Bringing together the Emerging Theories on Trust and Dynamic Capabilities – Collaboration and Trust as Focal Concepts

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Abstract

It is proposed that the firm's ability to create and manage trust in its internal and external networks may become a critical factor in search for sustainable competitive advantage. As knowledge and capabilities have emerged as the key determinants of competitive advantage, new, modern strategic management theories are needed to explain why firms differ. Especially in the global competition midst in the dynamic and uncertain environment there seems to be very little left to "draw the line between competitors" and therefore, new sources for competitive advantage are keenly sought. In this article the dynamic capability view of the firm and the emerging theory on trust are brought together. These emerging theories are not yet properly synthesized in theory nor in empirical research. This paper serves as a preliminary study introducing an integrating conceptual modeland propositions for future research. The role of trust in the dynamic capability view of the firm is elaborated more explicitly. Trust is identified as multi-dimensional and multi-temporal phenomenon typology and the components of trust and their impact on the various dynamic capabilities are proposed. Collaboration is seen as a meta-capability and it is proposed as a critical concept unifying the emerging theories of trust and dynamic capability view of the firm.

Keywords: Dynamic-capability view of the firm, trust, dynamic capabilities, knowledge, capability to collaborate, sustainable competitive advantage

INTRODUCTION

The organizational environment has changed significantly during the last decade. The complexity and uncertainty has reduced the role of traditional sources of competitive advantage, such as exploitation of economies of scale or monopoly power. Technological knowledge is critical, but hardly a source for sustainable competitive advantage. In a recent CEO survey among almost 1,000 CEOs from 43 countries the ability to build trust among key stakeholders was seen to be critical for company success[1]. In business journals there are numerous examples of increased concern on corporate reputation, capability to collaborate and the role of trust in business. Enron, Worldcom and many others have been raised to high public discussion due to unethical business behavior. In today's global and networked business environment it is simply not possible to let down the key stakeholder expectations. Trust is fragile and in the world of increased transparency even minor breakdown of trust may result in major failures.

Increasingly, companies are concerned for their capability to leverage complementary networks through collaboration. Microsoft, for example, has launched a major change project on corporate ethics. According to CEO Steve Ballmer, the capability for cooperation is a major issue in his agenda for Microsoft renewal. Nokia, another major global corporation, has raised trust as one of its core values since early 1990's. Also Metso Corporation, one of the largest global paper machine manufacturers, has ethics and collaboration high in their agenda[2].

In the knowledge-based competition the firm's capabilities cannot be seen only in terms of its products or services but more likely as a social phenomenon, i.e., as a part of the firm's 'organizational capital' (Foss, 1997: 313, Cohen and Prusak 2001, Ghoshall and Bartlett 1997). The seminal work by Barney (1986; 1991), and Barney and Hansen (1994) can be

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[1] A study conducted by PriceWaterhouseCoopers.

[2] Paper machine projects are a good example of technology-intensive and complex collaborative projects demanding a high level of collaboration between the major supplier and its supplier networks. There may be up to 400 changes during a paper machine project.

seen as landmarks suggesting the linkage between organizational culture, trust and competitive advantage (see also Sako, 1992, 1998; Zaheer et al, 1998; Fukuyama, 1994; Bidault and Jarillo, 1997, Miles et al., 2000, Ghoshal and Bartlett 2000)[3].

The increased uncertainty, complexity and turbulence in the business environment have awoken major interest in the role of trust among academics since the mid 1990's. Trust has become an important issue in inter-firm cooperation (Macaulay, 1963; Håkanson, 1989; Young and Wilkinson, 1989), partnerships and alliances (Parkhe, 1993 and 1998; Ariño et al., 1999; Ariño et al., 2001; Zaheer et al., 2002) and supplier relations (Sako, 1994 and 1998). Trust has also been identified as an emerging managerial philosophy (Creed and Miles, 1996; Miles et al., 2000) and a critical issue for organizational culture (Barney and Hansen, 1994; Barney, 1996). Trust has also been seen as an implicit if not explicit source for sustainable competitive advantage (Barney 1986 and 1991; Barney and Hansen 1994; Fukyama 1994; Bidault and Jarillo, 1997; Sako 1992 and 1998; Zaheer et al., 1998; Cohen and Prusak, 2001).

Following the recent work in the research conducted by e.g. Miles et al. (2000) and Blomqvist (2002), trust is seen in this paper to be directly linked to the capability of collaboration. The aim of this paper is to contribute to the elaboration of the linkages between the dynamic capability view of the firm and emerging theory of trust, and by making their linkages more explicit. Also the sustainability of the competitive advantage is discussed. Propositions for further research and empirical testing are also provided.

DYNAMIC CAPABILITY VIEW OF THE FIRM AND DYNAMIC CAPABILITIES

Achieving and maintaining the firm-level competitive advantage is in the core of the theory of the firm. One of the focal strategic decisions in search for competitive advantage is the determination of the optimal boundaries of the firm as suggested in the transaction cost

[3] There is an emerging discussion goin on, whether achieved competitive advantage can in general be sustainable or not. For more of this, see e.g. Eisenhardt and Martin, 2000; Teece et al., 1997; Wiggins and Ruefli, 2002).

analysis (Coase 1937; Williamson 1975). A recent dynamic capability view[4] of the firm (DCV) can be seen as an emerging theory on firm competitiveness in dynamic environments (Kogut and Zander, 1992; Teece et al., 1997; Metcalfe and James, 2000). In the dynamic capability view, the firm is seen as a generator and a repository of dynamic capabilities, as well as a knowledge transformation process. Hence, the firm is an organization, which coordinates, combines and transforms an individual effort into the collective. DCV stresses the firm's *internal conditions*: resources, routines, competences, capabilities, and accumulated knowledge – as the most crucial factors in explaining the creation, maintenance and renewal of its market position and competitive advantage (Kyläheiko, 1995; Foss, 1996b; Robertson, 1996). However, according to dynamic capability view of the firm, the competitive advantage is based on a continuously changing knowledge base, resources, and learning-induced replication processes. The lack of tradability is a notable determinant in firm-specific capabilities. Accordingly DCV stresses collaboration in networks and other hybrid organizational arrangements (Cravens et al., 1993) as a potential mode in leveraging external capabilities (Foss, 1997; Coombs and Metcalfe, 2000; Barney, 1999; Kay, 2000; Teece et al., 1997; Grant, 1996; Easton and Araujo, 1994). Firms are thus seen to vary in their ability to renew and adapt these capabilities (Foss, 1997; Teece et al., 1997; Kogut and Zander, 1992 and Metcalfe and James, 2000; Grant, 1996). Thus the dynamic capabilities itself are inert - the sense of purpose, which is embedded in the firm's theory of business is what brings them 'alive'. More precisely, capabilities are combinations of resources and routines, yet they need to be connected with the firm's strategic intentions and ambitions. Together they form the firm's productive opportunities (Metcalfe and James, 2000; Prahalad and Hamel, 1990). This aspect is closely related to self-reference (see further in the following chapter, and also Luhmann, 1979; Blomqvist, 2002).

[4] Teece (1998a, 72) defines dynamic capability as *"the ability to sense and then to seize new opportunities, and to reconfigure and protect knowledge assets, competencies, and complementary assets and technologies to achieve sustainable competitive advantage*". DCV is closely related to the Resource-based View and to the Knowledge-based View of the firm.

There is a considerable haziness in the conceptualization of dynamic capabilities (for a state-of-the art review see e.g. Jantunen, 2002). Therefore, in order to elaborate the linkages between the dynamic capabilities and the emerging theory on trust we have chosen the approaches by Eisenhardt and Martin (2000) and Teece (1998a) to make dynamic capabilities more explicit (see tables 1 and 2). Eisenhardt and Martin (2000) list dynamic capabilities, which 1) integrate resources, others, which relate to 2) reconfiguration of resources, and finally capabilities, which are to be used for 3) gaining and releasing of resources. Dynamic capabilities, which *integrate resources,* include e.g. product development routines and strategic decision-making (Eisenhardt and Martin, 2000). We want to stress that the firm essentially must have both *external and internal integrative capability*. The internal integrative capability, i.e., ability to diffuse, transfer, combine, and renew information and knowledge also at individual-, team-, and department-level, is at least as critical than external integrative capability for the firm to be able to constantly develop its capabilities and knowledge repositories. The external integrative capability (Tripsas, 1997) includes two elements: internal R&D investments that develop absorptive capacity[5] and a capability to leverage strong external communication infrastructure to facilitate the transmission of external knowledge and capabilities. This infrastructure comprises both informal mechanisms such as know-how trading networks with other technical experts, and more formal hybrid organizational arrangements like strategic alliances with other firms or long-term supplier relationships. (Tripsas, 1997; Teece, 1998a, Cravens et al., 1993; Easton and Araujo, 1994).

Dynamic capabilities which focus on *reconfiguration of resources* (Eisenhardt and Martin 2000, 1108) include e.g. transfer processes for replication, allocating, and recombining resources; coevolving routines for generating new and synergistic resource combinations with collaborative webs[6]; and patching processes for realigning businesses[7]. Dynamic

[5] The firm's ability to recognize the value of new, external information and to combine and apply it to commercial purposes (Cohen and Levinthal 1990; see also Zahra and George, 2002).

[6] "*With coevolving, multibusiness teams (the heads of individual businesses working together) drive synergies by reconnecting the collaborative links among businesses as markets and businesses evolve. Their skill is managing their own group dynamics*". (Eisenhardt and Galunic, 2000.)

capabilities which are used for *gaining and releasing of resources* include for example knowledge creation routines, building new thinking; alliancing and acquisition routines for diffusion of new resources; and finally exit routines for jettisoning resource combinations which are no longer useful (Eisenhardt and Martin 2000).

Table 1. Types of dynamic capabilities as characterized by Eisenhardt and Martin (2000)

Type of dynamic capability	**Example**
Integration of resources	Product development routines and strategic decision-making.
Reconfiguration of resources	Transfer processes for replication, allocation and recombining resources, coevolving routines for creating new resource combinations, and patching processes for aligning businesses.
Gaining and releasing of resources	Knowledge creation, new thinking, alliancing, acquisition and exit routines

According to Teece (1998a, 72-74), the firm is able to exhibit dynamic capabilities, when it can *sense the essentiality for change, and the opportunity*, which is available. Teece (2000; see also Barney, 1999) describes these concepts as follows: sense making is an essential and critical function, since it "*enables the organization to connect with its environment and invest its resources wisely, thereby generating superior returns"*. After the firm has sensed an opportunity, it has to seize it. In order to do that, it has to have an organizational structure, which allows *fast decision-making and action.* Thus the *choice of the organizational form* and the firm's ability to *strategize* can be seen as dynamic capabilities (Teece, 1998a, 72-74).

[7] "*Patching is not just another name for reorganizing. Patching managers believe structure is inherently temporary. Traditional managers set corporate strategy first, but patching managers keep the organization focused on the right set of business opportunities and let strategy emerge from individual businesses. The focus of patching is flexibility. Patching changes are usually small in scale and made frequently*." (Eisenhardt and Brown, 1999.)

Table 2. Types of dynamic capabilities as characterized by Teece (1998 a)

Type of dynamic capability	**Example**
Sensing	Ability to *"sense the opportunity and the need for change, properly calibrate responsive actions and investments, and move to implement a new regime with skill and efficiency"*.
Seizing	Fast decision-making, choice of organizational form, strategizing

In similar vein than integration of resources by Eisenhardt and Martin (2000), it is proposed that in order to be able to sense and seize new business opportunities as predicted by Teece (1998a), the firm has to manage both internal and external collaborative networks. Several other authors make similar remarks, see e.g. Foss, 1997; Tripsas 1997; Barney, 1999; Kay, 2000; Teece et al., 1997; Grant, 1996; Easton and Araujo, 1994.

TRUST – WHAT IS IT ABOUT?

Despite of the increased interest among academics the theory on trust is only emerging. There seems however to prevail a consensus about the general role of trust in business. Trust is believed to reduce governance costs (management costs), costs for internalization (acquisitions), and transaction costs in and between organizations, and by opening chances for decentralization and informal collaboration in networks. Trust enables more open communication, information sharing and conflict management (Bidault and Jarillo, 1997; Creed and Miles, 1996; Barney and Hansen, 1994, Cummings and Bromiley, 1996, Sako, 1992 and Blomqvist 2002; Aulakh, Kotabe, and Sahay, 1997). Trust has been identified as an important component, which makes teamwork, intra-organizational cooperation, inter-organizational partnerships, strategic alliances, and performance of networks of small firms successful (e.g. Sako, 1998, 88. Larson, 1992; Dogson, 1993; Young-Ybarra and Wiersema, 1999; Virolainen, 1998, Puumalainen et al, 2001; Blomqvist, 2002; Aulakh et al., 1997).

There is not a universal, all encompassing definition of trust available. Trust is often closely related – and even used as a synonym – for such words as competence, credibility, confidence, faith, hope, loyalty, and reliance (Blomqvist, 1997, 277-279). Bidault and Jarillo (1997, 84-86) have defined trust as "believing that the other party will behave in our best interests". Blomqvist (2002, 173-183)[8] has developed a four-dimensional conceptualization, where trust is seen to consist of the four components, namely capability, goodwill, behavior and self-reference. Subsequently trust can be defined as *"actors' expectation on the capability, goodwill, and self-reference visible in mutually beneficial behavior enabling cooperation under risk."* This conceptualization was developed for and empirically derived from dynamic and knowledge-based business context where the pace of technological change is high and at the same time, there is a lot of uncertainty and turbulence in the markets. Conceptualization is also valid in both individual, and organizational levels of trust (see Figure 1).

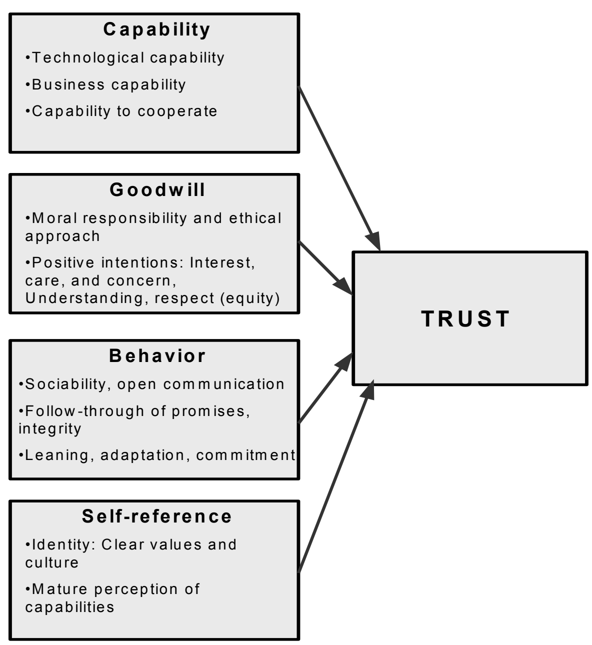

Figure 1. Components of Trust (Blomqvist, 2002)

[8] Her study concentrates to the role of trust in asymmetric technology partnership formation.

The *capability*-layer includes technological capability, business capability, and the capability to cooperate. Organization's *capability to cooperate* is a critical message to its potential partners and a potential source for relationship capital (Blomqvist, 2002; see also Sako, 1992; Sako, 1998). *Goodwill* is the "partner's moral responsibility and positive intentions toward the other". Goodwill-component is divided into sub-components of *moral responsibility*, *interest*, *care and concern*, *understanding and respect*, and *positive intentions* (Blomqvist, 2002; see also Sako, 1992; Sako, 1998). The *behavioral dimension* of trust is present already in the very beginning of trust-formation process, in the signs and signals, i.e., what information is brought out and how it is done. It is assumed that "*individuals make conclusions about others' trustworthiness by observing their behavior either consciously or unconsciously"* (Blomqvist, 2002, 179). *Self-reference*[9] -component of trust is a complex but useful concept in understanding the nature of trust. Strong self-reference offers a solid base for open communication, learning, and knowledge creation. An individual can be seen as self-referential if he or she is aware of its own identity, capabilities, and values, referring thus also to the self-confidence. A self-referential organization is aware of its identity, capabilities, and values, and can also build on its strengths, and balance its weaknesses by generating the needed capabilities internally or externally. Without self-reference, recognizing needed complementary partners and establishing partnerships is difficult. Furthermore, it is proposed that "*an individual or an organization which has a strong self-reference, is capable to recognize, maintain, and develop the strength in its identity, and to connect and collaborate with the other actors on equal level*" (Blomqvist, 2002, 181).

Most of the literature in this discipline sees trust as a result of the common history and incremental investments in the relationship, i.e. the evolution of trust takes time. Trust can be seen as an expectation or prediction of future behavior, resulting from satisfactory interaction and past experience (Medlin and al., 2002; Aulakh and al., 1997; Blomqvist,

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[9] Luhmann (1979) has introduced it in the context of auto-poetic, self-renewing systems, meaning both individuals and organizations. Self-referential systems are autonomous and independent of their environment, as well as conscious of their own identity and capabilities in relation to others. (Luhmann 1979. See also Luhmann, 1988, 99-101; and Ståhle, 1998, 77-92.)

2002). However, Blomqvist (2002) has discussed *fast trust* related to uncertain and fast-moving markets. In such conditions there may not be such possibility for the evolution for incremental trust. Fast trust[10] enables individuals and organizations to take quick actions needed for competitiveness. Fast trust also helps individuals to tolerate the inherent uncertainty and vulnerability related to dynamic environments. In comparison to fast trust, *incremental trust* is based on a deeper, cognitive knowledge and behavior-based experience of the other party. Incremental trust is also *"thicker and more resilient than fast trust"* (Ibid, 2002, 186; see also Ring and Van de Ven, 1993). There are both individual and organizational elements included, as well as also a deeper evaluation of the goodwill of the other party. Separation to fast and incremental trust enables an essential factor, viewing the time-scale in combining the concepts of trust and sustainable competitive advantage.

THE RELATIONSHIP OF DYNAMIC CAPABILITIES AND TRUST – PROPOSITIONS FOR FURTHER RESEARCH

In the following sub-chapter the identified dynamic capabilities are compared to the components of trust. First the dynamic capabilities as depicted by Eisenhardt and Martin, (2000) is compared to the four-dimensional approach of trust as follows. Dynamic capabilities, which *integrate resources:* The capability, goodwill and self-reference - components of trust are seen to be most crucial enabling efficient and effective integration of resources. Managers need essentially to have the technological and business capability as well as the meta-capability for collaboration for both product development and decision-making processes. In addition, self-reference (corporate identity) is a critical basis for strategic decisions. Only the awareness of the corporate strengths, weaknesses and values enable choices leading to successful performance. Dynamic capabilities which focus on *reconfiguration of resources* (Eisenhardt and Martin 2000, 1108) demand as well capability, goodwill and self-reference –components of trust. Dynamic capabilities, which are used for *gaining and releasing of resources*: Again, capability and self-reference are

[10] Meyerson et al., (1996, 168-192) discuss a closely related phenomenon, *swift trust*. In contrast to swift trust, instead of role-based categorization, fast trust includes both rational and emotional elements. Fast trust enables individuals to establish also affect-based relationships and expand their specific roles, creating also potential space for innovation.

crucial elements here, but in addition to them, also active components of trust, i.e., goodwill and behavior are urgently needed. In alliancing and building new thinking the indicators for goodwill component of trust: equity, positive intentions, and moral issues are important. Also the behavioral components like open communication, keeping promises, and social behavior are critical.

> *Proposition 1: Trust – and all its components: capability, goodwill, behavior, and self-reference - have a positive effect to dynamic capabilities related to integrating, reconfiguring, gaining, and releasing of resources.*

Next, the conceptualization of dynamic capabilities as depicted by Teece (1998a) is evaluated in relation to dimensions of trust. We also leverage the conceptualization by Tripsas (1997). The effect of trust to firm-specific capabilities, and especially for future competitiveness is evaluated.[11]

As pointed out earlier, the firm is able to exhibit dynamic capabilities, when it can *sense* the essentiality for change, and the opportunity, which is available, and to *seize* it. In order to do that, it has to have an organizational structure, which allows fast decision-making and action (Teece 1998a). It is proposed that in order to be able to sense and seize new business opportunities the firm has to manage both internal and external collaboration. Also, it is proposed that all four dimensions of trust are essential for sensing the weak internal and external signals of needs and opportunities.

When seeking for new capabilities and directions for the firm the risk inherent in uncertainty and taking action may cause lack of willingness to sense new opportunities and

[11] E.g. Metcalfe and James (2000, 34-35) identify three classes of capabilities: "*capabilities in relation to the conduct of existing activities; capabilities in relation to the growth of those given activities through investments in productive capability and market position; and capabilities in relation to the development of all the firm's activities, including the introduction of new products and processes, entry into new market areas, and the entering into of relationships with other firms through alliances, joint ventures or acquisitions".* Following the argument of Metcalfe and James, the latter capabilities can be seen especially interesting and significant in the framework of the dynamic capability view.

even the need for change. Trust has a critical role in reducing the experience of risk (Blomqvist, 2002; Moorman, Zaltman, and Deshpande, 1992). Moreover, also path-dependence[12] restricts individuals' thinking patterns. As Barney (1999) points out, capabilities may also be socially complex. If only their value is acknowledged and there is sufficient trust, managers can sense and seize them.

Self-reference is a critical component of trust including also self-awareness – an ability e.g. to sense and understand one's own weaknesses and strengths – and self-confidence enabling open-minded and positive respond to sensed opportunities. Path-dependence also causes barriers to sensing and seizing new capabilities. Individual, inter-personal, and organizational trust may help to unlock these ties of thinking in helping in organizational learning and adaptation of new skills. Trust, and its components, i.e. self-reference and capability assist in improving organizational rationality, and goodwill enables open and honest interaction between the parties. The behavioral components of open communication and social behavior demonstrate one's positive intentions and moral responsibility increasing trust and reducing social complexity of strategic decision-making (see e.g. Cohen and Prusak, 2001).

Proposition 2: Trust has a positive effect on sensing and seizing capabilities.

Development and commercialization of almost all innovations demand some form of collaborative arrangement. The ability to develop collaborative relationships is essential to the building of organizations capable of continuously producing large amounts of innovation and for capturing commercial benefits of them. Hence, knowing how to collaborate helps the firm to create and transfer knowledge. Knowledge creation and utilization, in turn, lead to innovation (Miles et al., 2000; Powell, 1996). On the contrary, unsuccessful organizational arrangements – network relations, alliances, and coalitions

[12] Path-dependence refers to the choices, which a firm is able – and willing - to make: "*Where a firm can go is a function of its current position and the paths ahead. Its current position is often shaped by the path it has traveled*" (Teece at al., 1997).

namely often fail for a very simple reason – they are not created or utilized collaboratively (see e.g. Cravens et al., 1993).

Subsequently, the firm essentially must have - in addition to external integrative capability - also *'internal integrative capability'*, i.e., ability to diffuse, transfer, combine, and renew information and knowledge also at individual-, team-, and department-level, in order to constantly develop its capabilities and knowledge repositories. It is assumed here that there essentially has to be some level of trust between the parties, in order for collaborative relationship to take place. For a collaborative relationship to start and occur, signs of each parties' goodwill, i.e., equity, responsibility, and positive intentions need to be stated out by behavior which is open and communicative, honest, and ethical. Obviously, all parties need also to become convinced about other parties technical and business capabilities. In addition to pointing out the values and culture of the firm, it also shows one's maturity and ability to interaction where the benefits can be equally and mutually seen. When the firm has a strong self-reference and self-confidence, it is able to trust, and be trustworthy (Blomqvist, 2002). Therefore, in this study self-reference is assumed to be an essential base – and a precondition – for successful and beneficial trustworthy situation to take place.

Both external and internal integrative capability demand capability and self-reference components of trust for understanding the potential of knowledge, and goodwill and behavior components of trust for forming and exploiting external and internal collaborative infrastructure.

> *Proposition 3: Trust – and all its components: capability, goodwill, behavior, and self-reference – is a necessary precondition for external and internal integrative capabilities i.e. collaboration.*

Beneficial collaborative relationship helps an individual and an organization effectively to renew the use of resources and gaining essential information and knowledge in changing environment. Therefore, it is claimed in this paper that the capability to collaborate is a true dynamic capability. As pointed out already earlier, Miles et al., (2000) define it as the meta-capability in the information-era. As e.g. Metcalfe and James (2000) stress, firms can develop their capabilities by interacting with their customers, suppliers, and other parties, and this surely is one of the major determinants of long-term competitive advantage. Internal and external integration of resources, i.e. collaboration, seems therefore to be a focal conceptualization of dynamic capabilities for several authors. Hence, it is argued in this paper that the capability to collaborate supports the firm's endeavors of both creating and utilizing dynamic capabilities.

Proposition 4: Collaboration is, besides a dynamic capability of the firm, a meta-capability, which effects positively to the development, functioning, and exploitation of all dynamic capabilities.

Eisenhardt and Martin (2000) argue that in dynamic environment, a target of sustainable competitive advantage is unrealistic - rather it is a question of gaining a series of temporary, short-term, and unpredictable advantages. It is however argued in this paper, that meta-capability of collaboration – and trust as its essential prerequisite – is a determinant, which changes the logic and dynamics of time competitive advantages, enabling long-term, if not even sustainable, competitive advantage.

As Teece et al. (1997) note, building up relevant capabilities often takes years. Building up for example external integrative capability is a process, which takes a lot of time. This is the case both in formal collaboration channels – for example in alliances and networks – and experts' more informal networks, transferring know-how and experiences (Tripsas, 1997, Metcalfe and James, 2000; Tidd et al., 2001). Subseqently, if the firm's employees are not part of a network during an era of incremental innovation, it will be difficult for them to join in once radical change – which often originate outside the boundaries of large corporations - is taking place (see e.g. von Hippel, 1988, Christensen, 1997). Organizational path-dependency is connected also to the organizational culture, learning, and habits etc., which are all seen to be long living and sustaining processes the firm.

Neither the capability to collaborate nor other dynamic capabilities can be bought from the markets; they have to be built by the firm itself. Building, maintaining, and exploitation of trust and trustworthiness is a process, which also takes a lot of time. These path-dependent and firm-specific capabilities cannot be bought or copied in short time. A firm that is capable of building up trust and collaboration is seen to be able to leverage firm-specific competitive advantage. Especially in the dynamic environment, trust and capability to collaborate may become sources for competitive advantage, if they enable the leverage of best partners, competent and motivated employees, as well as profitable customer relationships. This is why the effect of trust to dynamic capabilities and thus to the firm's competitive advantage are seen to be long-term, or even sustainable.

> *Proposition 5: Trust, and the capability to collaborate help in creating, maintaining and constantly renewing the achieved advantage in the markets and therefore, they can be a source sustainable competitive advantage.*

In the ***Figure 1*** the relationship between trust, collaboration and dynamic capabilities is depicted.

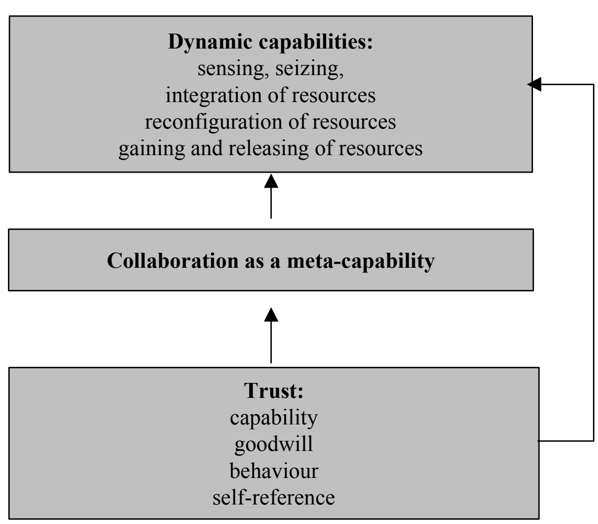

Figure 1. A conceptual model on trust and collaboration as focal concepts enabling dynamic capabilities

Trust, and all its components, is seen to have a positive influence on collaboration. Trust, and all its components, is also seen to have both a direct and indirect positive impact on all dynamic capabilities.

CONCLUSIONS

Globalization forces companies to find out new ways to share knowledge and collaborate. The change in business-environment has opened the boundaries of organizations. Old, hierarchy-based structures are being replaced by lean and adaptive network-type organizations. The development and commercialization of almost all innovations demand some form of collaborative arrangement. In the dynamic environment the capability to create, transfer and exploit emerging new knowledge becomes crucial.

Relationships in the dynamic industries seem increasingly tentative and partly treated as "future options" (Blomqvist 2002). Subsequently the managerial challenge of how to establish, manage and dissolve such relationships, and simultaneously maintain a good reputation for a potential partner on the markets arises. The amount of network relationships may be rather dense and looser, non-exclusive relationships are common.
Trust and the capability to collaborate enable firms to develop, renew, and exploit its firm-specific resources and to combine them to be its strategic assets. The major theoretical contribution of this study is thus the proposed conceptual model, which binds these two emerging theories together. The focal connecting aspect here is the capability to collaborate, enabled by trust and resulting to utilization of dynamic capabilities and hence to competitive advantage of the firm.

Realizing the indispensability of collaboration capability is essential. However, it often remains in the shadow of other dynamic capabilities. The other – even more crucial – point is whether the management of the firm has taken all necessary actions to support creation and maintaining the capability to collaborate to gain sustained competitive advantage with the help of its firm-specific dynamic capabilities. The most important suggestion for managers is thus to pay more attention to crucial capability of collaboration, and to the process of building, maintaining, and utilizing trust (see Blomqvist 2002) as a necessary pre-condition of collaborative capability. Both fast and individual-based trust as well as incremental and organizational-based trust is needed.

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