The Networking Abilities of Craft Entrepreneurs

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Abstract

It has been claimed that networking capability is one of the core competences of firms and one of the critical competences of entrepreneurs. Yet very few studies to date have focused on conceptualising network competence. Thus, the aim of this study is to deepen our understanding of the capabilities needed in establishing and maintaining business relationships and nets. In our study, the network competence concept refers to the ability and willingness of craft entrepreneurs to act in versatile nets. The study was conducted as a multiple case study (14 craft firms).

After identifying the requisite skills for network competence, this research was able to construct a new theoretical framework or local theory on the network competence of craft entrepreneurs. The framework consists of two bundles of abilities: those needed in establishing relationships and those needed in maintaining relationships and nets. We argue that the fundamental requirement for establishing relationships is confidence in networks as a system, and that the key skill in maintaining relationships and nets is an ability to take the partner's interests into consideration.

Key words: network competence, abilities, entrepreneurial networks, case study

Introduction

It has been claimed that networking capability is one of the core competences of firms (e.g. Hill and McGowan, 1996; O'Donnell et al., 2001; Ritter, Wilkinson and Johnston, 2004; Sivadas and Dwyer, 2000) and one of the critical competences of entrepreneurs (Johannisson, 1987). Yet very few studies to date (Hill and McGowan, 1996; Niemelä, 2003; Ritter, 1999) have focused on conceptualising network competence. However, relational capabilities (e.g. Jarratt, 2004; Johnson and Sohi, 2003; Lorenzoni and Lipparini, 1999) and alliance competence (Draulans, deMan and Volberda, 2003; Lambe, Spekman and Hunt, 2002; Spekman, Isabella and MacAvoy, 2000) have been analysed quite recently. It has been proposed that the current understanding of networking capability needs further development, and how it contributes to relationships and networks in different contexts should be studied empirically (Ritter, Wilkinson and Johnston, 2004).
The aim of this study is to deepen understanding of the capabilities needed to establish and maintain business relationships and nets. After identifying the requisite skills for network competence, a new theoretical framework or a local theory on the network competence of craft entrepreneurs is to be constructed. In this study, the concept of network competence refers to the ability and willingness of craft entrepreneurs to act in versatile nets.

The structure of this paper is as follows: we start with a brief introduction to each of the industrial networks approach and the entrepreneurial networks approach. We then present the main themes from previous research and consider their relevance in the context of micro-sized craft firms. We follow with a description of our research design and the cases we used for our analysis. After presenting the main results of the analysis, we close with a summary of our conclusions and suggestions for future research in this area.

Two approaches to networks

This study relies on the industrial networks or IMP approach (e.g. Axelsson and Easton, 1992; Håkansson and Snehota, 1995; Matsson, 1985), and the entrepreneurial networks approach (e.g. Aldrich and Zimmer, 1986; Johannisson, 1988; Johannisson, Ramirez-Pasillas and Karlsson, 2002; Larson and Starr, 1993). These approaches share an understanding of markets as networks: firms are in many ways linked to each other, and therefore the views and experiences of other actors influence entrepreneurial decisions. Because of their dependency on each other, the network both constrains and gives new opportunities to the actors in the marketplace. Business environments or contexts are collectively enacted by actors (Weick, 1995: 30−36; Johannisson et al., 2002), and a firm’s identity is constructed by its relationships with other actors (Håkansson and Johanson, 1988).

In the entrepreneurial network literature, more emphasis is placed on individuals as actors in networks than in the IMP approach. In the entrepreneurship literature, the emergence and growth stages of firms have been found particularly interesting from the networking point of view. The personal network relations of a new entrepreneur gradually change into a many-layered network of relationships where bonds also exist between firms (e.g. Larson and Starr, 1993). The literature on entrepreneurial networks has adopted the elements of a network relationship from the social networks approach: exchange, communication, and normative behaviours are present in every relationship (Mitchell, 1973: 23−26).

In the industrial networks approach, it is also understood that the social dimension is always present in relationships between firms, as firms are represented by people interacting with each other, and social bonds grow as a result (Johanson and Mattson, 1987; Håkansson and Snehota, 2000). The interaction between people influences the actors’ views on the attractiveness of the partner and on the general atmosphere of the relationship (Holmlund and Törnroos, 1997). Both approaches share an understanding of trust and commitment, two of the distinctive features of a long-term relationship. In the industrial networks approach, a third characteristic, mutual orientation (e.g. Johanson and Mattson, 1987) or the high degree of mutuality (Holmlund and Törnroos, 1997) is often discussed.

Small firm networks have been studied by sociologists, too. It has been proposed that both the actors (individuals and the relationships between them) and the structures (the interaction roles of the persons and the relationships between these roles) continuously and simultaneously play a significant part in trust building (Ruuskanen, 2003: 223). The emergence of inter-firm networks has thus been

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2 In this study we use the concepts abilities, capabilities and a competence as synonyms although we acknowledge that especially in the strategy literature the concepts “a capability” and “a competence” may have differing meanings (e.g. Sanchez et al., 1996, cf. Grant, 1998: 118). Our understanding on capabilities relates to Loasby’s (1999: 51) definition: “Capabilities are knowhow, ..., crucial to the performance of a person, a firm, an industry, an economy.” These capabilities may be direct: we know how to do something – or indirect: we know how to get it done (ibid.).
claimed to require two kinds of trust (Ruuskanen, 2002): system trust (Luhmann, 1979: 22) and interpersonal trust. System trust or confidence in a system means that people act without questioning the basic reason for acting (Luhmann, 1988: 97–105). Upon seeing the red traffic light, we stop. And when the light turns green, we step on the gas instead of the brake, because we believe that the cars coming the other way now have a red light to stop them. We have confidence in the traffic light system. In the similar vein, an entrepreneur who has confidence in networks as a system, does not question or doubt the raison d’être of collaborative activities. According to Luhmann (1988: 103–104) “the lack of confidence will lead to feelings of alienation, and eventually to retreat into smaller worlds of purely local importance, to new form of ‘ethnogenesis’, to a fashionable longing for an independent if modest living”.

**Previous studies on relational and network competence**

Within the industrial networks approach, the pioneer in conceptualising network competence has been Thomas Ritter (Ritter, 1999; Ritter, Wilkinson and Johnston, 2002; Ritter and Gemünden, 2003, 2004; also Gemünden and Ritter, 1997). According to Ritter and his colleagues, “a company’s degree of network competence is a two-dimensional construct that can be defined as (a) the degree of network management task execution and (b) the extent of network management qualifications possessed by the people handling a company’s relationships” (Ritter and Gemünden, 2003: 748). The network management tasks relate to establishing and maintaining a single relationship (initiation, exchange, and coordination) and to managing a portfolio of relationships or a network as a whole (planning, organising, staffing, controlling). Network management qualifications include specialist qualifications (technical and financial expertise, legal skills, network knowledge, experiential knowledge from interactions with partners) and social qualifications (e.g. communication skills, empathy, cooperativeness). (ibid.)

In addition, networking and net management capabilities have been identified by IMP scholars (Möller and Halinen, 1999; Möller and Svahn, 2003; Möller, Rajala and Svahn, 2004; Svahn, 2004). However, these frameworks focus mainly on the management competence of intentionally-constructed strategic nets, whereas this study is concerned with the capabilities needed to act in any kind of nets or networks. In addition, the results of a recent study on the marketing capability of a small firm operating in networks (Äyväri, 2002, see also Äyväri and Möller, 1999) are linked to network competence, although the study is partly based on marketing capability literature relying on a marketing management approach instead.

In the field of entrepreneurship, studies on networking capability are very rare, although twenty years ago Johannisson (1987: 55) argued that the networking capability of an owner-manager becomes a critical competence in itself. The first conceptual model of an entrepreneur’s personal contact network competency constellation was presented by Hill and McGowan in 1996. Their constellation comprises vision, experience, judgement, information gathering, knowledge, communication, and analytical skills (Hill and McGowan, 1996). Niemelä (2003) conceptualised the inter-firm cooperation capability in the context of networking family firms. The building blocks of her model are social networking capability, management capability and learning capability.

As relationships construct networks, relational competence is very relevant when building a new framework of network competence. The studies on relational competence or capabilities have mainly focused on the issues that enable a firm’s cooperation with other firms. Relational competence has been conceptualised in the context of dyadic strategic relationships characterised by strong ties and an atmosphere of trust. Some of the studies on relational capabilities have been positioned in the field of strategic management (e.g. Lorenzoni and Lipparini, 1999; Ling-ye and Ogunmokon, 2001; Johnston and Sohi, 2003), some in the field of the industrial networks approach (e.g. Möller and Törrönen, 2003; Blomqvist and Levy, 2004), and some in other fields (e.g. entrepreneurship: Baron and Markman, 2000, 2003; marketing: Jarratt, 2004). A few studies have focused on identifying the elements and capabilities that construct alliance competence (Dyer and Singh, 1998; Sivadas and
Relational (incl. alliance competence) and network competences have previously been analysed at the levels of company (e.g. Dyer and Singh, 1998; Lorenzoni & Lipparini, 1999), individual (e.g. Hill and McGowan, 1996) and relationship (e.g. Siwadas and Dwyer, 2000). In this study, network competence refers to the ability and willingness of craft entrepreneurs to act in manifold multi-actor nets. Therefore, the focus must be on the abilities of individuals: craft firms are either micro-sized or relatively small firms, so the firm and the entrepreneur cannot be separated.

An analysis of previous studies reveals that relational and network competences have been conceptualised as comprising skills, abilities, orientations, tasks, functions, human resources, and organisation structures and systems. All in all, the extant literature on relational and network competences seems to be scattered and conceptually rather vague: the number of concepts used to refer to the same phenomena is large, and the meanings of certain concepts vary from one study to another. Table 1 in Appendix 1 summarises the concepts used in recent studies.

In this study, the elements of network competence were manifested in reported actions, in carrying out different kinds of activities when establishing relationships and maintaining nets. Therefore, such items as network knowledge (Ritter, 1999; Walter, 1999), the relationship portfolio (Walter, 1999), experience (e.g. Draulans, deMan and Volberda, 2003) or knowledge (e.g. Hill and McGowan, 1996), understood as resources or capital, and are not considered elements of network competence; rather, they result from network competence.

Most of the previous frameworks on relational and network competence have been based on studies carried out in the context of medium-sized or large firms. This study focuses on micro-sized firms, and thus, certain types of elements are not relevant in our context, such as the structures and management systems supporting strategic relationships (e.g. Spekman, Isabella and McAvoy, 2000; Jarratt, 2004), and specific functions, structures or tasks for planning, organising, staffing, controlling, and information sharing within a firm (e.g. Ritter, 1999; Möller and Törrönen, 2003).

However, an entrepreneur’s abilities in planning, follow-up, and evaluation of business relationships might be essential elements in his or her network competence. On the other hand, the results of an earlier study (Äyväri, 2002) indicate that an entrepreneur’s vision directs the search for new relationships. Thus, planning abilities could be included in the visioning capability that has been identified as an element of network competence in several studies (Hill and McGowan, 1996; Möller and Halinen, 1999; Pihkala, Varamäki and Vesalainen, 1999; Spekman, Isabella and McAvoy, 2000; Äyväri, 2002). Abilities needed in the follow-up and evaluation of relationships are linked to an entrepreneur’s analytical skills and learning capability, especially to the experiential learning capability (cf. Hill and McGowan, 1996; Äyväri, 2002; Niemelä, 2003, see also more on a firm’s learning capability as an element in relational competence, e.g. in Lorenzoni and Lipparini, 1999; Spekman, Isabella and McAvoy, 2000; Johnson and Sohi, 2003; Jarratt, 2004).

According to the network competence concept adopted in this study, a craft entrepreneur must have both abilities and willingness to carry out the activities needed in establishing and maintaining relationships. The orientations or “views of life” (Niemelä, 2003) identified in previous studies, e.g. “organisation-wide relational orientation” by Möller and Törrönen (2003: 115) and “positive attitude towards inter-firm cooperation” by Niemelä (2003: 63), express a willingness for constructing and nurturing relationships. Thus, a cooperation-orientation might be one of the elements in the network competence of craft entrepreneurs.

The entrepreneurial networks approach maintains that entrepreneurship is basically all about networking: making contacts, constructing relationships, and re-activating former links between actors in the market (Johannisson, 1987; Dubini and Aldrich, 1991). Therefore, an entrepreneur’s ability to identify potential partners is crucial, although at the same time it is emphasised that the
building of nets demands a willingness for interaction on both sides: nobody is able to build relationships on his or her own. Certain characteristics of the craft field may make it more difficult for craft entrepreneurs to identify potential partners among other craft firms, or in agents, retailers, and other relevant actor groups. Firms in the field are very small, they are hidden in the official industry code-based statistics and registers, and the tacit nature of craft knowledge, all of which make it challenging to get to know the actors with suitable resources. A capability to identify potential partners is included in network competence or related frameworks by Möller and Halinen (1999), Ritter (1999), Spekman, Isabella and McAvoy (2000), Lambe, Spekman and Hunt (2002) and Äyväri (2002).

Combining the heterogeneous resources of different actors is the rationale for many business nets. To succeed in combining and co-developing several actors’ resources and activities, coordination is necessary. Therefore coordination capability has been identified as a relevant element in network competence in previous studies within the industrial networks approach (Möller and Halinen, 1999; Ritter 1999; Äyväri, 2002; Möller et al., 2004; Svahn, 2004).

Social competence (social skills) is also included in earlier frameworks (Jarratt, 2004; Croom, 2001; Möller and Törrönen, 2003; Walter, 1999; Baron and Markman, 2000, 2003; Spekman, Isabella and McAvoy, 2000; Ritter, 1999; Äyväri, 2002). In the context of this study, the importance of social skills may be even more crucial. The craft knowledge has both a public and private aspect. It is communal in the sense that interaction between craft professionals is needed to increase craft knowledge, to share it and even to preserve it. “If you decide not to compare your work or your ideas with those of other people then you withdraw from the culture of discoveries, innovations, techniques and insights”, says Peter Dormer (1994: 76), who has analysed the nature of craft and design. The private, tacit aspect of craft knowledge requires not only interaction but also doing together with other actors in the same field.

Having analysed the extant literature from both the standpoints of the craft entrepreneurial context, and the basic ideas of the two networking approaches chosen as the basis of this study, six elements of network competence are suggested to be relevant: cooperation-orientation, visioning capability, an ability to identify potential partners, social skills, learning capability, and coordination capability.

**Research design**

This study was conducted as a multiple case study. The analysis was based on 14 cases of owner-run micro-sized crafts firms, hence entrepreneurs. The aim was to include various types of firms: at different stages of the company life cycle, differing customers (foreign/local, consumers/companies) and with different channel choices. The variety was intended to maximise learning (Stake, 2000), giving a more comprehensive understanding of the phenomenon under investigation. However, all of the selected cases were similar on one dimension: their business models included the idea of collaboration with other actors in manifold ways. All except one of the case firms had less than ten employees, and seven of them had only one employee: the entrepreneur. The firms represented a variety of crafts and design fields: textile and fashion design and production, silver- and goldsmiths, furniture design and production, carpentry, ceramics and stained-glass design.

The data consisted of theme interviews with the entrepreneurs (each was approximately 2 to 2.5 hours long, conducted on the company premises), articles and other information about the companies and the entrepreneurs, and the actors in their focal nets (web search). Moreover, six expert interviews were carried out in order to deepen the pre-understanding of the nature of craft work, craft firms, and networking in the field. All the interviews were transcribed. The lead author of this paper had some prior knowledge of the field as she had been collaborating with some of the actors in the crafts market for a few years.
The analysis was started by categorizing the 14 focal firms in groups on the basis of the distinctive types of actors in their focal nets: a) creators of international nets, b) craft firms partnering with industrial firms, c) creators of colleague nets, i.e. firms in the same craft field, d) creators of local nets (see Appendix 2 for a brief description of the case firms). The case descriptions (approx. three pages each) were created as part of the analysis, as verbal reconstructions of the firms involved and the phenomenon studied.

The researchers used abductive reasoning (Coffey and Atkinson, 1996: 156-158; Dubois and Gadde, 2002; Shank, 2002: 119) to identify the elements of network competence in each case. Network competence was analysed case-by-case from the perspective of tasks or activities, as network competence was to be manifested in action. Firstly, all activities related to the following tasks were identified case by case: creating and seizing business opportunities, choice of partners and establishing relationships, maintaining relationships, coordinating operations between multiple partners, and ending relationships. Secondly, the interpretation of the abilities needed to perform those activities was based on the clues given by the data of the case, the theories of industrial networks and entrepreneurial networks, previous conceptualisations of relational and network competence, and the characteristics of craft knowledge and craft entrepreneurship. The process was similar to Shank’s (2002: 19) description: “We are performing acts of abductive reasoning when we get hunches, read clues, discern omens, diagnose symptoms, formulate patterns, and concoct explanations after the fact.”

Thirdly, the results from the case-by-case analysis were summarised by group. Fourthly, the results were compared across groups. Figure 1 presents the steps in the analysing process.

| CASE BY CASE |
| Identification of the activities reported by the entrepreneur, five task areas: |
| 1. Creating and seizing business opportunities |
| 2. Choice of partners and establishing relationships |
| 3. Maintaining relationships |
| 4. Coordinating operations between multiple partners |
| 5. Ending relationships |

| The choice of these task areas is based on the two network approaches, extant frameworks of network competence, and on the characteristics of networking within craft field. |

| CASE BY CASE |
| Interpretation following abductive logic: |
| Which abilities are needed in performing each of the activities identified? |

| CROSS-CASE COMPARISON within each group: |
| a) Creators of international nets |
| b) Craft firms partnering with industrial firms |
| c) Creators of colleague nets (same craft field) |
| d) Creators of local nets |

| The interpretation of the necessary abilities is based on the clues given by the data of each case, the two network approaches, previous studies on relational and network competence, the characteristics of networking within craft field, and on the features of craft knowledge and craft entrepreneurship. |

| CROSS-GROUP COMPARISON |

Figure 1. The analysing process of the study
Next, we will present the findings of the study. We start by discussing the abilities needed in establishing relationships. However, due to the limited length of the paper, we are not able to present the findings case by case. The cross-group comparison revealed no differences in the elements of network competence according to group. Therefore, the main findings are presented without reference to the groups.

Abilities needed in establishing relationships

The framework for the network competence of craft entrepreneurs consists of two sub-frameworks, or “bundles” of abilities, the first being the abilities needed in establishing relationships, and the second bundle being the abilities needed in maintaining relationships and multilateral nets (see Figures 2 and 3).

The results suggest that the confidence of the entrepreneurs in networks as a system (see more Luhmann, 1988: 97–105: “confidence”, and 1979: 22: “system trust”) is a fundamental ability, as it can be considered a prerequisite for networking done on the entrepreneur’s own initiative. Correspondingly, the ability to take a business partner’s interests into consideration – in addition to one’s own interests – is a key skill needed in maintaining relationships and nets. These most essential abilities are shown in bold in the figures and are presented as the basic skill set to which all the other abilities are related.

Figure 2.
The network competence of craft entrepreneurs: abilities needed in establishing relationships.

*Confidence in networks as a system* refers to an entrepreneur’s ability to trust that business networks function and in his or her own position as a part of the network. As was mentioned above, confidence or system trust seems to be a fundamental element in network competence since without it, craft entrepreneurs would not try to establish co-operative relations with unknown actors, or try to actively strengthen their ties to the actors with whom they have already had some contacts.
Confidence in networks develops gradually, sometimes over a long period of time. It can be learnt. In this study, ten case entrepreneurs seemed to have had system trust when they started their businesses, but there were four cases where the system trust of the entrepreneurs seemed to have grown as their experience with networking slowly accumulated. In two of those cases, the entrepreneurs felt that they had to “give up something of their own”, or least share something of their own with business partners; in the other two, it was more about adapting to changes in the business environment and utilising perceived opportunities. In all of these four cases, the entrepreneurs were not looking for partners during the first years of their businesses; on the contrary, they had planned to acquire all the necessary resources into their own firms. The start of collaborative activities for example in production in these cases was more or less accidental, either the potential production partners or customers were active in suggesting new arrangements. The gradual strengthening of system trust seems to be linked to the development of the owner-manager as an entrepreneur. When the entrepreneur is able to identify his or her own strengths as an entrepreneur, he or she becomes more able to outline new opportunities and more willing to change plans.

The importance of confidence in networks as an element in network competence is stressed by its link to the visions created by an entrepreneur. An ability to act with confidence in networks turned out to be a prerequisite for being able to vision business concepts based on cooperative relationships with other actors. Visioning ability refers to an ability to outline possibilities for future cooperation both in dyadic relationships and in multi-actor nets. The vision guides decisions made on which opportunities offered by the network should be seized and who should be contacted. Furthermore, the vision influences any cooperation needs identified by the craft entrepreneur; it affects how the entrepreneur sees the firm generally and its future needs. Hence, our results confirm the findings by Spekman et al. (2000: 83), Äyväri (2002), and Hill and MGowan (1996) (cf. differing understandings on visioning capability by Möller and Halinen, 1999; Möller and Svahn, 2003 and Möller et al., 2004).

The third element in network competence needed to establish relationships and nets, an ability to identify the needs of one’s own firm and inform others about those needs is linked to the above-mentioned capabilities, confidence in networks as a system, and visioning ability. These are needed in combination with the third element so that an entrepreneur is able to see how other actors’ resources could be combined with the resources of one’s own firm. Case analyses indicate that positive experiences with cooperation improve the chances that new cooperation needs will be identified. Ritter’s (1999) study makes an exception among extant research in network competence: the identification of technological collaboration needs is included in planning tasks, and is thus integrated in his framework. However, he does not elaborate on the ability to inform others about those needs.

Contact-seeking ability refers to an ability and willingness to make contact with actors with whom an entrepreneur has not yet cooperated. The following abilities are included: a) initiative in making contacts; b) an ability to be “found” by international clients and agents (the entrepreneur should be able to gather information on where and when it would be possible to meet these actors and try to establish relationships); c) an ability to be “found” by domestic clients and other potential domestic partners (the entrepreneur should have up-to-date information on times and places where one should be, and one should with conscious effort seek access to such projects or positions that offer chances to create contacts with potential partners); and d) an ability to give way to coincidence (let chance decide, be able to realise the value hidden in accidental meetings and be able to quickly seize the serendipitous opportunity for cooperation).

Existing literature suggested that an ability to identify potential partners is relevant to network competence (e.g. Möller and Halinen, 1999; Spekman et al. 2000; Lambe et al., 2000; Ritter, 2002; Äyväri, 2002). The results of the case analyses clearly indicated that entrepreneurs utilise their own as well as their partners’ contacts to identify potential partners. Not only do they make use of the contacts of other craft entrepreneurs, retailers, clients, suppliers, business advisors, consultants, advice bureaus in the craft field, but they also use the contacts from their family members, friends, former studying and working colleagues, former teachers, and so on.
Hence, an ability to utilise one’s own and present partners’ contacts to identify potential new partners is a relevant capability for establishing relationships both with production and marketing partners. The cases in this study indicate that a network transmits information, especially on the resource needs related to production and often it, sooner or later, produces a solution: an actor with the necessary complementing resources gets in touch, or his or her contact information is given to the craft entrepreneur. The capability to utilise business partners’ experience to identify further potential partners also refers to learning about which kinds of actors would not produce beneficial relationships.

Abilities needed in maintaining relationships and nets

Next comes the capabilities of the other “bundle” in the network competence framework. The abilities needed to maintain dyadic relationships and multi-actor nets are as follows: an ability to take the interests of business partners into consideration, social skills, an ability to share one’s own knowledge and accept and utilise others’ knowledge, a customer-oriented product modification and tailoring ability, an ability to manage time efficiently in order to devote enough time to nurture relationships, and a coordination capability (see Figure 3).

![Diagram](image)

Figure 3. The network competence of craft entrepreneurs: abilities needed in maintaining relations and nets.

An ability to take the interests of business partners into consideration proved to be a key element in maintaining and strengthening relationships irrespective of the type of partner (regardless of production, marketing channel, product development, marketing communication, etc.). A craft entrepreneur’s ability and willingness to support marketing counterparts (retailers, importers, and agents) in obtaining his or her goals were manifested in many kinds of tasks or activities: a craft entrepreneur might give guidance and practical help in building the assortment, displaying products in the shop, and in shop decoration; an importer was given a questionnaire to collect feedback from his own clients; the crafts entrepreneur (i.e. the designer) joined the agent when visiting retailers abroad.
The same ability was manifested in relationships with production partners: prices were set so that they were considered fair by both actors; when designing new products, the craft entrepreneurs took their production partners’ machinery into consideration; when assigning production tasks, they took care that regular partners were given an appropriate amount of work tasks, and that the assignments were equivalent to each partner’s level of know-how. In relationships with other craft entrepreneurs, the ability was manifested in recommendations and passing orders to colleagues, investments in joint marketing activities, and sharing knowledge to advance the partner’s business. In addition, the significance of this ability was expressed in the descriptions of those actors with whom the entrepreneurs did not want to cooperate (such as those who were egotistical, or sought only self-interest) and in their descriptions of the reasons why some relationships ended (e.g. investments and benefits were not equally distributed, or a coordinator in a multi-actor net took higher profit margins for himself).

Social skills are necessary for building social bonds in the dyad, and therefore social competence has been included in earlier frameworks, too. In the cases of this study, the synonym for social skills seemed to be an ability to cope with people, especially the social flexibility which refers to the ability to easily adapt to different kinds of social circumstances and people. The personal nature of craft entrepreneurship and craft firm networking might be one of the reasons why social flexibility was regarded so highly. Personal interaction is highly appreciated, irrespective of the partner type.

An ability to share knowledge and accept and utilise others’ knowledge is needed in relationships with production partners when the designer and the actors involved in the production process negotiate (such as a discussion on how the prototype of a new product should be changed in order to make the product easier to produce, or what changes are needed in the production process to improve the quality of the final product). The sharing of others’ knowledge and the co-creation of new knowledge in conversations or actually working together is essential due to the communal nature of the craft knowledge. The capability and willingness to share knowledge is also valued in the dyads between entrepreneurs in the same craft field. A partner is supposed to be a professional both as a designer, a maker and as an entrepreneur, and therefore the partner’s knowledge is appreciated. However, it is not always easy to accept and utilise feedback from colleagues, although feedback from marketing partners is expected and required.

Earlier studies (e.g. Lorenzoni and Lipparini, 1999; Spekman et al., 2000; Johnson and Sohi, 2003) have suggested learning capability as an element in network competence, but they have not stressed a willingness and ability to share one’s own personal knowledge and experience. Thus, these findings clearly specify the concept of learning capability as a part of network competence.

A customer-oriented product modification and tailoring ability is linked to receiving and utilising feedback, new ideas and information on needs from customers (both consumers and firms and other organisations) and from members of the marketing channel. Customer-oriented product modification strengthens relationships, as it is one way of showing that the partner’s interests have been taken into consideration. However in this study, there were two cases, two designer-led firms with the design range that started with the needs of the target group, but the designers were not willing to modify their models according to the wishes of individual customers. A good knowledge of the markets is important in these cases, too.

An ability to manage time in order to reserve enough time to nurture relationships is linked to a coordination capability because successful coordination work gives entrepreneurs possibilities to allocate their time to take care of their relationships by conversation and joint activities. Yet it is clear that the ability to manage time is an element of its own in network competence, since it is essential for the maintenance of customer and marketing channel relationships that craft entrepreneurs are able to reserve enough time for interaction with these partners. The designer, or the craft entrepreneur as a person, is in a way a part of the product or the offer, as the design and manufacture of these products are very personal in nature. The visits and contacts made by the designer motivate members of the marketing channel, as they indicate the designer-entrepreneur’s interest in the partners’ business. In
production nets, face-to-face meetings are a means of coordination and quality control. Strengthening relationships between craft entrepreneurs seems to require allocating time for such interaction that is not related to any specific joint effort, project or activity, but gives way to informal experience sharing and mutual motivation and support.

A *coordination capability* is needed when coordinating the activities of the actors in the network and when systematising the routines linked to coordination. In one case, the coordination capability was also necessary inside the firm (in reference to the organisation of internal activities and ways of operating). In all the other cases, “coordination” meant the coordination of the activities of one’s own firm and the activities of partner firms. In practice, it means coordinating the transport of materials and final products, coordinating timetables, controlling quality, and taking care of financial transactions. In some cases, the craft entrepreneurs had coordinated their machinery investments and product development, too. For the craft entrepreneurs to have coordination capability, they must be aware of the whole value-producing chain, regardless of the part for which they themselves are responsible.

**Conclusions**

A framework for the network competence of craft entrepreneurs is shown in Figure 4. In this last section, we will summarise the contribution of the study and present the theoretical and practical implications. Finally, we suggest some avenues for further research.

When compared with earlier research on network competence, the results of this study highlight especially those abilities needed to establish relationships. In addition to the fundamental element in network competence, confidence in networks as systems, the following capabilities have not been previously recognised, or they were more clearly observed in this study: ability to identify the collaboration and resource needs of one’s own firm and inform other actors about those needs, contact-seeking ability, and ability to utilise one’s own and present partners’ contacts to identify potential partners. The results appear to reinforce what has already been established on visioning capability.

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<th>ABILITIES NEEDED IN ESTABLISHING RELATIONSHIPS</th>
<th>ABILITIES NEEDED IN MAINTAINING RELATIONSHIPS AND NETS</th>
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<tbody>
<tr>
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<td>▪ Social skills, social flexibility</td>
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<td></td>
<td>▪ Coordination capability</td>
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Figure 4. A framework for the network competence of craft entrepreneurs
The basic framework element just mentioned, confidence in networks (or system trust), has been adopted from sociology. Previous studies (Spekman et al., 2002; Möller and Törrönen, 2003; Niemelä, 2003) indicated that cooperation-orientation might be a relevant element in the network competence of craft entrepreneurs. Yet cooperation-orientation seems to be linked to maintaining relationships, and therefore it is more likely that it is implicitly included in an ability to take partner’s interests into consideration. Hence it seems that the concepts of system trust and cooperation-orientation do not refer to the same phenomenon. Future research should deepen the conceptual analysis of system trust in the context of business networks. One way to do this would be to compare it to network-orientation or cooperation-orientation.

An ability to identify the collaboration and resource needs of one’s own firm and inform other actors about those needs is a new finding unseen in previous studies. It is an essential element in network competence because if an entrepreneur were not able to become aware of the opportunities and needs for cooperation, he or she would not invest in building network relationships.

Very little research has previously focused on conceptualising relational or network competence at the individual level. This might be the reason why contact-seeking ability has not been identified as a separate element in earlier studies. The results suggest that a low number of weak ties might be one indication of poor contact-seeking capability.

In the second “bundle”, the ability to take a business partner’s interests into consideration is said to be fundamental, as it is related to building a sense of trust and commitment between actors. Furthermore, it is related to the key characteristics of network relationships, namely reciprocity (e.g. Easton and Araujo, 1992) and mutual orientation (e.g. Johanson and Matsson, 1987). In spite of the essential nature of this element in the network competence concept, it has not been identified in previous studies.

An ability to share one’s own knowledge, and accept and utilise other actors’ knowledge is necessary to maintain relationships with marketing and production partners as well as with owner-manager colleagues in the same craft field. Customer-oriented product modification and tailoring capability is linked to being able to utilise feedback and to co-create new knowledge. This capability might be characteristic of the network competence of a craft entrepreneur, since craft knowledge as the core competence of a craft firm includes problem-solving capabilities and aesthetic skills as well as know-how in materials, design, and production (Dormer, 1994).

An ability to manage time in order to reserve enough time to nurture relationships is a new finding. Face-to-face interaction can be quite time-consuming. Developing close collaborative relations seems to take a lot of time because entrepreneurs as persons have to get to know each other well. In the context of micro-sized firms, personal interaction appears to replace the management, controlling, information and decision systems implemented in large firms, and it appears to replace the information and integration systems between firms. These have been included in the frameworks of network competence in the context of large companies.

The results of this study reinforce that social skills and coordination capability are essential elements in network competence. As a whole, the framework for the network competence of craft entrepreneurs shown in Figure 4 makes a contribution to both the industrial networks literature and to the entrepreneurship literature, as it contains many new findings and integrates the abilities identified in a novel way.

Finally, we wish to link our findings to the fascinating discussion on network paradoxes (Håkansson and Ford, 2002). This study suggests that an ability to take the interests of partners into consideration is one of the essential elements of network competence needed to maintain dyads and nets. The first paradox claims that firms in networks are not free to act on their own goals or changes in circumstance. A firm striving for change is always dependent on the approval and actions by other actors. On the other hand, change is possible only through the network, which means that the actor
must be able to convince others about the benefits of a change and he or she will be thereby able to manage their expectations. An ability to take the interests of business partners into consideration is especially linked to the second paradox, which maintains that the network is a way or means to influence, and at the same time it is a way or means by which others influence the focal firm. The consequence of the second paradox is that listening to counterparts, reflecting their views, and reacting to those views will become central activities. (ibid.) Network competence, especially those capabilities needed in maintaining relationships, is a prerequisite in carrying out these activities.

The third paradox is also connected to these capabilities, particularly to the ability to take the interests of business partners into consideration. Håkansson and Ford (2002) argue in their third paradox that firms struggle towards controlling the network to reach their own goals. The more successful a company is in its struggle, the less effective and innovative will be the network. So to pursue goals by striving for control over the network but to simultaneously take account of others’ interests seem to be two courses of action that contradict each other. Yet a keen balance between control and consideration is what is likely to ensure the survival of both the firm and its net. It would be very interesting to analyse this tension or dilemma both conceptually and empirically.

**Practical implications**

The goal of this study was not to produce normative instructions like “do this” or “you must learn these”. However, a craft entrepreneur can use the theoretical framework that emerged from the results for guidance when evaluating his or her own firm’s courses of action or when reflecting his or her own work. It may be useful to discuss the capabilities needed in nurturing relations and nets with partners. For business advisors and institutions offering business training services, the results raise many interesting questions. Some examples could include: Is there enough time to outline alternative partnering visions and the paths to make those visions come true? It is possible to support the networking activities of potential entrepreneurs while they are constructing their business ideas? What kinds of training methods could be used to strengthen social skills?

Many business advisory organisations organize different kinds of developmental projects financed at least partly by EU funds. “Enhancing networking” seems to be one of the most popular goals. The results of this study indicate that it would be useful to organize “dating arenas for craft firms” offering possibilities for meeting entrepreneurs representing the same and other craft fields and getting to know the services of those firms that offer for example complementary services. In the “dating or networking arenas” it would be possible to identify those firms with whom the focal entrepreneur would like to discuss about future cooperation. In addition these arenas or forums would enhance the occurrence of happy coincidences. On the other hand, this study seems to indicate that those projects where the participants are “forced” to cooperate in order to fulfil the implementation plan drawn by the project manager, for example, by organising a joint trade fair stand, are not necessarily successful in enhancing establishment of long-term relationships. Entrepreneurs should be given an opportunity to choose each others as partners.

**Avenues for future research**

The study opens many avenues for future research. Naturally, the framework should be fine-tuned in different business fields. It would be very interesting to study network competence in other fields or industries where the offering, a product or a service is similarly bound to the entrepreneur or any other key person in the firm. Other creative industries might be suitable, such as architecture, advertising, media and publishing, music and theatre, or software production. Studying the network competence of small and micro-sized firms in the fields of tourism and welfare services might produce interesting comparison material.

This study was conducted as a multiple case study. In the future, ethnographic methods could be applied to a single case study. A researcher could work in a craft firm for a certain period of time so
that he or she would get to know the actors and activities in the focal firm’s network. In this case, the net could be the case instead of the firm itself.

The interviews to collect data for this study were done in the style of “narrative interviews”, which cover the biography of the entrepreneur, the history of the firm, and so on. However, this study is not a longitudinal study. However, the processual research design is an interesting option for future studies.
References


Table 1.
Summary of the concepts used in previous studies on relational and network competence

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<thead>
<tr>
<th>RELATIONAL COMPETENCE</th>
<th>NETWORK COMPETENCE</th>
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<tr>
<td><strong>Relational competence or capability</strong></td>
<td><strong>Network competence and other related studies in capabilities by IMP scholars</strong></td>
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<tr>
<td>- relational capabilities (Croom and Watt, 2000; Möller and Törrönen, 2003)</td>
<td>- marketing capability of a small firm operating in networks (Äyväri, 2002)</td>
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<td>- interfirm relational capabilities (Ling-yee and Ogunmokon, 2001)</td>
<td>- network management capabilities (Möller and Halinen, 1999; Möller, 2001)</td>
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<tr>
<td>- relational competences (Croom, 2001)</td>
<td>- net management capabilities (Möller &amp; Svahn, 2003)</td>
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<tr>
<td>- interfirm partnering competence (Johnston and Sohi, 2003)</td>
<td>- managerial capabilities in managing business nets (Svahn, 2004; Möller, Rajala and Svahn, 2004)</td>
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<tr>
<td>- collaboration capability (Blomqvist and Levy, 2004)</td>
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<td>- relationship management capability (Jarratt, 2004)</td>
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<td>- relational power sources of relationship promoters (Walter, 1999; Walter and Gemünden, 2000)</td>
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<td>- social competence (Baron and Markman, 2000, 2003)</td>
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<th><strong>Alliance competence or capability</strong></th>
<th><strong>Network competence in entrepreneurship studies</strong></th>
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<tr>
<td>- relational capability (Dyer and Singh, 1998)</td>
<td>- the personal contact network competency constellation (Hill and McGowan 1996)</td>
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<tr>
<td>- cooperative competency (Sivadas and Dwyer, 2000)</td>
<td>- networking capability (Pihkala, Varamäki and Vesalainen, 1999)</td>
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<tr>
<td>- partnering capability (Sivadas and Dwyer, 2000)</td>
<td>- inter-firm cooperation capability (Niemelä, 2003)</td>
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<tr>
<td>- alliance competence (Spekman, Isabella and MacAvo, 2000; Lambe, Spekman and Hunt, 2002)</td>
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<tr>
<td>- alliance capability (Kale, Dyer and Singh, 2002; Draulans, deMan and Volberda, 2003)</td>
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A) Creators of International Nets

A1. Piketex Oy*, textile designer Pirkko Nieminen*, fashion for women, jackets made of a special cloth called “poppana”; est. in 1983. During the first five years all the activities were carried out within the firm: hand-weaving of the fabrics, designing, sewing, and marketing, incl. a retail shop. Gradually the focal net of the firm has grown: there are 16 production partners (for weaving, sewing), an importer, and several agents and retailers in foreign markets. Most of the turnover comes from abroad. The firm has also several partners in product development.

A2. Studio Aalto & I Oy, fashion designer Hillevi Aalto, fashion for women, coats; est. in 1993. The firm has its own retail shop in Helsinki, all the other retailers are abroad. There are agents in two countries, and in the other two, the relationships with retailers are maintained by the designer herself. Most of the turnover comes from abroad. All the production activities are carried out by the partners. The entrepreneur was active in building a net of designer entrepreneurs, called Designers’ Collections organizing joint marketing activities both aboard and at home.

A3. Tmi Johanna Gullichsen, textile designer Johanna Gullichsen, furnishing fabrics, since 1994. All the fabrics are designed by Johanna Gullichsen, produced by machine-weaving companies, and sewed by partners. The firm has its own retail-shops both in Helsinki and in Paris. A Japanese importer is an important customer.

B) Craft Firms Partnering with Industrial Firms

B1. Erja Räty Ky, a family firm, Erja Räty and Hannu Salminen, clogs and baseball bats, since early 1980’s. The most important partners in clogs are Marimekko and Nanso. The clogs are designed by the designers of these companies and produced by the focal firm and its production partner. Baseball bats are manufactured for Berner Oy. The entrepreneur Hannu Salminen is very active in contact-seeking in many arenas. New products and services are developed with manifold actors.

B2. Tornipaja Oy, technician, joiner Juha Oksanen, machine-tooled (cnc-cutter) workpieces, mostly wooden materials acquired by the customer. Strong customer relationships with medium-sized industrial firms in different industries and with smaller firms producing furniture and carpentry. Close partnerships with three firms, two of which are both production partners and customers.

C) Creators of Colleague Nets, i.e. firms in the same craft field

C1. Keramiikkapaja Erkki Stenius, potter Erkki Stenius, pottery ware since 1978, china restoration services based on his own innovation, renting services for other potters: places in his workshop, machinery, kiln (since 1997 when the new building with a retail shop and a large workshop was build). Regular customer relationships with large firms and other organisations, tailor-made product designs. Marketing collaboration with antique dealers in restoration services. Erkki Stenius has long been an active entrepreneur within craft business with many confidential posts.

C2. Ebonia Design, cabinetmaker Markku Tonttila, furniture designed and made to order; est. 1995. Markku Tonttila organized with other actors an association called Pro Puu (Pro Wood in English) in 1997. Currently he is the (non-paid) executive director of the association managing the gallery and the shop, too. He has a joint workshop with two other entrepreneurs in the same building with the gallery. Markku Tonttila has established a lot of relationships with versatile actors both in the field of lumber and carpentry industries and in furniture design and marketing.

C3. Union Design Oy, silversmith Eero Taskinen, est. 1997. Union Design Oy is an umbrella company for silver- and goldsmiths who design and produce unique pieces of jewelry. Each entrepreneur pays rent to Union Design Oy. The rent covers the working place, machinery, and sales vitrines and advertising. There are seven goldsmiths as tenants.

C4. Taiga-Koru Oy, goldsmith Juha Janger and goldsmith Seppo Penttinen, a joint venture since 2003. Both have been private entrepreneurs since early 1980’s. The collaboration of these entrepreneurs has widened and deepened very slowly starting with tentative joint marketing
activities. Casting services are acquired from subcontractors. Close relationships with retailers all over Finland. Both jewelry and business gifts and prizes are designed and made to order as well.

D) Creators of Local Nets

D1. Tmi Sevenon, artisan Anne Takanen, stained glass design, pieces of glass made to order for windows and doors, business gifts; est. 1998. Local and regional carpentries producing doors and windows are marketing partners as well as local retailers representing kitchen fixtures manufactures. Almost all the customers, marketing partners, and raw material suppliers are situated within a maximum range of 100 kilometres. Anne is very actively seeking for new contacts and opportunities for growth.

D2. Tmi TuLi Design*, knitwear designer Tuulikki Linden*, woollen sweaters, slipovers, knitted caps for women and men; est. 1997. Two subcontractors in knitting, few retailers in Finland. The entrepreneur moved into the village of Fiskars where almost one hundred craft firms are situated. The village with its exhibitions, craft entrepreneurs’ and artists’ workshops is a very popular sight in the summer time. Tuulikki has a retail shop of her own where she sells her own knitwear as well as products made by other craft entrepreneurs, and she plays an active role in the cooperative society of the craft entrepreneurs in the village.

D3. Katarina’s Wood, carpenter Katarina Lähteenmäki, tableware made of wood and clay, furniture restoration services; est. 1999. A versatile production net comprising of sawmills, turneries, metal and pottery workshops. Close relationships with advisory and training organisations. Most of the actors in her focal net are within less than one hour’s drive.

D4. Tmi Outi Kaukinen-Vesa, dress designer Outi Kaukinen-Vesa, potholders made of hand-painted fabrics; est. 1998. Outi paints the figures with a brush on the cloth and a production partner sews the products. The firm has retailers all over Finland. However, the most important actors of her focal net are situated in the same town. A project manager of an advisory organisation has been a key person during the first years of the business.

D5. Erilainen Kutomo Ky, textile designer Leena Matomäki, textile products for (dinner) table. Production activities, weaving the fabrics and sewing the products, are carried out by local production partners. The firm has retailers all over Finland, and an agent in Sweden. Joint marketing activities (a joint stand at fairs) and product development activities with another crafts entrepreneur.

*The names of the firm and the entrepreneur have been changed.