995.)

"... we have a large assortment (of tables, beds, cabinet combinations etc.) ... now we just have to have enough persistency and money to start the marketing ... " (A, 1995.)

There are issues that have pushed and pulled the firms towards inter-firm co-operation. Family firms have complementary resources and core competencies in their value chain. Division of work has been formulated on these competencies, and combined with inter-firm co-operation and joint venturing. Subsequently, the goals of the owner-managers concerning the joint venturing are mutual and diverse. Owner-managers are ready to fight to the bitter end to achieve a common goal. Still, the expectations of the resources invested and the profits are not mutually consistent. New ideas of technological improvements are also discussed with some venture capitalists. So far, the marketing strategy is refined to tackle project furnishing (i.e., shipyards, hotels, schools, public institutions) in the domestic market, and the joint assortment is to be developed. In the worst case, the operations go back to their old tracks unless the firms can find new innovative technology and new markets that are useful to all partners. Otherwise, the contribution of the networking will remain sufficient to the partners.

Founding a joint venture has required both money and reinvestment, i.e., more share capital and obtaining a loan from the owning family firms. Owner-managers have had to invest more money and shares to supplement the joint venture's lack of working capital. Owner-managers see the inter-firm co-operation as an investment for the future. The outcomes and profits are measured in several ways, that is, as adding to the value and knowledge of the owning family firms, and the possibilities for developing one's own operation. It is worth noting that co-operation has not treated all family firms equally and therefore the willingness to invest more is more cautious than in the early stages of the co-operation. Hence, the owning family firms were prepared for investments, and waiting for results, when they entered the joint venturing.

" ... I would not like to be dependent ... either way ... " (E, 1995.)

"... our operations have always been one awful mess, but still we have been operating for 63 years and there has never been any risk of the firm going bankrupt ... and we just have to believe that this mode of operation, like ours, can continue ... and we have been advised to concentrate on just one product—no doubt, a good piece of advice as such—but who will manage to sell millions of that one product? ... " (A, 1995.)

The size of the group, i.e., the number of family firms, is important when considering communication, management and investments. The networking family firms have never been competitors in a productive context. But it is also worth noting that the resources of the individual family firms - as compared to joint venturing - are not sufficient for all the activities that effective, competitive production and marketing require on both the domestic and foreign markets. Inter-firm co-operation has been a risk-free way to growth, and at the same time it has been a controlled way to share risks and resources. This is the case in exporting.

"... from the very beginning we started with the idea of export markets ... but of course we also sell on the domestic markets ... but we do not lay an equal amount of stress on the home markets ... " (C, 1995.)

" ... the original idea was, that German speaking markets would be our main export markets.. that we are targeting there (as a JV), but then the domestic markets seemed to be selling very well ... " (B, 1995.)

Adaptation and adjustment is still needed; the future of the inter-firm co-operation seems still to be unclear, i.e., the question is how to improve the inter-firm processes to become more effective and competitive. Each of the owning family firms has, naturally, its own goals and future visions concerning their own family business. The prediction of an effective and the most suitable way of co-operation is hard to make. Failures and bad investments have been hard to avoid. Both the assessment of adjustment and investment are very cautious. Yet, the owning family firms' investments have been remarkable concerning the R&D, time and financial resources, and they are now in the black. Although the mutual orientation towards inter-firm co-operation is still strong, the owner-managers are concerned with the costs and effects. Developing the joint operation has come to a crossroad, whether to succeed or survive.

"... we have allowed credit to this joint venturing during the whole networking process ... " (C, 2001.)

"... the positive experience has been that we do not have to invest money of our owning family firms into this co-operation during these two years ... , or that we do not have to subvent in order to balance the accounts ... " (B, 2001.)

"... it's very hard today to see why this co-operative enterprise was established ... at least when it comes to our firm ... from an economic point of view - as well as otherwise - it's very hard to actually measure what this network has brought to us ... " (B, 2001.)

"... the co-operation has not brought this about, which is a disappointment in a way ... but we've managed to keep on our feet all the same ... however, there have been some difficulties

in export marketing ... we are now trying to tackle this problem and have moved on to a new area, that is, furnishing of public premises ... " (D, 2001.)

However, the costs and effects of the networking process clearly revealed how easily the networking process can fail. Benchmarking and co-operation with retailers would contribute to increased sales, and help to utilise the inter-firm co-operation. Capability to work efficiently and trustfully with the subcontractors is highly appreciated among the owner-managers of the networking family firms. The importing, as well as the 'chaining'⁷ form of the Finnish furniture market, has forced them to reconsider their position and competitive advantage in the market place. Despite this, the expensive collection has not yet been all that competitive either in the domestic or the export market.

"... This ... the multiple role of the business ... could even be a strength ... we can produce just exactly the kind of board that the customer wants and ... but it may be that in time ... it will be necessary to choose one or the other, the enterprise's own board manufacture business or the business related to co-operation from the standpoint of the JV ... I do not see any contradiction here, however ... " (B, 1995.)

"... to get into the markets with new articles is really difficult ... we have about ten agents all over the world ... " (C, 1995.)

"... we do try to make these products for that business line, but co-operation with the businessmen is minimal ... we meet once a year at the fairs ... spend 10 minutes with each customer ... there is no understanding between customer and seller ... the businessman decideswhat the customer wants and presents the product in such a manner that the customer wants it ... " (E, 1995.)

" ... Co-operation is surprisingly low with the retailers or customers ... " (E, 1995.)

" ... personally I have to say ... that I buy a lot from my subcontractors and I always look forward to long-term relationships ... I really understand that I have to pay a feasible amount of money for the products - otherwise I do not have interactions with the subcontractors ... " (E, 1995.)

The action control decreases when the bonds grow stronger and the investments in the co-operative enterprise increase. This has bad consequences, too, from the viewpoint of strategic planning. Too strong a confidence in the smoothness of things causes disastrous axiomatic assumptions of, for example, how the benefits and investments concerning operations should be examined. This can not be understood simply by measuring the effectiveness of the invested resources and the productivity, for the failure or incapability of even only one enterprise in the value chain to carry out its part of an assignment affects the reliability of the group. Control of profitability is all the more

⁷ Chaining or forming into chains means in this furniture context, e.g., a group of associated retailers, shops or producers, or chain stores (multiple stores, multiple shops) owned by the same retailer. Compared with independent retailers, chain stores benefit from economies of scale and so can charge lower prices from consumers. They have therefore become dominant in many areas of retailing. (cf. The Oxford Dictionary for International Business, 1998.)

important, when the business idea of the co-operation implements the strategies that have been set up for the co-operation. However, trust breeds familiarity, i.e., the shadow of mutual trust.

"... It could also be dangerous that we all trust so deeply in each other ... considering this inter-firm co-operation ... " (A, 2001.)

The action control is tied to the nature of the bonds, and the investments of the family firms. Control seemed to decrease if the partners are not committed enough, communication or conventions are rare, financial investment is lower than it is with others, or the deals concerning the joint operations are decreasing, that is, the inter-firm co-operation is decreasing. Sometimes, too much confidence in regards to the controlling could lead to a loss of effectiveness and decrease of productivity. Every third year, the business plan is verified and revised, and the overall results are weighted in order to search for new challenges in the market place.

"... the same sum of investment would have sunk in the Nordic markets ... anyway ... " (E, 2001.)

In the context of networking family firms, the decision-making is consensus-oriented, i.e., the board of directors and corporate governance of the joint venture are managed by the owner-managers of the networking family firms. Each of the family firms still owns an equal amount of the stock of shares, even though the resources and loans from the owning family firms are diverse in their amount and form. Procuring legal security can also be regarded partly as a factor determined by the statutes of the governing stock companies. The possible eventuality of a firm 'sneaking out' of the joint venture has been taken into account by making legal agreements concerning sanctions or other responsibilities. In other words, controlling action principles, such as owning shares, long-term investments, and other resources have been determined in order to keep the trust between the partners. Power and dependence seemed to be intertwined. This appears in controlling critical resources and in sharing the profits. In the co-operation between enterprises, power wielding and dependence are closely connected. This comes out especially in the control of critical resources and in the defence against outside networks, but also in how the interactive results of the co-operation are distributed among the enterprises. In co-operative efforts, it is rare to arrive at a pure consensus - which could be the result of differently weighted resources, especially the relations between investments and results.

"... we have a partnership agreement to determine all those legal sanctions and possibilities if one is willing to leave the joint company ... but if we would come to this situation, it would be a very difficult situation ... " (E, 2001.)

"... it is like a couple getting married ... it feels funny indeed to elaborate a marriage settlement ... it feels that you are already preparing to get divorced ... " (A, 1995.)

Leaning on the experiences of the owner-managers of the family firms, there are multiple and multilateral issues that have pushed and pulled family firms into inter-firm co-operation. The need for business relations (whether it has concerned one's own goals or joint goals) has convinced the entrepreneurs of the power of networking, and of the fact that it is possible to achieve more together than alone. Adding value and combining resources have provided a good launching pad for technological and marketing functions. Nevertheless, experience has also pointed out un-competitiveness in the export markets, occurring because of the lack of marketing skills, expenses of the joint assortment, and the transaction costs of the inter-firm logistics.

Furthermore, investments compared to profits from performance have been enormous in the progress of the networking process of family firms. However, the motivation to develop the inter-firm co-operation is still high, and the reasons for this lie beyond the family firms' own goals. Network management, owning and controlling relationships of systems and the environment is seen as a way of action that is natural - bearing in mind the owning structures, earlier network relationships and experiences of networking. Consequently, looking at the networking process of family firms, trust constitutes a large part of the learning process for the owning family firms and their inter-firm co-operation. All in all, the development of networking can be interpreted as an evolutionary process, influenced by earlier inter-firm relationships, the geographical proximity, the complimentary resources, and the trust between the partners concerned.

Table 8 introduces the sources of conative capabilities on the networking process of family firms.

As a conclusion, the summary of the conative capabilities:

- Capability to assume interactions, i.e., inter-firm co-operation and joint venturing. This means that networking family firms have a need for business relations, and they have a motivation to seek new markets, and volition to achieve more together than alone. This appears as working more efficiently, and as a trust between the partners, in order to invest and develop inter-firm co-operation and joint venturing.
- Capability to assume the structure of the inter-firm co-operation, i.e., running one's own family business systems and the equally owned joint venture. This means both network management and relationships management. Those appear as action control principles concerning the technology, the quality, 'the rules of the game', and the distribution of profits based on the transactions of the owning family firms. In managing the relationships between the owning firms and the customers effectively, the dissimilarities and competencies of both the individuals and the networking firms are taken into account. Also, the willingness to add to the goodwill of the owning family firms as well as the joint venture.
- Capability to add value through partnering, i.e., creating and readjusting the shared value for the owning firms and the customers. This means combining the family firms' complementary competencies and capacities, and enhancing innovation between the networking family firms.

TABLE 8 The Findings of the Conative Capabilities

View of Conative Capability	Means	Appears as
<p>Interaction and Structure</p> <ul style="list-style-type: none"> - inter-firm co-operation, subcontracting, and joint venturing <p>Economic Responsibility</p> <ul style="list-style-type: none"> - responsibility of family, business and JV health and goodwill - costs and effects of networking and inter-firm co-operation 	<ul style="list-style-type: none"> - need for transaction and co-operation - motivation to seek new markets, and volition to achieve more together than alone - managing the interaction of network of Family Firms (JV) - managing owning relationships of the JV, and the inter-firm co-operation and relationships (customers) - family, business and ownership: one's own and joint goals/visions, investment capability: credit, loans, other resources of the owning firms 	<ul style="list-style-type: none"> - designing joint collection, - producing according to one's own tasks and capacities - targeting to export - technology improvements - agreement of distribution of profits agreements, of action control principles, quality control - controlling the outcomes of JV, and inter-firm co-operation, weigh the input-output of investments other resources
<p>Adding Value through Partnering</p> <ul style="list-style-type: none"> - creating the economic value for owning firms and their customers <p>- values, attitudes, beliefs, and interests of the owner-managers reflect their cultural bedrock</p>	<ul style="list-style-type: none"> - combining and utilising the competencies and capacities of the owning family firms - enhancing innovativeness, working efficiently in order to gain (position) competitive advantage in domestic or export market - to manage similarities and dissimilarities between owner-manager's and their firms in the network, i.e., - social competence - locus of control - self- and other direct interest - acting wisely in human relations: coping with one's own family members, kin, customers, and respecting each others competencies 	<ul style="list-style-type: none"> - division of work based on the production strategy and core competencies - developing tasks and competencies of the owning family firms - adapting and readjusting operations suitable to changing demands of various furnishing projects/orders/joint collection - using effectively the 'loose' capacity of the production by directing one's deals to other members - developing a brand image for the joint collection, marketing operations - to know how a partner will behave in certain situations concerning the results and outcomes of the networking - to get the best of the available capacity of the human and firm specific resources

7.3.3 Findings of the Cognitive Capabilities

The cognitive capabilities are investigated using the integrated model of inter-firm co-operation capability in the context of networking family firms (see Figure 12). The synthesis of the conceptual part of the study revealed that the concept of learning is based on the reflection of affective, conative and cognitive constructs discussed in chapter 3 of this thesis. Learning implies knowledge and skills, and the ability to use resources as well as to produce new resources and knowledge. The cognitive dimension of inter-firm co-operation was defined as 'learning capability'. The concept of learning is operationalised for the purpose of the empirical analysis in chapter 5 in this study. The theme '*What kind of knowledge and skills have been essential in the inter-firm co-operation*' serves to describe the essential abilities associated with the inter-firm co-operation and networking process of family firms (see Figure 2).

The network of family firms is a local phenomenon. The production-transaction intensive processes have been dependent on the quality of technological skills and knowledge, as well as on the technological "carpenter-craftsmen" culture of the firms. Subsequently, the technical progress and need for marketing skills and internationalisation have evolved and increased in the progress of the inter-firm co-operation and networking. This, if any, has an effect on the ability to learn from the customers, i.e., to learn from the market. Subsequently, the experiences on the domestic market as well as the export market have prompted action towards learning more about the readiness and facilities to cope with the changing demands of markets. Going international has not been an easy task to conduct, as suggested by the experiences of the owner-managers of the networking family firms.

"... this co-operation and joint venturing has trained us to change our behaviour and plans ... that we are selling images, that we somehow have to outlearn from the traditional production based marketing ... almost every producer in this area is lacking in that kind of ability...that is the distinction between our inter-firm co-operation and one's own family businesses ... " (E, 2001.)

"... effective networking will need a hub-firm or some other big company to organise and develop the functions of the network, one that would be responsible for marketing, quality management (TQM), and R&D ... " (C, 2001.)

In the progress of the inter-firm and networking process, the owner-managers have learned how to solve the problems of technology transfer, how to limit the costs and risks, how to combine the information flow of technology and market signals and transcode it to their own mutual language and needs, or just how to build bridges between intangible and tangible resources, i.e., know-how and assets are to be collected and enhanced in order to create new core competencies and skills.

"... right from the beginning of this networking process we have realised the problems of activities and resources we are facing, and we can also predict or at least guess the problems that future might bring for us ... " (A, 1995.)

"... [partners] should reduce our coverage and sell to chains, we're seeking the right direction all the time ... you see, you never know ... it's always possible to make amends and get out of trouble if you're not in too deep ... " (B, 2001.)

Although strategic planning has been stressed a lot, the planning of developing functions in terms of finding new markets and composing the competencies of firms, designing new products and seeking new markets for the products has not been an easy task to conduct.

"... there are many carpenters that are capable to successfully run their firms ... And bigger firms as well ... but most of us do not have time to concentrate on thinking about these issues ... " (E, 1995.)

"... one of the purposes of this joint venture is to be a middleman for future transactions ... I really would like to see ... in the future ... that our joint venture will export the products of the owning family firms ... not only its own collection ... " (E, 1995.)

Coping with changes in markets and the depression of the Finnish economy in the early 1990's forced the firms to change strategies, and to seek new markets by mobilising resources and adapting production. Also, each of the family firms was facing the market setbacks. However, experiences of changing competition and economic depression both in domestic and export markets led, in the very early phase of the joint venturing, to a cautious approach and developing planning skills. Consequently, new knowledge of pooling assets, rationalising and improving systems of joint venturing were achieved in order to find synergies in the value chain of the firms. Focusing on niche markets required a lot of knowledge of consumer behaviour, as well as an ability to meet the customers' requirements, i.e., the firms were narrowing down the operations in the decreasing specialised production of solid wood. The core competence of the family firms is still anchored in solid wood processing.

"... we have a vision that someday there will be a joint enterprise, that collects all the knowledge, language skills, routines, competencies and contacts ... under one roof ... " (A, 2001.)

"... we (family businesses) have quite a stable position in the market place ... we can act and take risks a little bit differently, and to get growth for our businesses if we want to ... " (A, 1995.)

"... we do not make enough strategic planning for us (firms) ... " (E, 1995.)

"... when things are quiet ... no orders coming ... and this doesn't seem to work, then we decide to go in that direction ... it is necessary now and then to check whether we are going in the right direction ... resources are so limited that no false steps can be allowed ... this means that we plan our operations too little in accordance with our own joint venturing patterns ... " (E, 1995.)

"... pricing and inter-firm logistics need to be developed ... " (D, 2001.)

The networking process of family firms seems to be a constant process for learning how to adapt, how to adjust the resources of one's own family firm, and how to create new resources and ideas for the inter-firm co-operation.

Withdrawing the production-oriented strategy towards an even more co-specialised networking oriented market strategy has required skills and openness to share intangible resources (information and knowledge), but also to manage relationships and owning shares in such a way that has added new economic value for the partner firms, even though their joint venturing has not reached the expected outcomes. Utilising both the combined skills and adaptability of the workforce and the existing machinery and equipment are not sufficient enough if the owner-managers lack leadership skills, such as negotiation skills and problem-solving skills. Nevertheless, the owner-managers' experiences from markets through mistakes and market setbacks have taught them what really works in the economic environment. Somehow, there is lot of so-called tacit knowledge, which is interwoven with the experiences and practices of the individuals.

" ... we have learned so much when going international, and that have provided us, I gues, some facilities ... now we know what gives and takes for us ... " (C, 2001.)

"... one of the most important factors is that our family firms lack all-round expertise ... our operations have been very production-oriented, and marketing skills -especially when it comes to export marketing - are still lacking, and this is the reason why we are prompted to get access to networks here ... " (C, 2001.)

"... we are not equally strong here in our joint venture ... but our long-term business relationships and history, mutual business culture, and most of all the personal relations, relations are the most important factor considering this networking process ... " (C, 2001.)

"... five owner-managers meet regularly to discuss the joint issues concerning our inter-firm co-operation, developing business in general; then you have a possibility to get information, you can ask, argue, ... it is not an insignificant group of people ... adding to the information flow and networking ... " (E, 2001.)

Envy, individualism and unwillingness to share are also facts that are facing the networking family firms. This is especially the case when some of the firms are afraid of losing their independence - feeling too compelled to pay for costs that are not their own. Other possible models and ways of networking have also been discussed in the group. All these factors speak for new ideas and resources to develop both the relationships and the system of networking. However, the lack of resources and of people possessing marketing skills is obvious.

"... there is a lack of entrepreneurs with a marketing spirit ... there is enough know-how ... products are manufactured ... but who gathers the skills and knowledge together ... trained employees are needed in the small enterprises ... " (E, 1995.)

However, the decision-making is rather consensus oriented between the networking family firms. Management and decision-making are divided in such a way that each owner-manager in turn serves as the chairman of the board, and one of the owner-managers of the networking family firms works as the managing director of the joint venture. Believing in one's own abilities, whether in making the right decisions or just getting a foothold in the market,

has promoted utilising the knowledge and skills of the owner-managers of the networking family firms.

" ... we really do not have to market our products ... " (B, 1995.)

As the issues which describe the entrepreneurial drive and dynamics of networking family firms shift from the shared culture and value systems all the way to willingness to working together, strong bonds, and need for business relations and growth of the firms, the terms of economic efficiency and competitiveness shift from the capability to continuously innovate, design and customise the performing according to the needs of markets. The creation of knowledge and value are the tools to cope with the changing markets and to gain competitiveness in the market place. Tacit knowledge is considered to be an important ability that is hard to imitate, and not easy to learn outside of either the family business or the network of the owner-managers.

Table 9 introduces the findings of the cognitive capabilities of the networking process of family firms.

As a conclusion, the summary of cognitive capabilities:

- Capability to learn from the environment, i.e., from competition, the market and technology, and a common understanding of the operating environment, and the system of family firms. This means that owner-managers have learned from their customers, rivals and the other partners of the network both individually and on a network level. Much of the learning has resulted from market setbacks, mistakes, failures, and bad investments. Learning has allowed the partners to make re-evaluations concerning their value creation ability. This has led to readjustments as regards to the initial and revised conditions and expectations, such as profits, value creation skills of the owner-managers, as well as the tasks and roles in a network. Furthermore, action control principles, agreements and owning relationships in the joint venture have, to some extent- improved performance and added to the joint and economic responsibility of the family firms.
- Capability to learn tasks and goals. That means developing the roles and the division of work, and the management of the network relationships and structure. This appears as the owner-managers' abilities to use their existing resources, and to produce new knowledge in order to cope with the changing environment.
- Capability to learn from skills. This means that creating new knowledge is dependent on the owner-managers' openness, willingness and abilities to enhance innovation, R&D, as well as on the sharing of the tacit knowledge between the owner-managers of the networking family firms. This appears as, e.g., negotiation skills, problem solving skills, and strategic planning skills and social competence skills, which all are important abilities in developing the inter-firm co-operation and networking processes.
- Capability to learn to learn in a networking process. This means that the owner-managers have been in the key position to create new capabilities in the inter-firm co-operation and developing the networking process of family firms. They have had to learn to learn how to share relationships and the 'rules of the game', and how to manage the structure and interaction between the family firms and

customers, and how to learn to unlearn from old patterns, i.e., routines, habits, 'right' practices (as in: 'this is the way how we have always done it here') in order to create new knowledge and skills, so as to add the value through partnering.

TABLE 9 The Findings of the Cognitive Capabilities

View of Cognitive Capability	Means	Appears as
Environment - experiences of competition, technology, market (current)	- learning from the environment wherein the operating systems of family business and JV enacted - ability of problem solving (skills) - ability to seize opportunities - ability to use available and produce new resources and knowledge.	- learning from customers, market setbacks, failures, bad investments, competitors - learning from 'success', well-run projects - to share information and joint problems in order to avoid remaking mistakes
Tasks and Roles - performing efficiently and competitively together - adding value through partnering	- division of work based on the core competencies, capacities, preferences of family firms and owner-managers, - enhancing innovativeness of the firms - managing the roles, norms, and distribution of profits and economic responsibilities and agreements concerning the JV - ability to understand the dissimilarities and mutual interdependence	- concentrate on core competencies of firms, outsourcing - designing joint products, projects, seeking new domestic and export market, - innovate, design and customise complementary competencies in the face of the demand of the market - face the fact of the equity problem in networking
Skills - Solving technology transfer, marketing, exporting problems - leadership skills - negotiation skills - strategic planning skills - decision making skills - social competence (intelligence)	- reducing costs and risks - combine owner-manager's core skills and know-how - utilising tacit knowledge of owner-managers - experience (knowledge and skills) how to keep trust between partners, family members and customers	- concerning the control and responsibilities of systems - knowledge of the industry, markets, R&D - skills to agree on norms, and keeping balance of power, will of partners and family members - creating new knowledge

(Continues)

TABLE 9 (Continues)

<p>Goals</p> <ul style="list-style-type: none"> - own and joint goals - self- and other directed interests 	<ul style="list-style-type: none"> - understand the partner strategy - ability to commit and trust - openness between partners goals and expectations 	<ul style="list-style-type: none"> - avoiding moral hazard - partners self-interests vs. joint interests - openness to discuss about one's own personal dreams, desires, and the goals of the family firms
<p>Networking Process of Family Firms</p> <ul style="list-style-type: none"> - developing the performance of the networking constantly - learning in each of the phases or cycles of the processes - commitment to mutual assistance - evolutionary trust - compatible production strategy - contextual issues of family business of the networking firms - positive and realistic expectations - cultural bedrock of networking family firms 	<ul style="list-style-type: none"> - mutual understanding of the need for co-operation and goals of the co-operation - learning by doing, and by mistakes - trust in equity and efficiency - using the skills and goals of the collaboration suitable for one's own family business context - commingle and evaluate the skills of the owner-managers - overlapping family, business and ownership subsystems - local business culture, culture of the networking family firms, networking culture, group spirit, entrepreneurial spirit, business climate 	<ul style="list-style-type: none"> - commitment at the personal and family firm level to networking - family /business reputation, references, prior joint projects, trust from customers - commitment (affective, continuance, normative) and willingness to invest capital (requires more money from the owning family firms) - re-evaluate, readjust, revised, initial conditions (intangible and tangible resources) and developing activities - shared rules and agreements - willingness to increase the investments, scope of the interactions and structure - willingness to increase the commitment between partners - willingness to face the fact that something might go wrong at the individual, firm or network level - values, attitudes, beliefs of the owner-managers reflect their family and business culture; i.e., their behaviour, style of managing one's own firm, and owning and customer relationships

7.4 The Affective, Conative and Cognitive Capabilities in a Networking Process of Family Firms

The empirical study on a networking process of family firms revealed that the inter-firm co-operation and networking capability consists of affective, conative and cognitive capabilities, which are all associated with the processual learning in a networking process of family firms. The networking process considers both the family business system and inter-firm co-operation owning relationships. Consequently, the networking process is a learning process for owner-managers, and for the networking family firms.

Affective capabilities seemed to refer to an openness to share a similar 'view of life', which means that the owner-managers have a mutual understanding of the networking, and a positive attitude towards the co-operation and networking process. Furthermore, the owner-managers seemed to share a similar value system, i.e., the values, attitudes and beliefs of the owner-managers reflect their family business culture and the commitment, i.e., mutual assistance to the joint responsibility of their networking process.

Conative capabilities seemed to refer to a willingness to manage the interactions, i.e., inter-firm co-operation and joint venturing between partner firms, and the structure of the systems, i.e., managing the owning capabilities and inter-firm owning relationships. This means a capability to add value through partnering, and managing the economic responsibility of the relationships of the networking family firms

Cognitive capabilities seemed to refer to abilities such as knowledge and skills, but also to the tasks, the goals and the environment. That means, abilities to learn from the networking process as a whole. The processual learning has covered all the affective, conative and cognitive capabilities at the individual, family firm and network level.

To conclude with: the longitudinal case study on a networking process of family firms has been a simultaneous learning process for both the owner-managers and the networking family firms. Learning is a two-way process that returns the owning family firms to the heart of the inter-firm co-operation capability. Learning covers all the dimensions of affective, conative and cognitive capabilities. Furthermore, owner-managers' values, attitudes and beliefs reflect their family business culture, i.e., the culture of each family firm has an influence on the inter-firm co-operation capability. Figure 18 illustrates the findings of the inter-firm co-operation and networking capability in a networking process of family firms.

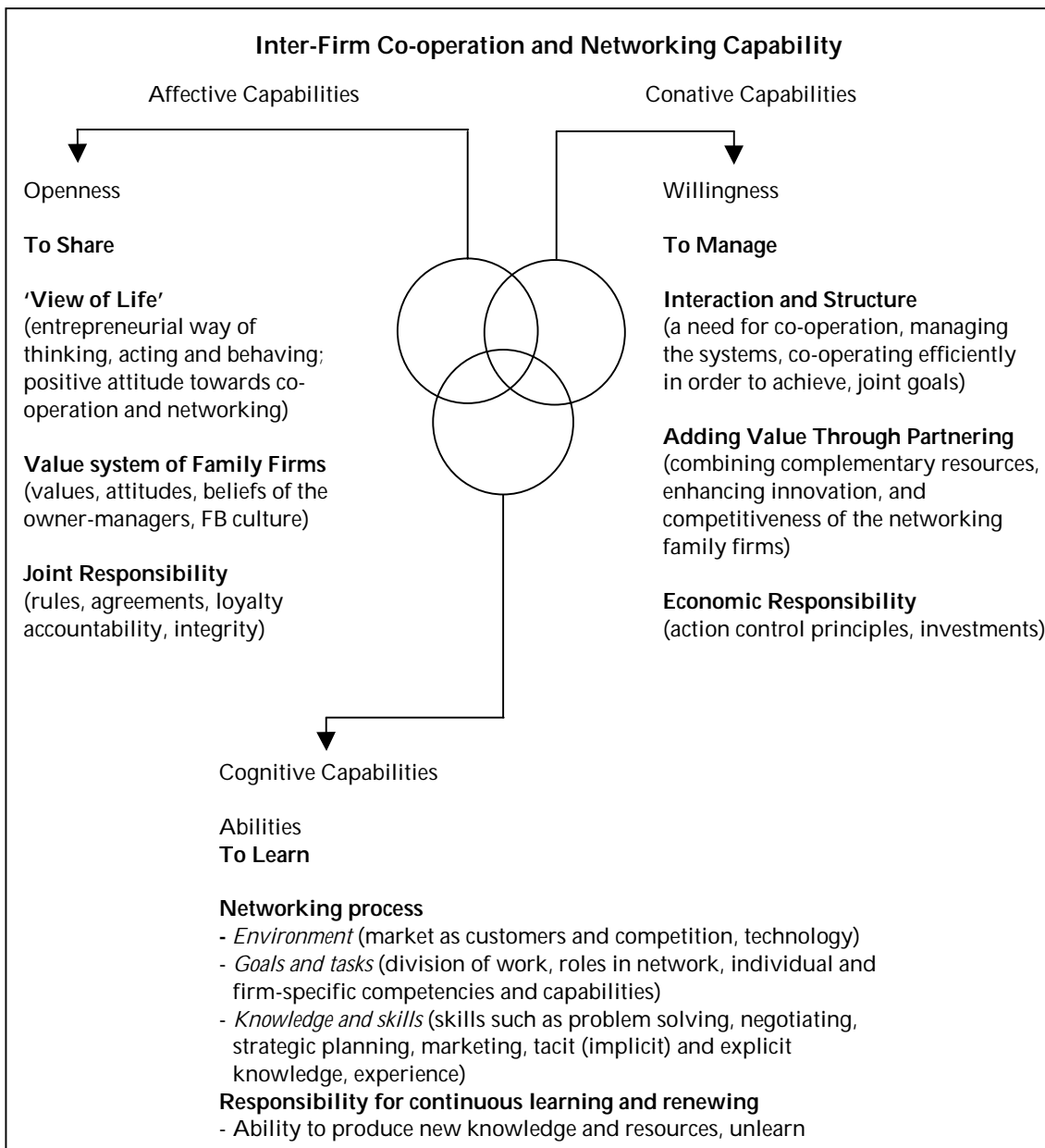


FIGURE 18 The Findings of the Inter-Firm Co-operation and Networking Capability in a Networking Process of Family Firms

8 INTER-FIRM CO-OPERATION CAPABILITY: THE ROLE OF LEARNING, TRUST AND COMMITMENT IN THE INTER-FIRM CO-OPERATION AND NETWORKING PROCESS

The synthesis of the longitudinal empirical study is divided into three sections. First, the findings are reviewed in the light of the purpose of the study in section 8.1. Secondly, the Model of Inter-Firm Co-operation Capability is revised and introduced in section 8.2. Thirdly, the inter-firm co-operation capability and networking process of family firms is highlighted paving the way for contextual issues in section 8.3.

8.1 The Role of Learning, Trust and Commitment in the Inter-Firm Co-operation and Networking Process

The longitudinal empirical study on inter-firm co-operation and networking process of family firms started with the case description, and the empirical analysis of the affective, conative and cognitive capabilities. The empirical study was anchored on the Integrated Model of Inter-Firm Co-operation Capability introduced in chapter 5. As a synthesis of the conceptual phase of the study, the inter-firm co-operation capability was suggested to consist of three sub-concepts: learning, trust and commitment. The purpose of the empirical study was to investigate what has been the role of learning, trust and commitment in the inter-firm co-operation and networking process of family firms. Next, each of the concepts is in turn reviewed in the light of the findings of affective, conative and cognitive capabilities.

8.1.1 The Role of Learning

The findings of the cognitive capabilities underlined the importance of learning in the networking process of family firms. The findings revealed that learning takes place in five key areas of the inter-firm co-operation and networking process, i.e., the environment in which the networking firms have operated, the tasks that have been performed, and the processes intertwined with the inter-firm co-operation, the owner-managers' skills and knowledge, and their intended and emerging own and joint goals.

According to the findings of the cognitive capabilities, learning covers all the dimensions of affective, conative and cognitive constructs of inter-firm co-operation capability and returns the owner-managers of the networking family firms to the heart of the inter-firm co-operation capability. The role of learning has been that of creating new knowledge through partnering. Cognitive capabilities are embedded at the individual, family firm and network levels in the networking process of family firms.

8.1.2 The Role of Trust

Findings of the conative capabilities underlined the importance of network management of both the structure of and interaction between owning family firms. The findings revealed that family firms have learnt to manage inter-firm co-operation and joint venturing, and to work efficiently in order to achieve their own and joint goals. Managing the structure refers to economic responsibility, i.e., taking responsibility of mutually accepted control principles of the owning family firms, and investments. Combining complementary intangible and tangible competences and resources, family firms have added the economic value and enhanced the innovation and competitiveness of the family firms and the network. The role of trust has been to add value through partnerships. Trust is embedded at the individual and firm level, and developed by being based on an evolutionary trust at the network level.

8.1.3 The Role of Commitment

The findings of affective capabilities underlined the importance of view of life as a basis for inter-firm and networking process. View of life refers to owner-managers' entrepreneurial way of thinking, acting and behaving, their mutual understanding of the meaning of inter-firm co-operation, and their positive attitude towards networking. This means that owner-managers have learnt to share the joint responsibility. This refers to shared rules, and agreements, that are based on inter-firm relationships of owners. Furthermore, values, attitudes, beliefs of the owner-managers are reflected on the shared value system of the family firms, i.e., the culture on each family firm influences the inter-firm co-operation capability and networking process. The role of commitment has been that of sharing the joint responsibility for creating trust.

As a synthesis, and conclusion of the longitudinal empirical study, the role of learning, trust and commitment consists of the following key capabilities in the networking process of family firms:

- To Learn to Learn Knowledge Creation
- To Manage Value Creation
- To Share Trust Creation

As a conclusion of the empirical study on the networking process of family firms, the role of learning, trust, and commitment returns the networking family firms to the heart of the inter-firm co-operation capability. Figure 19 illustrates the synthesis of the key capabilities of inter-firm co-operation capability in the networking process of family firms.

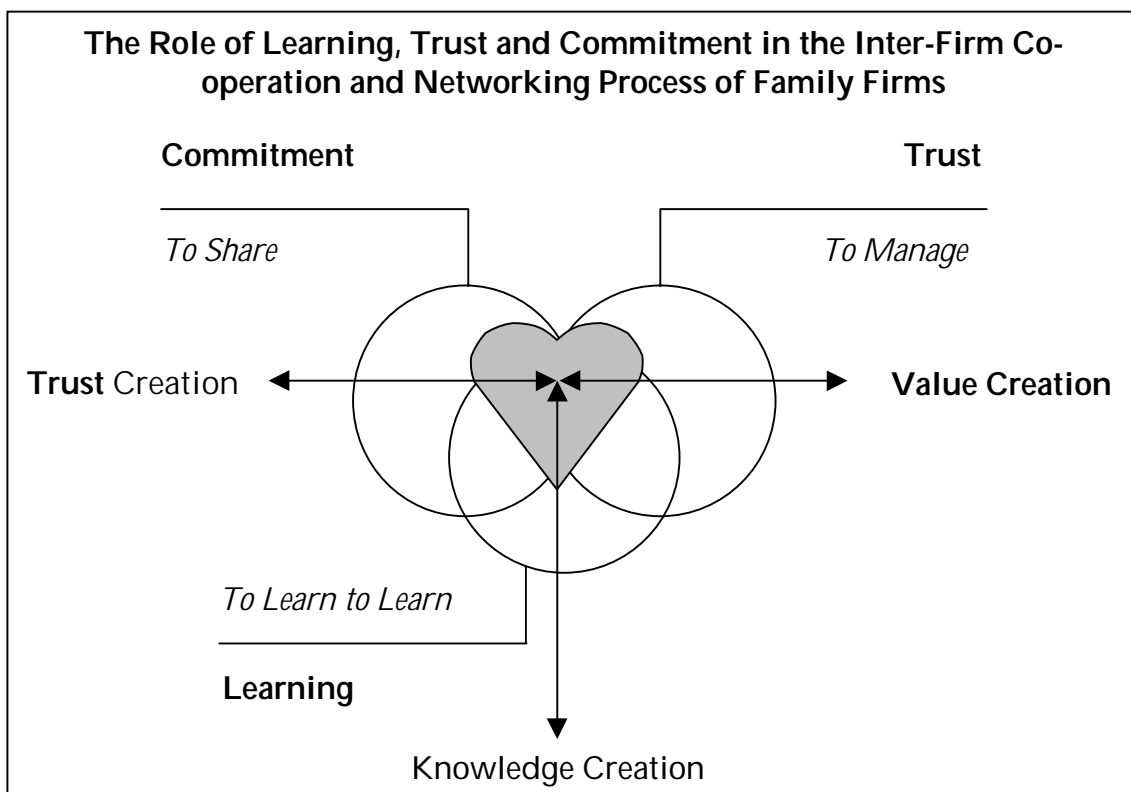


FIGURE 19 The Role of Learning, Trust and Commitment in the Inter-Firm Co-operation and Networking Process of Family Firms

8.2 The Inter-Firm Co-operation Capability in the Context of Networking Family Firms: Synthesis and Revised Conceptualisation Model

In chapter 5, the integrated model of inter-firm co-operation capability was constructed as a synthesis of the conceptual part of the study, and to form a

basis for a theoretical frame of reference. The Integrated Model of Inter-Firm Co-operation Capability is based on the dimensions of the affective, conative and cognitive constructs (see Snow, Corno & Jackson 1996; Ruohotie & Koiranen 2000; Peltonen 1986; Gibb 1995). The emphasis of the model of inter-firm co-operation capability has been on the owner-manager level, however, the setting has been anchored on the individual level (owner-manager), firm level (family firm) and network level (networking family firms). The concept of inter-firm co-operation capability has preliminarily been defined to cover both the skill and will factors, as well as the personal abilities and empowerment of the owner-managers in the context of networking family firms. (Niemelä 2002.)

As a conclusion of the conceptual part of the thesis, inter-firm co-operation capability was defined in the context of networking family firms as consisting of the following capabilities: Social 'Networking' Capability, Management Capability and Learning Capability. The results of the longitudinal empirical study suggest that inter-firm co-operation is a learning process for, both owner-managers and the networking family firms. This, if any, is a result of the developmental process of inter-firm co-operation capability, and has an influence on the competitiveness of the whole network. Furthermore, it has only been possible to interpret the values, attitudes and beliefs of the owner-managers indirectly; they are reflected in the family business system and the operating environment. However, the empirical study revealed that the values, attitudes and beliefs of the owner-managers reflect their family business culture, i.e., the culture of each family firm influences the inter-firm co-operation capability.

The phenomenon of inter-firm co-operation is wide and multidimensional; the theoretical frame of reference has provided fairly extensive frames to the empirical investigation. Thus, there is a prevailing danger of reduction from the individual level to a network level in the progress of the empirical analysis. However, if we understand the networking process holistically, the findings of the study have showed that the networking as a process has various roles for the owner-managers, for the family firms, and for the network of owning family firms. From the viewpoint of the owner-managers the role of networking has been cultivated into sharing a *Joint Responsibility*. From the family business viewpoint, the role is anchored to managing the *Joint Business Venture*, and from the viewpoint of the horizontally networking family firms the role is based on the *Learning Network of Family Firms*.

The *Integrated Model of Inter-Firm Co-operation Capability* has provided a rather extensive frame of reference to investigate both conceptually and empirically inter-firm co-operation capability in the context of networking family firms. Next, the findings of affective, conative and cognitive capabilities are synthesised to the *Revised Conceptualisation Model of Inter-Firm Co-operation Capability*. Figure 20 illustrates the revised conceptualisation model of inter-firm co-operation capability in the context of networking family firms.

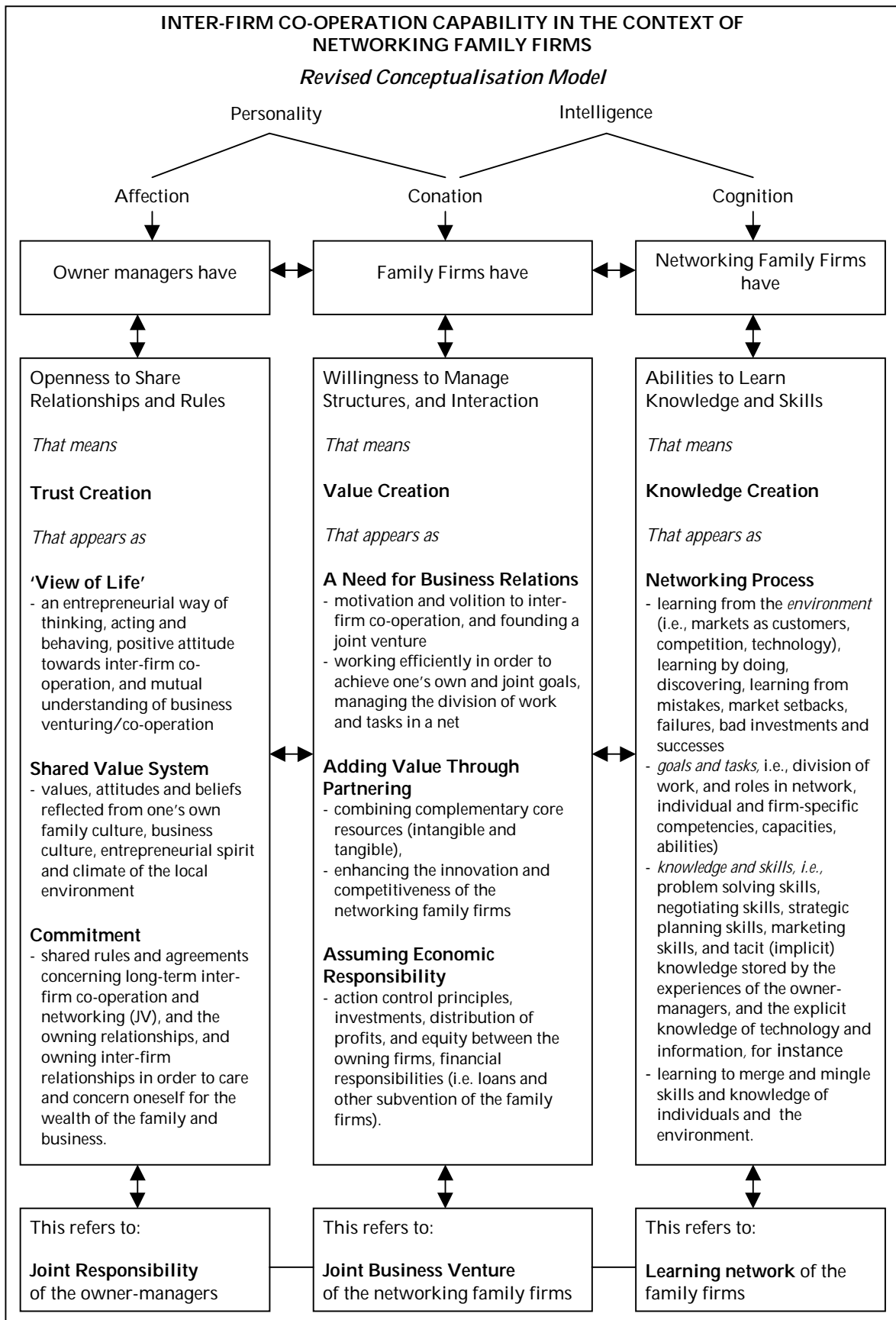


FIGURE 20 Inter-Firm Co-operation Capability in the Context of Networking Family Firms: Revised Conceptualisation Model

8.3 Contextual Issues Paving the Way for Inter-firm Co-operation Capability in a Networking Process of Family Firms

This study has been centred on family business. The outcome of the processual and longitudinal empirical study is very natural, bearing in mind the specific role of ownership in the family business. Managing both the family business and the joint venture systems, has required very strong psychological and economic accountability and joint responsibility for maintaining the trustfulness and the necessary openness in the progress of the networking and inter-firm co-operation. All of the owner-managers are owning stakeholders in their horizontal network, i.e., joint venture. The roles of ownership and management are strongly overlapping, as are the roles of family and business. The cohesion and commitment of the networking family firms have been an essential force driving the owner-managers to share each other's business values and to endeavour to increase common economic business values. Consequently, the managing and owning capabilities have overlapped, and therefore there has also been overlap between the managing and owning capabilities, and the managing and inter-firm owning relationships.

The cohesion and commitment of the co-operating firms have also strengthened the shared culture and the value systems of the family firms. The shared values, attitudes, and beliefs of the owner-managers reflect their family business culture. This is a result of the context of the study. The interdependency and interplay of the subsystems of the family business system had an influence on all levels of the multiple analysis and the networking process of family firms. Furthermore, the ability to continuously learn and renew inter-firm co-operation capabilities, but also to 'unlearn' selectively from the past has been crucial for the networking process of family firms.

Figure 21 illustrates inter-firm co-operation capability in the context of networking family firms. Figure 21 combines context, definitional ground used, and the phenomenon of this study. The 'dimensions' of family-culture, business-experience, and ownership-power synthesises the contextual issues of the networking process, and the overlapping capabilities of the inter-firm co-operation. The contextual dimensions comprises the levels of individual, firm and network analysis. As a conclusion, the inter-firm co-operation capabilities are associated with the context of family business as follows:

- Capability to maintain the necessary openness and trust in the inter-firm co-operation relationships and networking process.
- Capability to share each other's business values and endeavour to increase common economic value through partnering.
- Capability to manage the owning relationships and enhance inter-firm co-operation relationships.
- Capability to continuously learn and renew.
- Capability to unlearn selectively from the past.

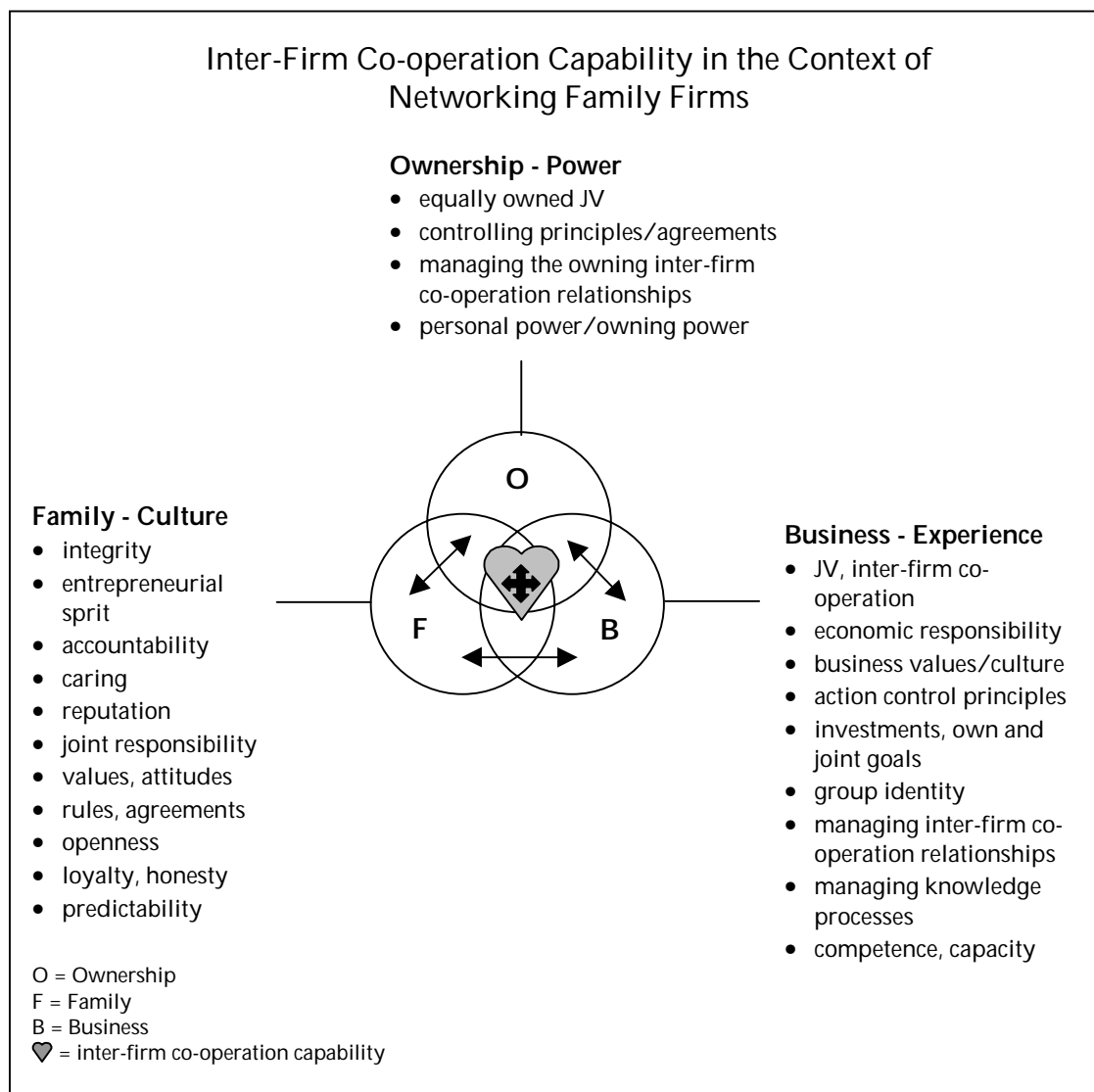


FIGURE 21 Inter-Firm Co-operation Capability in the Context of Networking Family Firms

The Figure 22 closes and illustrates the processual empirical study on a networking process of family firms.

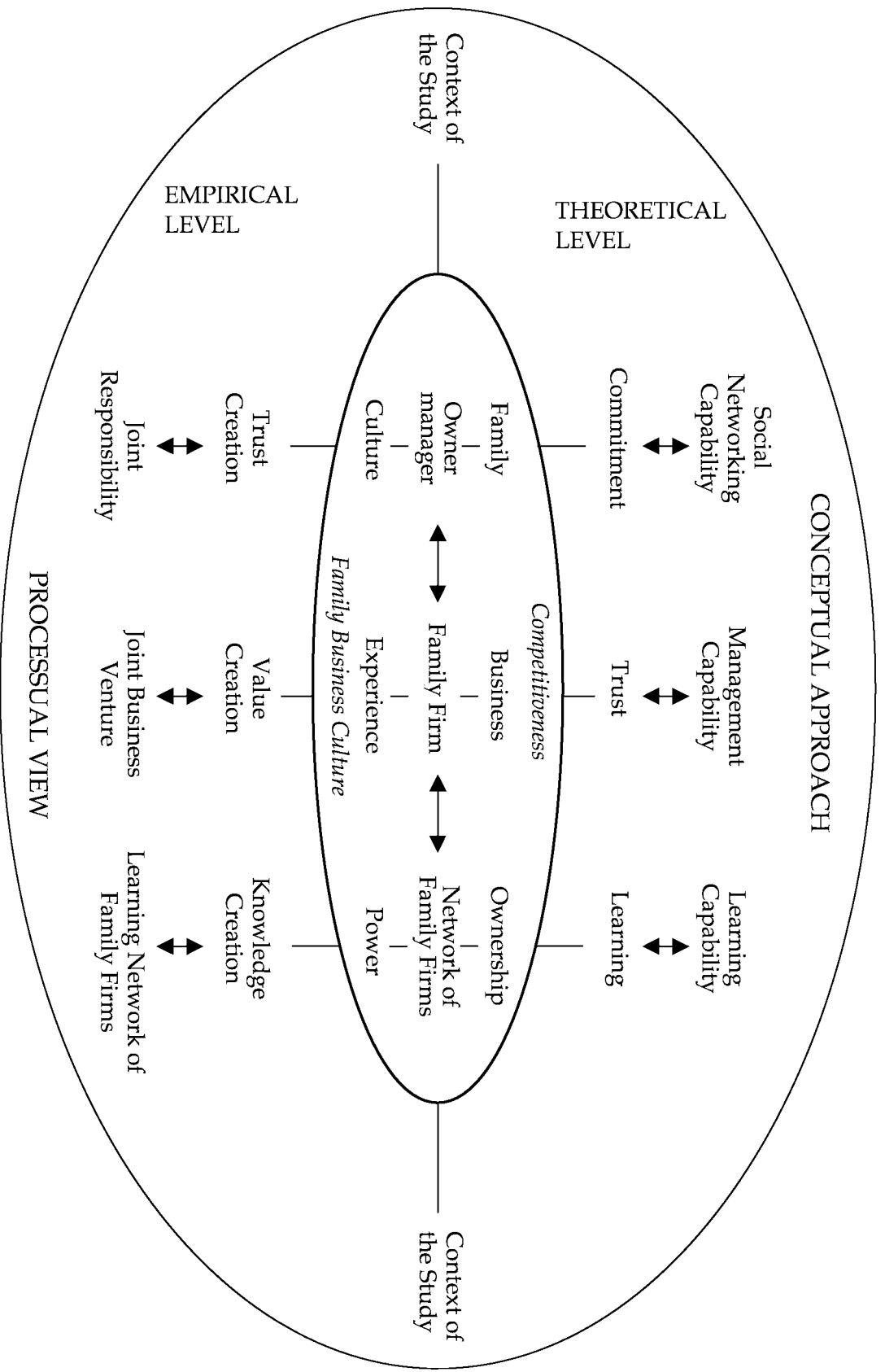


FIGURE 22 Inter-Firm Co-operation Capability: A Processual Empirical Study on Networking Family Firms

9 DISCUSSION

In this final chapter, firstly, the main conclusions are revealed in section 9.1. Secondly, the results are reviewed in the light of prior research in section 9.2. Thirdly, the critical assessment, and suggestions for further research are discussed in section 9.3. Finally, some educational and practical implications are presented in section 9.4.

9.1 Main Conclusions

This study has gone some way towards understanding inter-firm co-operation capability in the context of networking family firms. The main conclusions contribute to the research question of the study as follows:

What has been the Role of Learning, Trust and Commitment in the Inter-Firm Co-operation and Networking Process?

- The role of learning refers to a networking process itself, and to the abilities *to learn to learn* from the key areas, such as the environment, goals and tasks, skills and knowledge. *The role of learning contributes to knowledge creation of the networking process.*
- The role of trust refers *to managing* the structure (i.e., the family business system and the joint venture), and interaction (i.e., inter-firm co-operation and networking process). *The role of trust contributes to the value creation of the networking process.*
- The role of commitment refers *to sharing* a 'view of life' (i.e., a mutual understanding and an entrepreneurial way of thinking, acting, behaving, and a positive attitude towards co-operation) and a value system (i.e., shared values, attitudes and beliefs reflected from the family business culture). *The role of commitment contributes to the trust creation of the networking process.*

Entrepreneurship research has suffered from a lack of longitudinal studies (Van de Ven 1992) and this is a widely known fact among family business researchers as well (Brockhaus 1994). This processual and longitudinal case study has been a small contribution to such studies. It is also worth noting that inter-firm co-operation capability in the family business context is as yet not a widely researched phenomenon, although there are numerous studies focusing on the inter-firm co-operation and networking concerning small and medium-sized firms in general. Consequently, it was not easy to find other studies or literature dealing specifically with the phenomenon of the inter-firm co-operation capability in the family business context, or horizontal networking and inter-firm co-operation in the family business context.

9.2 Reviewing the Results in the Light of Prior Research

The approach of this study has been both theoretical (conceptual) and empirical (practical). At the theoretical level, the conceptual analysis rests mainly on the theories of inter-organisational studies (i.e., network approach) and education (i.e., Snow, Corno & Jackson 1996; Ruohotie & Koironen 2000; Gibb 1992, 1993, 1999). In the first phase of this study (Niemelä 2002), the conceptual study argued for a need of a holistic view of the inter-firm co-operation capability in the context of networking family firms. The key concepts were symmetrical with the earlier studies in the field of networking and inter-firm co-operation, and were also in line with the entrepreneurship studies in the field of entrepreneurship education.

As a result of the conceptual study, it was found that the network approach underlined mainly the firm as a contributor to social networking and management capabilities in the inter-firm co-operation. Thus, the conceptual study contributed among others to Social Network Theory (Johannisson 1987, 1988) and Social Exchange Theory (Cook & Emerson 1984) as well as to Strategic 'Network' Management (see A Cube Model...Varamäki 1997, 2001). The *taxonomies of affective, conative and cognitive* constructs underlined the role of the individual as a contributor to the learning capabilities in the inter-firm co-operation capability. The learning capabilities contributed, among others, to the provisional taxonomy of individual differences of affective, conative and cognitive constructs, as well as to entrepreneurship education and entrepreneurship research in general (cf. Snow, Corno & Jackson 1996; Ruohotie & Koironen 2001; Peltonen 1986).

The conceptual study suggests that in the context of networking family firms, the inter-firm co-operation capability consists of three key sub-concepts: learning, trust and commitment. From the viewpoint of education, the concept of learning covers all the dimensions of the affective, conative and cognitive constructs. From the viewpoint of a network approach, the trust and commitment define and describe the inter-firm co-operation in the context of

networking family firms. As a conclusion of the conceptual analysis, the inter-firm co-operation capability was defined in the context of networking family firms as consisting of the following capabilities: Social 'Networking' Capability, Management Capability and Learning Capability.

The empirical part of the study contributed to the discussion on networks and inter-firm alliances as learning organisations (see e.g., Nooteboom 1999; Doz & Hamel 1998; Doz & Schuen 1998; Gibb 1993, 1999; Child & Faulkner 1999). The empirical part of the study revealed that inter-firm co-operation is a learning process for both the owner-managers and for the networking family firms. The findings of the capabilities of the inter-firm co-operation and networking process of the family firm suggest that the role of learning is to learn knowledge creation, the role of trust is to manage the value creation, and the role of commitment is to share trust creation.

All in all, this study has demonstrated a wide range of issues relating to networking family firms, and has shown that the most often used theoretical approaches tend to focus on some aspects, while ignoring others. The multiplicity of the theories, approaches and models of the network approach and co-operation capability were needed in order to get a holistic view on the multidimensional phenomenon of inter-firm co-operation.

Paving the Way for Learning

More specifically, knowledge creation is associated with the 'organisational learning loops' and knowledge processes (see, e.g., Andreu & Ciborra 1996, 126 cit. in Child & Faulkner 1999; Wickström & Normann 1994; Doz & Schuen 1998, Hamel 1991; Prahalad & Hamel 1994; Hamel & Doz 1995; Nooteboom 1999; Nonaka & Takeuchi 1995). And yet, organisations learn only through the experience and actions of individuals (Nonaka & Takeuchi 1995). Inter-organisational learning is critical to competitive success - organisations often learn by collaborating with other organisations (Dyer & Singh 1998). It has indeed been argued that the only competitive advantage the company of the future will have is its manager's ability to learn faster than its rivals (De Geus 1988, 740 cit. in Child & Faulkner 1999; Prahalad & Hamel 1998).

Thereby, the study has provided both balance and new insights into the understanding of inter-firm co-operation capability and processual learning in a family business context. By focusing on the nature and extent of affection, conation and cognition as a source of individual and firm-specific capabilities, this study has expanded on earlier '*capability learning studies*' to gain a more fine-grained understanding of the constructs and processes through which inter-firm networks and alliances develop over time (see e.g., Håkansson 1989; Sautet 2000; Ruohotie & Koironen 2000), and creating and sustaining capabilities in family firms (Steier & Reay 2002). It has been noted in this study, that the affective, conative and cognitive dimensions are all important in the conceptual framework, and that a more thorough understanding of inter-firm co-operation capability can be achieved (cf. Ruohotie & Koironen 2000). It has also been noted that the mutual need for co-operation, trust and basic

understanding of each others capabilities all contribute to the owner-managers' learning intention and experience. Quite similar results have been found by Nonaka & Takeuchi (1995, 70), who pointed out the importance of the socialisation, externalisation, combination and internationalisation of knowledge. Furthermore, looking at the Model of Inter-firm Co-operation Capability in the light of the learning process, both the cultural web of the family business owner-managers (cf. Aronoff & Ward 2000; Salvato, Williams & Habbershon 2002), and a cognitive distance are associated with the learning of family firms (cf. Johannisson 1998) as well as the affective dimension of the *Mental Hierarchy of Entrepreneurship* (Peltonen 1986).

Paving the Way for Trust

This study has also contributed to the discussion on shared economic values, and value creation capability. Shared values promote synergistic social behaviour and firm-specific investments (cf. Lorenzoni and Lipparini 1999, Dyer & Singh 1998). Adding value through partnering has been a crucial source of competitive advantage for the networking family firms. (cf. Lazerson 1995, Lorenzoni & Lipparini 1999; Uzzi 1997; Kumar 1996; Gulati 1995; Ring & Van de Ven 1992, 1994). This study also suggests that a family business culture and local milieu facilitate the value creation of the family firms. Competitive advantage in SME's is generally about creating (or adding) social, cultural, political, economic, technical, and/or technological value – through a myriad of vertical and horizontal arrangements (Fletcher & Hardill 1995, 45).

Research on trust has proliferated since the mid 1990's. Trust has become an important issue in inter-firm co-operation, as it highlights the sources and components related to capability and competence (Håkansson 1989; Varamäki 2001; Nootboom 1999; Kumar 1996; Ring & Van de Ven 1994; Gulati 1995; Fletcher & Hardill 1995; Uzzi 1997; Lazerson 1995), and behavioural trust (Zucker 1986; Nootboom 1999) as well as goodwill and joint responsibility (e.g. Kumar 1996; Granovetter 1992), but also process-based trust (Ring & Van de Ven 1994; Nootboom 1996). This study gives support to social exchange theory, and various studies that have highlighted the importance of both the economic (extrinsic utility) and social dimensions (intrinsic utility) of exchange and co-operation (see, e.g., Cook & Emerson 1984; Lorenz 1988; Nootboom 1996).

Paving the Way for Commitment

Commitment is a concrete base of trust (Blomqvist 2002, 197). Commitment can be divided into affective, continuance and normative components (Belausteguigoitia & Galicia 2001). The affective constructs of the inter-firm co-operation capability highlighted the hierarchy of the entrepreneurial spirit at the individual, group and network level (see Peltonen 1986, 134-135). Attitudes are associated with individual interests, the tendency or willingness to acquire knowledge. Values are learned and socially accepted desires and wishes, and

individuals and environment reflect their values through behaviour. Values can be seen as the bedrock of any corporate culture. (see e.g., Deal & Kennedy 1988; Aronoff & Ward 2000.)

This study has revealed that cohesion and commitment of the co-operating family firms requires a very strong psychological and economic accountability and a feeling of joint responsibility to maintain the necessary openness and trust in the co-operation. The joint responsibility, i.e., concerning the shared values, rules, norms and agreements in owning relationships, as well as knowledge creation and value creation, are symmetrical with the earlier studies on family business research, entrepreneurship and entrepreneurship education (cf. Belausteguigoitia & Galicia 2001; Ruohotie & Koiranen 2000; Peltonen 1986).

Quite similar results have been found by Corbetta & Montemerlo (1998) who have pointed out that the conditions for team success include a high mutual esteem, complementary competencies of team members, a distinct influence on domains but joint responsibility on key decisions, and effective communication (Corbetta & Montemerlo 1999, 373). The empirical results of this study also contribute to the comparative research results of Italian family firms and USA family firms (Corbetta & Montemerlo 1999). In this study, from the 'ownership' point of view, owner-managers of the networking family firms are aware of their prevailing capabilities and a need for development of the inter-firm co-operation capability of the whole network.

To summarise, this study has been centred on family business. However, looking at the results in the light of the prior research on family business, as the capabilities found in the networking process of family firms, a typical discussion of family-owned businesses uses a system approach (see Davis & Tagiuri 1991; Donckels & Fröhlich 1991; Lansberg 1988; Dunn 1995). Family business takes into account the interests of both family and business. Changes in any part of the system - family, business and/or ownership - affect the entire system. When the complex system and its operating environment is taken into account, owner-managers of the family firms have the key role in creating and establishing networks.

Continuing the system argument on the basis of the result of this study, and in the Finnish family business context of inter-firm co-operation capability, the specific roles of ownership and management are strongly associated with the development of a networking process. This is a result of managing and owning capabilities as well as managing and exchanging inter-firm co-operation relationships. Looking at the roles of learning as knowledge creation, trust as value creation through partnering, and commitment as trust creation, the present study contributes to and reflects the various contextual characteristics of family firms. One is, that family-owned firms are cautious to invest and that they prefer stability over dynamic growth risk strategies (cf. Donckels & Fröhlich 1991). The other is, that families in family-owned businesses are willing to maintain control over the business. This finding fits well with the joint venture or alliance form of relationships between firms in networks. Donckels & Fröhlich (1991) have come across quite similar findings in their study of STRATOS – findings that suggest that each partner retains control over

his or her own firm, yet they can be intimately involved in this new entity, i.e. joint venture. In a joint venture of family firms, each family firm controls its own part of the venture.

In addition, the results of the present study contribute to the debate of whether family business owner-managers are less network-oriented than non-family managers. This study disagrees with the findings of the above-mentioned STRATOS (Strategic orientations of SME's: Are Family Firms Really Different?" – a cross-cultural survey conducted in eight European countries, comparing family businesses and non-family businesses (Donckels and Fröhlich 1991, 158-160)). The survey suggested that family businesses seem to need fewer socio-economic networks, less co-operation with other firms, less subcontracting, and less collaboration with other firms for production.

This study represents only one small subgroup of an industry. It has revealed that the openness, willingness and ability of the owner-managers of networking family firms towards forming social and economic networks (taking into account their prior projects, their share of ownership in other alliances, their joint ventures as well as their positive attitude towards co-operation) has influenced their network success and survival in the networking process. Furthermore, this study has shown that the owner-managers of networking family firms seemed to have a positive attitude towards networking and inter-firm co-operation. In this light, one could argue that the owner-managers seemed to be fairly 'network-oriented'. This has been a matter of gaining access to lacking resources, previous experiences of networking relationships, learning from one's failures and market-setbacks, and merging complementary competencies in order to work efficiently and enhance one's competitiveness in the market. (cf. Porter 1985; Prahalad & Hamel 1994.)

However, the network of family firms (JV) has not been that successful when considering the economic side of the network process, although economic issues were considered highly important among the networking partners.

This study also contributes to the discussion on network practices and philosophies. The owner-managers are members of the owning families and their joint venture, and their personal capabilities have paved the way for the practices and philosophies applied in the inter-firm co-operation (JV); i.e., the values, beliefs, attitudes of the owner-managers, as well as their 'carpenter tradition', may have had an effect on the networking practices. However, these issues are only suggested by the study, and it can only be argued that affective, conative and cognitive capabilities have played important 'mediator' roles in the context of networking family firms. The owning families' commitment and support to network leaders was only indirectly recognised. Thus, it seems that the owning families have shared the operational and management responsibilities within their family firms, and the members of the owning families are encouraged to utilise their capabilities (competencies and qualifications) when particular expertise is needed in this networking process. (cf. Lansberg & Astrachan 1994; Dunn 1995.)

The results of this study also contribute to the discussion on family influence and family relationships. Family issues and business issues are most

often reciprocal; they can have an effect on network relationships - and, accordingly, on network practices. Family influence plays an important role in network practise through power (owning relationships), experience (family involvement), and culture (values and commitment of the owner-managers and the owning families). (cf. Astrachan, Klein & Smyrniotis 2002; Lansberg & Astrachan 1994.)

The Model of Inter-Firm Co-operation Capability reflects the structural and contextual issues of the networking process of family firms in various ways. Firstly, looking at the role of family business culture that has been suggested to influence the inter-firm co-operation capability of the networking family firms, culture is rooted in, e.g., basic assumptions, artifacts, values and attitudes of individuals. (Dyer 1992.) The study of Gallo and Sveen (1991, 187) has noted that *"many of the culturally related characteristics of family businesses are the same all over the world...[making] ...it easier to form strategic alliances."* Needless to say, family business cultures have differences and similarities in international, national and local contexts; thus, family firms are different as well. In their study *'Do Family Owned Businesses Have a Strategic Advantage in International Joint Ventures?'* Swinth and Vinton (1991) argue that the likelihood of success of an international joint venture increases, when both partners are family-owned businesses. The authors suggest that the firms' shared values and goals enable them to bridge cultural barriers more effectively than publicly owned corporations. Furthermore, Chau's (1991) study of succession in East Asian firms concludes that *"the real barriers between Asian countries and the United States are not economic but...attitudinal and cultural"*.

The findings of the study also contribute to the research on family business culture. The study has provided an insight into the culture of the firms, as reflected by the indirect notions of experiences of the owner-managers. The values, attitudes and beliefs reflect the culture of the family firms, i.e., the culture of each family firm influences the culture of the network, and inter-firm co-operation capability. This is in congruence with the earlier findings and notions of Ward & Aronoff (1991, 44) that *"some firms have eschewed the kind of policies and practices that build commitment, loyalty and trust"*, i.e., family firms with such fundamental values as guides to decision-making and operations find themselves at a strategic advantage. Owner-managers have a key role to build teams by using their social networks, as well as building bridges in and between the organisations that will give the firm(s) a strategic advantage. (Dyer 1992.) Furthermore, Aronoff and Ward (2000) have stated that values inspire people to do things that are difficult, to make commitments that require discipline, to stick to plans for the long haul. Values have a strong power in families and in businesses. The owning families' values form the heart of a business culture, and then, some vital synergies can arise.

To conclude with: particularly trust, but also commitment are necessary capital that can be accumulated or depleted. Trust is an important mode of governance of ownership – power, family - culture, and business - experience – building and rebuilding capabilities in the networking family firms. Thereby, owner-managers of the networking family firms are in the drivers' seat in their

systems and operating environment. This study has continued the recent discussion of conceptual modelling and framework development to examine capabilities, specifically inter-firm co-operation capability in the family business context, and it is trying to shed light onto values, commitment, and responsibility in family and business context. However, this study has also revealed that the joint responsibility is strongly anchored on motivation and volition to constantly renew and learn to learn at all levels of individual, firm and network.

9.3 Critical Assessment of the Study and Suggestions for Further Research

This study has demonstrated the relevance of the processual view of the networking process, as well as the relevance of educational studies as a theoretical frame of reference for understanding the inter-firm co-operation capability in the context of networking family firms. While previous studies on inter-firm co-operation and networking have largely been focused on strategic management, network management and sociological-psychological viewpoints of inter-firm co-operation, and capabilities as firm-specific, this study has introduced a deeper and wider perspective on inter-firm co-operation capability of networking family firms, emphasising the role of owner-managers as a key source of capabilities, focusing on learning in inter-firm co-operation and the networking process of family firms.

This study has empirically shown that the processual view of the networking and inter-firm co-operation capability is highly relevant and applicable to the study of the learning processes of networking family firms. It is also worth mentioning that while the majority of previous studies on entrepreneurial firm's learning through inter-organisational relationships and networking have been carried out in various specific industry sectors (e.g., Yli-Renko 1999), this study included a narrow view on one industry sector of family business. Although all the informants have represented the furniture industry in this study, the results indicate that inter-firm co-operation capability is important for small and medium sized family businesses and their development of networking and inter-firm co-operation. Furthermore, this study has been limited to the SME family business context only; any generalisations of the results outside of this context should be made very cautiously.

However, the multiplicity and heterogeneity of the phenomenon led quickly to the conclusion that no one-dimensional approach alone would be adequate to describe the inter-firm co-operation capability in the context of networking family firms. A more holistic view on the process of longitudinal study on a networking process was indeed needed, and both the inter-organisational theories and studies (network approach) and education (Snow,

Corno & Jackson 1996; Ruohotie & Koiranen 2000; Gibb 1993, 1999; Peltonen 1986) were 'combined and merged' in this study. Furthermore, the inter-firm co-operation capability was constructed and modelled for the purpose of the empirical study in this research process, and it has showed how challenging it is to describe the multiple concepts used around the studied phenomena.

The present study has empirically demonstrated that the roles of learning, trust and commitment have been rather applicable in empirical case studies. In this study, the three dimensions of affective, conative and cognitive constructs were conceptually distinguished from each other and separately described and investigated. The empirical results also indicate that the three dimensions of affective, conative, and cognitive constructs are distinct when it comes to the roles of learning, trust and commitment, and that they have both differential and shared effects on the learning process of family firms. It is also important to take this finding into account in further research of inter-firm co-operation capability and, in expecially the related family business context.

Several limitations exist in terms of being able to generalise and interpret the results of this study. Firstly, assessing the theoretical basis and the research design of the study, one could criticise whether all the multiple theories and approaches used were needed in order to conduct this study. It could be possible that, because of its multiplicity, the theoretical frame lacked unity and was scattered. The concepts of the study have been identified and labelled as the basis of the research questions. Especially, the concepts of inter-firm co-operation capability needed to be identified and labelled by combining the concepts in the fields of both inter-organisational studies and education. The reason for this lies in the definitional malaise of networking and co-operation, but also in the lack of an applicable and sufficient definition and determination of the co-operation capability in the family firm context. The theoretical framework and the constructed research design consist of many elements that overlap and interplay.

Therefore, it could be possible that the constructed framework has been too extensive for an empirical investigation. The multi-level analysis synthesised in the inter-firm co-operation capability, i.e., the owner-manager level, family firm level and network level (referring to the Integrated Model of Inter-firm Co-operation Capability constructed in the first and conceptual phase of the study, and to the theoretical positioning of the study) might have been too extensive and inaccurate. It is also possible that the reduction in multi-level analysis from the individual level to the network level might have weakened the construct validity of the concepts. In trying to improve the validity of the study, the major concepts concerning inter-firm co-operation capability have been studied by using versatile and multidisciplinary sources, e.g., from refereed journals as well as textbooks and conference proceedings.

The researcher herself (as one directly involved with the field of her own research) may have been a source of bias. She may have made mistakes by favouring the most suitable cases and avoiding the deviant cases in the process of data analysis. It is possible that the researcher's interpretation has favoured such viewpoints that have been of interest to herself. One could also argue that

the researcher has become blind to her own ideological assumptions and the chosen theories, and that she should have been more 'suspicious' of the data gathered because of her prior practical knowledge of the industry. Therefore, the researcher's preunderstanding and perceptions may have biased the results; the researcher has not entered into the research field as an 'outsider', and that may have biased the analysis and interpretation.

Secondly, assessing the credibility of this study as a whole, various methodological choices have been made. This study has followed an 'abductive logic' which means that the researcher has used multiple theories (literature), approaches and models that have been 'tested' and blended with empirical reality (findings) in order to develop and refine new models and classifications.

However, any generalisations concerning the representativeness of the sample (n=5) of this case study can not be made. This study can only base its arguments on the 'thoroughness' of the analysis. The researcher has pre/re/defined the inter-firm co-operation capability, and generated and reformulated hypotheses of the studied phenomenon during the research process. She has chosen a single case study with five embedded cases and investigated them. She has sought out and examined diverse perspectives of the cases. Findings have been subjectively selected on the basis of the researcher's interpretations (which may have been biased); moreover, they have been selected to fit in an analytic framework. In this study, looking at the thoroughness of the analysis, the analytic induction has been used. (cf. Silverman 2000, 2001.)

The researcher has also tried to investigate the effects of her biases by choosing the same owner-managers of the network (respondents) and refraining from direct and early questions about trust, commitment and learning. For example, the owner-managers have described the same networking process, and these multiple descriptions have been combined to form a more comprehensive picture of the case. Thus, it was necessary to interview several informants, otherwise the data gathered would have been biased. Both favorable and negative opinions on the networking process have been found. Consequently, the researcher has tried to understand the context and connections of the diverse issues brought up by the interviewees and the theoretical literature on the complex research problem.

The sample was taken solely from one country, one network of family firms, covering their joint nine-year time span, and from a set of five firms representing only a minute proportion of the overall economy. Furthermore, the results of this longitudinal study are well in line with the earlier findings of previous research closely related to inter-firm co-operation and the networking process and the role of trust and commitment in the network of Finnish furniture producers (Vesalainen & Murto-Koivisto 1994; Varamäki 2001; Kaleva 2000; Niemelä 2002). It can be suggested - and argued - in this study that family firms operating in a rural area could face similar learning paths and environmental changes that are neither industry-specific nor compelling outside them, indicating the emergence of new local industrial networks.

Another methodological limitation of the research design is that the data was collected from the owner-managers of the networking family firms, excluding, for example - the key customers. However, as the focus of the study was on the description of the development of the networking process, and investigating the inter-firm co-operation capability in the context of networking family firms, the owner-managers' approach was justified. Also other family members should have been included in this study in order to investigate more deeply how family issues affect the network practices.

The findings of the study suggest several additional avenues for future study. More detailed, clearly theorised and well substantiated models of the ways in which family firms exist as a part of the economy are clearly required if the role of family business in the economy is to be understood adequately. This is easier said than done. However, the present study cautiously indicates that such theorising can not simply be borrowed from ready-made notions, generated when trying to understand other kinds of phenomena or contexts; instead, one's own models could be built, based on careful investigation, in order to see how small and medium-sized family businesses actually function. More processual and longitudinal studies are needed. A processual and longitudinal perspective helps to understand how a system is evolving, how it, e.g., responds to anxiety; and a holistic approach, i.e., multiplicity of approaches sets the context for data collection. However, this kind of qualitative research is rather expensive and time-consuming.

In addition, the study demonstrated the potential capabilities associated with the inter-firm co-operation capability in the context of networking family firms. The outcomes of the study can be productively investigated, for example, by broadening the empirical scope to include an analysis of some of the key concepts of learning, trust and commitment in the networking processes of family firms individually. This could help in obtaining a deeper insight into, for example, the structural interdependencies and functioning of the owning relationships in the networking family firms.

Other suggestions for further research could be to broaden the perspective on the affective side of the networking and trying to find the role of joint responsibility in the light of competitiveness of the networking family firms. Further research could also include analyses of the impact of culture in terms of networking, franchising and mentoring in Finnish family firms related to their success and continuity. Can we build a successful model for succession in a family business context through affective, conative and cognitive capabilities?

To conclude with: this study has set out to shed light on the inter-firm co-operation capability by constructing, synthesising, and expanding the existing streams of inter-organisational and educational studies, and it has contributed towards a deeper understanding of the inter-firm co-operation capability in the context of networking family firms. Hopefully, this work will inspire further investigations into the processes of networking capabilities.

9.4 Practical and Educational Implications

This study has illustrated various and complex issues that the entrepreneurs face when managing their networking processes and coping with the tightening competition. This study suggests that owner-managers should consider not only the economic aspects, but also the social aspects, such as joint responsibility and cultural bedrock, in order to improve capabilities and develop their networking and inter-firm co-operation processes. As a conclusion, entrepreneurs play a crucial role in their own family firms as role models for the next generation: how to share, manage and learn in order to succeed and survive. Consequently, affective, conative and cognitive capabilities will serve as a launching pad for the competitiveness of family firms and their networking capabilities.

The findings of this study have also suggested that both the inter-firm co-operation capability and family business culture contribute to the competitiveness of the network of family firms. The networking process itself has provided a learning opportunity for the owner-managers and their networking family firms, perhaps for the suppliers and retailers as well. It looks like the networks act as a '*learning organisations*' for entrepreneurs. This if any, is a result of the openness, willingness and abilities of individuals to cooperate, to seize new opportunities, and to commit to long-term networking relationships and process. It is important to realise, and know how to share, manage and learn networking capabilities together, and how to mobilise 'tacit knowledge' in and between the individuals and firms. These kinds of managerial capabilities could be challenging to teaching, researching and learning modes considering entrepreneurship education and more specifically, to succession programmes carried out by the local Entrepreneurs' Associations and policy makers.

This study has also suggested that, in the family business context, learning returns the networking family firms to the heart of the inter-firm co-operation capability, and capabilities return to the centre (=heart) of the Three Circle Model of Family Business (i.e., family, business and ownership). This is important when considering the influence of family business culture on the business (management), family and ownership, and the development of the inter-firm co-operation capability. Why is this important and what does this mean in practice? From the viewpoint of the networking family firms and cultural bedrock of firms, and furthermore, pondering this in an even wider context in the entrepreneuring of the Ostrobothnian region in Finland, it is vital to realise that family business culture can be the most severe obstacle in establishing, developing and promoting networking and co-operation between firms. This study has luckily supported the opposite kind of an argument, yet showing the significance of the family – business – local cultures, shared value systems, joint responsibility and managerial as well as leadership capabilities. All these issues seemed to have a remarkable effect on successful networking, and understanding the meaning of networking between the firms. The other is

that family firms themselves should be aware of the impact of their own cultural bedrock and the capabilities of their firms. This is a matter of openness and willingness to learn, as much as to unlearn. Both are indeed difficult to any human being.

It is also worth noting that the interventions of policy makers, to promote the creation of new firms and enhance different forms of networking, should consider the role of family business culture and local business culture (as well as business climate) as a competitive advantage of small and medium sized family firms, when launching new government supported and subvented 'enterprising programmes' in rural areas. This is a serious challenge for all parties involved. Without an understanding of the contextual issues of family business, all good intentions will not easily materialize. This study has also revealed that trust and commitment are cornerstones of sustainable and efficient networking in order to compete in the future markets. Owner-managers' capability to commit themselves and manage their competences and capabilities requires both knowledge and skills. Thus, entrepreneurship is a practical and educational subject that can be learned in real-life contexts both in schools and enterprises. The best alternative could be a combination of both.

This case study is only a small effort to show how important it is to both research and teach entrepreneurship, more specifically family business, in schools. Future visions lie in tomorrow's competitiveness and the capabilities of the next generation. It is not too late to *take the bull by the horns* and start thinking how each of us can enhance an entrepreneurial way of thinking, acting, and behaving, and how we can utilise and enhance entrepreneurship, and family entrepreneuring, and entrepreneurship education in schools in co-operation with families, enterprises, schools and other institutions. This begs the question: *what* to teach and *how* to teach? Most of the managerial issues, such as knowledge and skills of entrepreneuring can be taught in schools: on the other hand, a lot of issues can be learned in 'real-life' business contexts.

Judging by the results of the study, more personal, more teamwork-oriented, more affective and conative entrepreneurship education is needed. As an example, entrepreneurship can be learned by: learning by doing, learning by discovering, learning by problem solving, learning from mistakes, learning from 'best failures', learning from 'masters and mentors', learning by networking, and learning from experience. Furthermore, it is vital to enhance co-operation between business associations, individual firms and students, cooperating and providing possibilities for engaging in project-type learning. In addition, to enhance pedagogical multiple alternatives for teaching, coaching and learning: pedagogical drama, role plays, business simulations, workshops, interactive panel discussions and demos, to enhance team working in research and study, and to enhance creative and problem based learning in schools.

Family firms are the engine and backbone of the Finnish society and economy, and the livelihood of the many municipalities and towns in the rural areas of Finland. This study has indicated the importance of co-operation and entrepreneurial capabilities, which need to be encouraged by the governmental interventions. This can be done by outlining the importance of society-wide

preconditions for family business, family business research and teaching, and by focusing on the family business operations of its members and next generation issues of entrepreneurs in general.

To conclude with: What do we all know about hearts, engines and backbones? They are practical and useful when they are in good shape and order. Each of them will probably need daily care and concern, such as exercise, healthy food, oil, 95E, shelter, to mention but a few. But what are the consequences if the heart would stop beating, if the engine would not receive oil, and if the backbone was not capable of supporting you? The case is analogous to family business networking. Hopefully, we can keep all these parts in good shape and order, for a successful family business future.

SUMMARY IN FINNISH (TIIVISTELMÄ)

Tutkimus on sekä käsiteanalyttinen että empiirinen. Tutkimuksen avulla haetaan vastausta seuraaviin kysymyksiin: 1) Mitä yritysysteistyön kyvykkyys on? 2) Kuinka yritysysteistyön kyvykkyyttä voidaan määritellä ja kuvata aikaisemman verkostoitumis- ja yritysysteistyökirjallisuuden valossa? 3) Mikä rooli oppimisella, luottamuksella ja sitoutumisella on ollut yritysysteistyö- ja verkostumisprosessissa?

Teoreettisella tasolla käsiteanalyysi nojaa pääosin yritysten välisiin organisaatiotutkimuksen ja perheyrittäjyyden teorioihin sekä kasvatustieteellisiin kehitelmiin. Ilmiön moninaisuus ja heterogeisuus johtivat nopeasti johtopäätökseen, että mikään yksisuuntainen lähestymistapa ei olisi riittävä kuvaamaan yritysysteistyön kyvykkyyttä verkostuneissa perheyrittäjyksissä.

Käsiteanalyysin tuloksena voidaan todeta, että yritysysteistyön kyvykkyys muodostuu kolmesta käsitteestä: oppimisesta, luottamuksesta ja sitoutumisesta. Kasvatustieteen näkökulmasta katsoen oppimiskäsite kattaa kaikki affektiivisen, konatiivisen ja kognitiivisen dimension käsitteet. Verkostonäkökulmasta katsoen luottamus ja sitoutuminen määrittelevät ja kuvaavat yritysysteistyötä verkostuneiden yritysten valitussa kontekstissa. Yritysysteistyön kyvykkyys verkostuneitten perheyrittäjysten kontekstissa määrittyy ja muodostuu seuraavista kyvykkyiden osista: sosiaalinen 'verkostoitumiskyky', johtamiskyky ja oppimiskyky.

Empiiriset tulokset osoittavat, että yritysysteistyö on samanaikainen oppimisprosessi omistajajohtajille ja verkottuneille perheyrittäjyksille. Yritysysteistyön kyvykkyys kehittyy verkostoitumis- ja oppimisprosessin aikana. Oppimisella, luottamuksella ja sitoutumisella on keskeinen rooli luotaessa uutta tietoa, arvoa ja luottamusta perheyrittäjysten verkostoitumisprosessin eri vaiheissa. Lisäksi, omistajajohtajien arvot, asenteet ja uskomukset heijastavat heidän perheyrittäjyskulttuuriaan, ja näinollen jokaisen perheyrittäjyksen oma perheyrittäjyskulttuuri vaikuttaa myös yritysysteistyön kehittymiseen. Päätelmänä on, että yritysysteistyön kyvykkyys ja perheyrittäjyskulttuuri vaikuttavat perheyrittäjysten muodostaman verkoston kilpailukykyyn.

Yritysysteistyön kyvykkyyttä on tarkasteltu tässä tutkimuksessa perheyrittäjysten kontekstissa. Perheyrittäjä integroi sekä perheen että yrityksen intressit, ja omistajuus liittyy läheisesti liiketoiminnan johtamiseen. Monimutkainen perheyrittäjyssysteemi ja toimintaympäristö huomioiden, perheyrittäjysten omistajajohtajat ovat avainroolissa luodessaan ja perustaessaan verkostosuhteita. Nyt saavutettu tutkimustulos on sillä tavoin kontekstisidonnainen, että siitä käytävä keskustelu on syytä rajata perheyrittäjyskontekstiin. Mahdollisia yleistyksiä tämän kontekstin ulkopuolelle voidaan tehdä vain suurta varovaisuutta noudattaen.

Avainsanat: kilpailukyky, kyvykkyys, oppiminen, perheyrittäjä, perheyrittäjyskulttuuri, verkostoituminen, yhteistyö

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APPENDICES

APPENDIX 1: INTERVIEW THEMES IN 1995 AND 2001.

Focussed themes in 1995

- Background characteristics of the family firm's (year of establishment, generation, ownership, production and products, turnover)
- Motivation and need for co-operation and networking
- Division of work, and experiences/outcomes of co-operation and networking
- Network management and owning relationships between family firms and their networking (i.e., joint venture)
- Future prospects of inter-firm co-operation and networking of family firms, and their joint venture as well as the industry in general

Focussed themes in 2001

- The case history, i.e., the experiences of the years 1995 to 2001 (year of establishment, rules and agreements, investments concerning the overall performance of the joint venture)
- Division of work (roles in a network), and management in the network
- Issues which 'pushed' and 'pulled' into networking and inter-firm co-operation
- Issues promoting and advancing the networking and inter-firm co-operation
- Development of the networking and inter-firm co-operation, and performance in general
- Outcomes, expectations and future prospects of the networking and inter-firm co-operation from the viewpoint of owner-managers
- The role of trust and commitment in the networking process of family firms
- The role of culture in the networking process of family firms

APPENDIX 2: THEMES AND SUBQUESTIONS DISCUSSED IN ORDER TO DESCRIBE THE CASE FIRMS AND THE DEVELOPMENT OF NETWORKING.

- What kind of knowledge and skills have been essential in the inter-firm co-operation
- What issues have 'pushed' and 'pulled' family firms to inter-firm co-operation
- What issues have promoted and advanced inter-firm co-operation of family firms
- What issues have strengthened and weakened the inter-firm co-operation of family firms
- What issues have contributed to (helped in) utilising the networking and co-operation in the progress of the inter-firm co-operation
- What issues have restrained the utilisation of inter-firm co-operation of family firms
- How are the values, attitudes and beliefs of the owner-managers associated with the inter-firm co-operation

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