Master´s Thesis

Co-opetition:

Coexistence of cooperation and competition

in public sector

-A case study in one city’s public companies

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Co-opetition: Coexistence of cooperation and competition in public sector – A case study in one city's public companies

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ABSTRACT

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Business actions do not take place in isolation. Complementary competencies and capabilities are the most important resources in the exponential knowledge growth. These resources are partially accessed via business partners. A company needs partners and the capability to cooperate, but also the awareness of the competitive tension, when operating in the market with multiple actors. The co-opetition research studies the occurrence and the forms of simultaneous cooperation and competition between companies or their units.

Public sector's governmental and municipal organs have been transformed into companies over the past years. Despite of their non-profit nature, public sector and public companies are adopting business doctrines from private sector towards efficient business operations. This case study aims to show, how co-opetition concept can be observed within public sector companies and in their operations with others, how public companies cooperate but also compete with others and why this happens. This thesis also explicates advantages and disadvantages of the co-opetition phenomenon.

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Liiketoimintaa ei voi harjoittaa eristyksissä muista. Toisiaan täydentävät kompetenssit sekä kyvykkyydet ovat tärkeimpiä resursseja eksponentiaalisessa tiedon kasvussa. Näitä resursseja voidaan saada osittain partnerien kautta. Yrityksellä täytyy olla yhteistyön osaamista, mutta myös tietoisuus ympärillä olevasta kilpailun jännitteestä. “Co-opetition” -tutkimus tarkastelee samanaikaisen yhteistyön ja kilpailun ilmenemistä sekä sen muotoja yritysten tai näiden osastojen välillä.

Julkisen sektorin toimielimiä on yhtiöitetty jo vuosia. Voittoa tavoittelemattomasta roolistaan huolimatta julkinen sektori sekä julkiset yhtiöt ottavat mallia yksityisen sektorin liiketaloudellisista opeista tehokkuuden tavoittelussa. Tämä tapaustutkimus pyrkii osoittamaan, kuinka “co-opetition” -ilmiö voidaan havaita julkisen sektorin yhtiöissä sekä näiden yhteistoiminnoissa muiden kanssa. Työssä tutkitaan kuinka julkiset yhtiöt tekevät yhteistyötä, kuinka ne kilpailevat ja mistä tämä johtuu. Tämä työ selvittää myös hyötyjä ja haittoja, joita ”co-opetition” -ilmiöstä seuraa.

[1] Termille ei löydy hyvää suomenkielistä käännöstä, Tutkijat ovat käyttäneet esim. kilpailjayhteistyö –termiä, mutta sitä ei käytetä tässä työssä, sillä se nähdään harhaanjohtavaksi (vrt. esim. kartelli).

FOREWORD

Thank you Kirsimarja and Paavo!
Thank you Hilkka, Mia and Asmo!

* * *

Blind men and an elephant
-a poem by John Godfrey Saxe (1816-1887)
based on an ancient South Asian story-

1
It was six men of Indostan
To learning much inclined,
Who went to see the Elephant
(Though all of them were blind),
That each by observation
Might satisfy his mind

2
The First approached the Elephant,
And happening to fall
Against his broad and sturdy side,
At once began to bawl:
“God bless me! but the Elephant
Is very like a wall!”

3
The Second, feeling of the tusk,
Cried, “Ho! what have we here
So very round and smooth and sharp?
To me ’tis mighty clear
This wonder of an Elephant
Is very like a spear!”

4
The Third approached the animal,
And happening to take
The squirming trunk within his hands,
Thus boldly up and spake:
“I see,” quoth he, “the Elephant
is very like a snake!”

5
The Fourth reached out an eager hand,
And felt about the knee.
“What most this wondrous beast is like
Is mighty plain,” quoth he;
“ ‘Tis clear enough the Elephant
Is very like a tree!”

6
The Fifth, chanced to touch the ear,
Said: “E’en the blindest man
Can tell what this resembles most;
Deny the fact who can
This marvel of an Elephant
Is very like a fan!”

7
The Sixth no sooner had begun
About the beast to grope,
Than, seizing on the swinging tail
That fell within his scope,
“I see,” quoth he, “the Elephant
Is very like a rope!”

8
And so these men of Indostan
Disputed loud and long,
Each in his own opinion
Exceeding stiff and strong,
Though each was partly in the right,
And all were in the wrong!

9
<u>Moral:</u>
So oft in theologic wars,
The disputants, I ween,
Rail on in utter ignorance
Of what each other mean,
And prate about an Elephant
Not one of them has seen!

CONTENTS

1 Introduction

This thesis focuses on the coexistence of cooperation and competition (i.e. co-opetition) in public sector companies' relationships with other public or private companies. The study is written due to the writer's own interest in the subject, it is not ordered by any company nor funded by any organization.

To begin with, this study reviews the short history of academic literature of co-opetition, and takes some ideas of its antecedents (cooperation and competition) in discussion. These notions are observed within a group of companies: two public sector companies and one private company. The results are presented, and the thesis is evaluated. Finally, some proposals for managerial implications are discussed, and ideas for future research are proposed.

1.1 Background

One catch phrase of the twenty-first century is that no organization can survive alone. Business actions do not take place in isolation. Every move affects another actor in the surrounding network (Zineldin, 1998; Ketchen et al., 2004). According to scholars, complementary and renewed knowledge, competencies and capabilities (e.g. Nonaka & Toyama, 2003; Teece, 2007) are the most important resources in the present day exponential knowledge growth, and these resources are partially accessed via business partners (Zineldin, 1998; Das & Teng, 2000; Gnyawali & Madhavan, 2001: Blomqvist et al., 2005, Ritala et al., 2008). Hence, a company needs partners and the capability to cooperate, but also the awareness of the competitive tension, when operating in the market with multiple actors (Chen, 1996; Miles et al. 2000; Contractor & Lorange, 2002; Ketchen et al. 2004; Klijn, 2005; Matthews & Schulman, 2005; Eng, 2006; Luo, 2007; Chen et al., 2007).

Traditionally, cooperation and competition as organizational relationships or strategies between two or more organizations have been regarded as the exact opposites, where one strategy is chosen over the other (Lado et al., 1997: 118; Quintana-Garcia & Benavides-Velasco, 2004: 930). A relatively new research agenda is the situation, where organizations are in these relations with each other simultaneously. Academics have named this paradoxical phenomenon as co-opetition (Nalebuff & Brandenburger, 1996; Zineldin, 1998; Bengtsson & Kock, 2000; Tsai, 2002; Ketchen et al., 2004; Luo et al., 2006).

In public sector, many official relationships and networks are given, meaning that there are official and formal ways how to operate and official roles linked to each other (formal hierarchy). However, according to the theory of social capital, people belong to significant networks via more than just their office, i.e. family and neighborhood, memberships in organizations and support groups (Dinda, 2007 Ref. Coleman, 1988; Portes, 1998, Putnam, 1995, 2004). In order to improve local operations (e.g. productivity and innovativeness), focus on and formation of cooperative networks is important (Pekkarinen & Harmaakorpi, 2006; Harmaakorpi, 2006). According to Harmaakorpi (2006, p.1086. Ref. Kostiainen, 2002) the regional innovation system can be defined as "*a system of innovative networks and institutions located within a certain geographic area, with a regular and strong internal interaction that promotes the innovativeness of local companies*". Cooperation and interaction are keywords – even among competing companies. However, there are not many academic studies in e.g. competition in public sector: neither competition between public companies nor competition between public and private companies in Finland. That is simply because the public sector services are just starting to open for competition. As the workshop of national public sector reform lately has noticed (National Innovation Strategy, 2007), public sector needs competition in order to become effective and efficient, and that this competition is gradually emerging in public sector. It is understandable that this new context is unstudied yet.

The role of public sector has classically been seen as stable and liable. Public services are there, and they are there available equally for all. Traditionally, public sector and also public companies are seen as non-profit organizations, and hence out of reach of competition. This role is in change (e.g. Pollitt & Summa, 1997; Walsh et al., 1997; Rainey & Bozeman, 2000; Riege & Lindsay, 2006). Decentralization of management authority, privatization when creating separate business units or companies, and efficiency and effectiveness in performance are no new ideas in private sector business, but implanting these in public sector strategy is. New kind of public management has emerged (Walsh et al., 1997; Box et al., 2001; Kolthoff et al., 2006).

1.1.1 New public management

The concept of the new public management has its roots in the late 1960´s in the new public administration studies (Fredrickson, 1996). The concept of the new public management was introduced by that name in the 1980´s by Pollitt and Walsh (Kolthoff et al., 2006). According to Kolthoff et al. (2006 ref. Pollitt, 1993; 2006 ref. Walsh, 1995), there are some basic ideas emphasized by Pollitt and Walsh: The new public management refers to increased focus on efficiency and quality, taking new technologies and information systems in use, performing productively and measuring performance, employing professional managers, and given them right to manage and delegate (Walsh et al., 1997). Put differently, the new public management means relieving traditional hierarchic system from bureaucracy, and setting apart politics and management (Kolthoff et al., 2006). According to Deakin and Walsh (1994, p. 13), the meaning of the new public management is to improve efficiency, and to enhance transparency and accountability in a more enabling, less hierarchic environment. As it is presented in figure 1, public organizations traditionally focus on equity (fairness) and effectiveness, but not that much on efficiency (i.e. profits, economy).

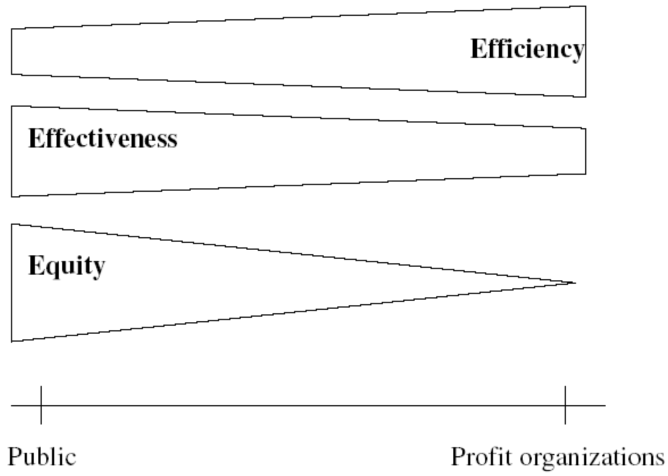

Figure 1: Efficiency, effectiveness and fairness in public vs. private organization. Adopted from Kolthoff et al. (2006, p.423).

Walsh et al. (1997) point out that it is important to notice that the new public management means different topics in different public service sectors, and that not all the ideas can be generalized. Also, Pollitt (2001) gives some critic to academic generalization of the new public management concept, noticing that there are many national differences, and so far there is no evidence that the new public management is behind public sector efficiency and effectiveness before some other factors.

1.1.1.1 New public management in Finland

The concept of the new public management was implemented in Finland in 1986 when a governmental committee gave a proposal for reform concerning decentralization of public sector organs (Pollitt & Summa, 1997). As Pollitt and Summa describe, the implementation of the new public management ideas in Finland has taken place modestly[2] due to e.g. the Finnish political system (i.e. coalition government and consensual decision-making). Anyhow, in 1995 all the Finnish governmental organs

[2] Pollitt and Summa (1997) made a comparison of the change in public sector in UK, New Zealand, Finland and Sweden over 15 years starting in 1979. The authors focused on privatization, marketization, decentralization, output orientation, traditional restructuring and intensity of reform process in public sector.

had moved over to a result-oriented management and budgeting. The same year 21 governmental organs had been transformed into companies (ibid. p. 17.)

1.2 Objective

This thesis aims to study and understand whether businesslike methods (c.f. the new public management concept) have introduced co-opetition into public sector. The objective of this thesis is to study whether co-opetition is visible in the changing public sector environment and how co-opetition appears. The new role with its functions, working methods and strategies needs to be studied. Seeing that non-profit public sector organizations and companies are adopting elements from private sector, and the operational environment is changing towards a more competitive one, competition is undeniable. When no organization can manage alone, cooperation is needed. This study examines how public companies cooperate and compete with each other and with other companies.

To this day, the research of co-opetition in public sector is almost non-existent. In the search of academic literature using EBSCO, Emerald and ABI databases and searching with the key words ‘co-opetition’, ‘coopetition’, ‘public sector’, ‘public company’ and ‘public sector company’ only one academic article of co-opetition in public sector was found. That single academic article was concerning the health care sector and co-opetition (see Barretta, forthcoming). It seems that the academic research of co-opetition in public sector is starting. Therefore, one purpose of this study is to provide more understanding of the role and nature of co-opetition in public sector and its companies.

1.2.1 Research questions

This research is focusing on the main question:
What is the role and nature of co-opetition in public sector companies?

This main research question is approached by six sub-questions. Answers to the first three questions are searched in academic literature, and to the last three through empirical research:

1. What is the nature of co-opetition?
2. What are the benefits and drawbacks of it?
3. How can co-opetition be managed?
4. Why and how do public sector companies cooperate with others?
5. Why and how do public sector companies compete with others?
6. How can co-opetition be managed in public sector companies?

1.2.2 Context

The empirical context of this study is limited to a specified sector. The research subject is a public group of companies in one middle-sized city in Finland, and one private company being linked to this group of companies via some joint-ownership. The organizational units for this research have been chosen because of the ownership (common goals), geographical boundaries of their business field (same market) and possible market overlap of services. In this study, a qualitative research method (i.e. a case study) is seen appropriate for the context. Public sector organizations are adopting elements from private sector. Hence, this thesis examines and assumes the existence of simultaneous cooperation and competition (co-opetition) in public sector companies.

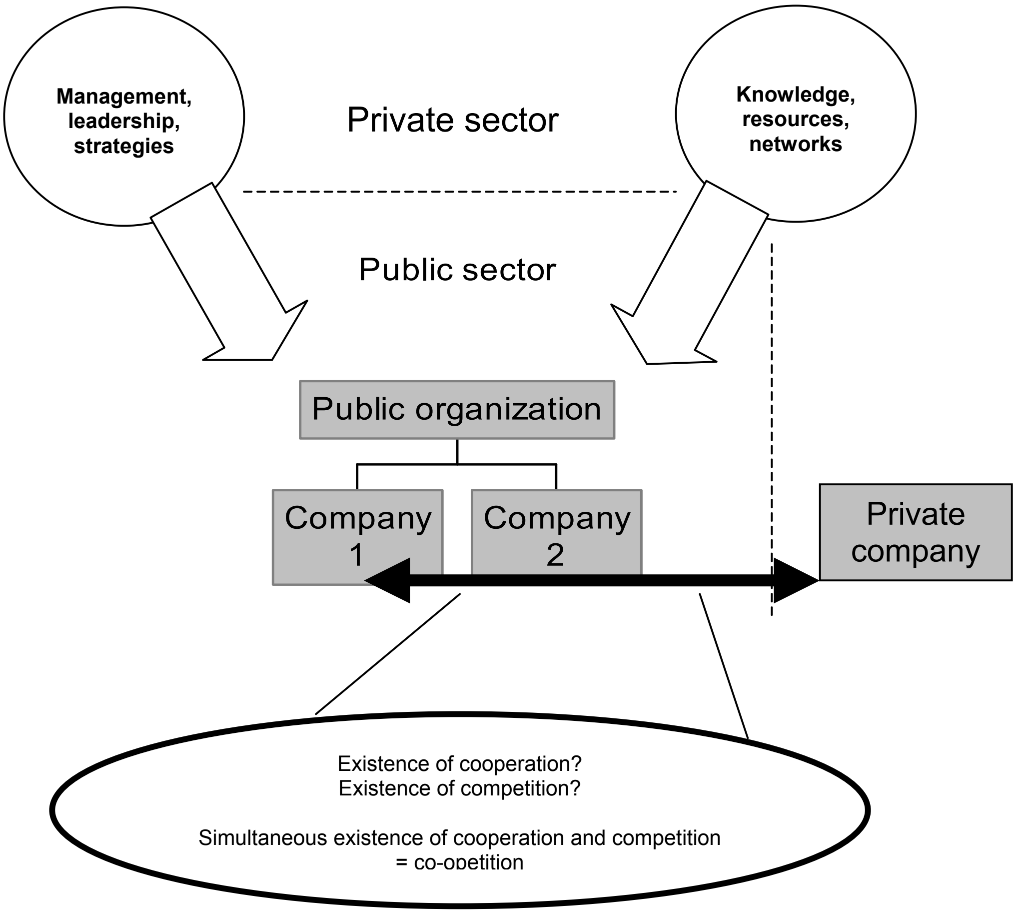

Figure 2: Description of the research context

1.2.3 Structure and definitions

In chapter one, background for the thesis, the context of a public sector organization and its recent changes are explained. The research question and its sub-questions are presented. Structure of the study and its key definitions are also explained in this same chapter.

The second chapter focuses on theoretical approaches to understand cooperation, competition and co-opetition. Antecedents of co-opetition are discussed, and the concept of co-opetition is explained. Fundamental findings of both inter-firm and intra-firm co-opetition are explained, and the academic literature of co-opetition is put together into a figure on pages 42-45.

In chapter three, the empirical research is described. The case study companies are presented, data collection is explained and finally, the results are explicated and analyzed. In the last chapter, chapter four, this thesis evaluated, and its reliability and validation are considered. Finally, some ideas for future research are proposed.

1.2.3.1 Cooperation

In this thesis, cooperation means a relation where organizations have complementary capabilities and resources, and share or leverage these in order to gain mutual goals (Gnyawali & Madhavan, 2001; Quintana-Garcia & Benavides-Velasco, 2004). This thesis does not take a stand on the duration of cooperation, but in this thesis cooperation tends to mean a longer-term relationship following Contractor and Lorange (2002) who describe cooperative relationship as something that falls between occasional cooperation and a complete merge of two or more companies. Herein, cooperation is seen as a relation based on and also creating trust, yet the concept of trust is not in research focus here, but seen as one fundamental element of cooperative behavior and therefore important (Miles et al., 2000, Rindfleisch & Moorman, 2003; Eng, 2006). This thesis follows the idea of Blomqvist et al. (2005, p. 499) that “trust covers expectations about what others will do in circumstances that are not, and often cannot be explicitly covered in a written contract” (see e.g. Miles et al., 2000; Rindfleisch & Moorman, 2003; Eng, 2006).

One core of cooperation is the idea that both or all actors cooperating are aware of the inter-relation. Cooperation is based on a voluntary mutual agreement that can be a formal contract in writing (Blomqvist et al., 2005) or an informal “handshake”, and that is formed to gain predictable mutual outcomes (Hamel et al., 1989; Miles et al., 2000).

In the chapter 2.1.1, where prior research of cooperation is discussed, cooperation means cooperative efforts with any partner. Thereafter, in all the remaining chapters cooperation means strictly cooperation with a competitor, although this may not always be written.

1.2.3.2 Competition

In this study, competition is defined as a dynamic situation that occurs when several actors on a specific area (market) are struggling for scarce resources, and/or are producing and marketing very similar products or services (Hunt & Morgan, 1995; Chen, 1996; Bengtsson & Kock, 2000; Luo, 2006; Hunt, 2007). Competition can be of inter-organizational or intra-organizational nature. The former means actions and reactions between two (or more) firms, and the latter means these moves inside organizations in between organizational units (Chen, 1996; Birkinshaw, 2001; Birkinshaw & Lingblad, 2005; Chen et al., 2007). Competition occurs even between individuals in organizations (Birkinshaw & Lingblad, 2005), but the interpersonal approach of competition is left outside in this study. Due to the nature of the empirical context, this thesis takes both the other two approaches (i.e. inter-organizational and intra-organizational competition) in to discussion.

Herein, competition is not considered undesirable, but as a driving force towards development bringing synergetic benefits for competing actors (Hunt & Morgan, 1996; Bengtsson & Kock, 2000; Tsai, 2002; Hunt, 2007). One substantial idea of competition is that it is not reciprocal. One actor can consider the other as a competitor, but the other part does not consider the same. In other words, the other company does not act or react. Nor is there is an obligation for a mutual agreement to compete, although actors in the same industry, brand field or product level are commonly regarded as competitors (Porter, 1990: Hunt & Morgan, 1995; Laine, 2002; Chen et al., 2007).

A fundamental idea herein is following Zineldin (2004, p. 780) quoting Kohn (1992) about competition in business: “The simplest way to understand why competition generally does not promote excellence is to realize that trying to do well and trying to beat others are two different things.” This statement is interpreted in this thesis, as the acceptance and renewed understanding of competition. It is useful to have competitors hence the pressure towards development is more powerful when coming from competitors than when coming from e.g. customers. If competitors were beaten out, then there would be less pressure towards development, but more focus on keeping the competitors out of business.

1.2.3.3 Co-opetition

Previous quotation is basically very similar to the core idea of Brandenburger’s and Nalebuff’s (1996) work – a game theory based mindset that is considered widely as the beginning of the academic interest of the co-opetition concept (e.g. Gee, 2000; Laine, 2002; Ketchen et al., 2004; Ritala, 2007). Brandenburger and Nalebuff (1996) explain co-opetition as “cooperation to increase the size of the pie, and competition in dividing it up”.

Many scholars agree that the term co-opetition comes originally from Raymond Noorda[3] in 1993 (e.g. Gee, 2000; Ketchen et al., 2004; Ritala, 2007, Walley, 2007). Co-opetition means circumstances where two or multiple actors simultaneously cooperate and compete with each other, and where the relationship consists of repeated interactions instead of a single one (Brandenburger & Nalebuff, 1996; Lado et al., 1997; Zerbini & Castaldo, 2007). The paradox of co-opetition comes, according to Bengtsson and Kock (2000), from the attempt to interact directly when cooperating towards mutual goals, but at the same time trying to avoid direct interaction or communication when competing out of self-interest.

[3] Raymond Noorda was the founder and CEO of the software company Novell (Gee, 2000, Ketchen et al., 2004).

On the contrary to the traditional economy-based view of competition, meaning efforts to play others out or limiting the game and the access into it (Porter, 1980; Luo et al., 2007), Brandenburger and Nalebuff introduce competition as way to build a larger game with higher returns to share for all actors in the game.

In this thesis, co-opetition is considered as the circumstances, where several actors willingly share competencies or capabilities, but where these actors also have to struggle (unwillingly) for same limited resources, customer's attention and the best performance (reputation). Co-opetition is not a permanent, stabile state in the relationship. It is dynamic depending on the context: Some moments the companies or units need each other more and mostly cooperate, even if the awareness of the competitive tension is there. Sometimes the relationship may include more competitive elements, and at times both cooperation and competition occur equally.

Academics have approached co-opetition both from intra-firm perspective (Tsai, 2002; Välimäki & Blomqvist, 2004; Luo, 2005, Luo et al., 2006) and inter-firm perspective (Bengtsson & Kock, 2000; Dagnino & Padula, 2002, Quintana-Carcia & Benavides-Velasco, 2004). Seeing that these ideas are not mutually exclusive, both approaches are utilized in this thesis due to the nature of the empirical context consisting of three companies: two public companies and one private company. Co-opetition from an intra-firm perspective is approached because two of the studied organizations are interdependent by being under the same governance and being parts of the same city concern. Also, the inter-firm perspective is reasonable, since these two public companies are independent firms by having their own CEOs and authorities, and the third company is privately owned.

1.2.3.4 Public company

Herein, a public company refers to a firm that is fully or partially owned by a city or a municipality. A public company is defined in this research like

Matthews and Shulman (2005) as an organization that aims to serve the public good by knowledge and services rather than to maximize its own profit, and where the achievable profit is used to maximize welfare (Corneo & Rob, 2003). Terms public company and public organization are used alternatively to mean the same concept through this study.

1.2.3.5 Non-profit company

The term non-profit company refers to a company that does not share the profits to (stock) owners but channels the potential profits back to operations. The company's mission is to create services or knowledge rather than deliver maximized private profits (Matthews & Schulman, 2005). A non-profit company finances its operations partially or totally with public funding.

2 Role and nature of co-opetition

Academics have used various scientific views in their co-opetition researches. Co-opetition is a contradictory concept that finds motivation from different academic approaches. Hence, this study is based on some even conflicting theories[4]. Evidently, this work finds logics in the resource based view (Wernerfelt, 1984) meaning that the competitive advantage of a firm is based in the mixture of strategic valuable and unique, un-imitable, non-removable resources, which can be tangible or intangible. This thesis supports also the ideas of the resource based view's extension, knowledge based view, following e.g. Välimäki and Blomqvist (2004) who see capabilities as a form of knowledge, and knowledge being one of the most essential resources of a firm (Miles et al., 2000; Contractor & Lorange, 2002).

[4] There is a conflict between social capital theory and transaction cost theory, when the first emphasizes the human cooperative nature and the latter the human opportunistic behaviour (Uzzi, 1997, p. 37; Nahapiet & Ghoshal, 1998, p. 242 and p.256).

Considering that knowledge and relationships are important resources and understanding that no firm can embody all the important, existing (tacit or explicit) knowledge itself, or have access to all valuable relationships, this thesis roots in social capital theory (Portes, 1998). Following the definition of Nahapiet and Ghoshal (1998, p. 243), social capital means "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit". Social capital can be explained as social relationships and memberships in collectives, and the resources that can be found through these (Inkpen & Tsai, 2005; Tura & Harmaakorpi, 2005). To put these approaches roughly, social capital is not only about what you know, it is about whom you know and what they know.

As many academics point, the resource based view alone cannot give a satisfactory explanation for some firms success in a rapidly and unexpected changing environment (Teece et al., 1997; Eisenhardt & Martin, 2000; Kianto, 2007). Hence, dynamic capability approach is considered important in this thesis supporting the idea that static knowledge and capabilities do not provide competitive advantage per se, instead only if they can be used in action, for learning and innovation and continuously be regenerated for the changing environment (e.g. Teece et al., 1997; Kianto, 2007; Teece, 2007). Naturally, when monitoring organizational operations, this thesis grounds partially on transaction cost theory, meaning shortly strategic considerations of making, buying or getting a partner in order to operate efficiently (Hennart, 1988; Williamson 1996, 1998; Blomqvist et al., 2002).

2.1 Antecedents of co-opetition: cooperation and competition separately

Co-opetition as a research subject requires some explanation of co-operation and competition as separate concepts, as they are the primary factors for the concept. This thesis observes strategies and management literature, but even the marketing literature is worth an examination (e.g. relationship marketing and networks). Relationships are essential resources of a company. Because relationships can be seen as assets that are non-removable, a company can get the access to useful relational resources via partners, if it has no possibility to establish these relationships itself (cf. social capital theory) (Nahapiet & Ghoshal, 1998; Portes, 1998). This access can be called a "reference effect" like Ritter & Gemünden (2003, p. 745), but even as "social flow" like Gnyawali and Madhavan (2001, p.432).

2.1.1 Theoretical background for cooperation

Cooperation is in nature a voluntary and reciprocal process, where the actors share knowledge, ideas and experience among other resources in order to gain both private and mutual goals (Khanna et al., 1998; Miles et al., 2000). Companies have different motives for cooperation, but only to have strong motives does not give a satisfactory explanation. Cooperation needs certain prerequisites in order to become successful. Also, however advantageous cooperation may be, it has some disadvantages as well.

2.1.1.1 Motives for cooperation

The academic literature presents several motives for cooperation. Companies or units cooperate often towards a mutual goal in order to share resources or get an access to them. These resources can be financial, technological, human or relational, but even knowledge can be seen as one. Also, companies cooperate in order to research, develop and release new products, services and processes and enter into new markets. Shortly, companies cooperate for value creation (e.g. Lado et al., 1997; Spekman et al., 1998, Gnyawali & Madhavan, 2001; Quintana-Garcia & Benavides-Velasco, 2004; Riege & Lindsay, 2006; Ritala & Blomqvist, 2006.)

Cooperation occurs in knowledge sharing, and in distribution of both product and process capabilities (Bengtsson & Kock, 2000; Ritala & Blomqvist, 2006), but also in absorption of operational competence e.g. quality and productivity improvement, relationships, sales and marketing (Rindfleisch & Moorman, 2003). One motive for cooperation can be learning or sharing of organizational expertise concerning the business area, such as experience of stakeholders, cultural circumstances or laws and practices (Khanna et al., 1998; Luo, 2005), but also consultation in analyzing and giving feedback on ideas and concepts (Houldsworth & Alexander, 2005). Actors can even cooperate financially when sharing monetary expertise for e.g. local markets (Luo, 2005.)

Cooperative relations can be formed for joint research and development of processes or products and for commercializing them (Rindfleisch & Moorman, 2003). Motives for cooperative relationships can be defined as offensive when trying to capture new markets or defensive when protecting the existing markets (Spekman et al., 1998).

Resources

According to the resource based view, firms are heterogeneous in their resource assets. In his early work, Wernerfelt (1984) started the discussion of the importance of resources describing how competitive advantage can be gained via focusing on the firm's resource portfolio, and proposing that companies can perform well by paying attention to differences between their own and in other firm's resources (Wernerfelt, 1995). The resource based view means that firms are heterogeneously different, and that firms gets sustainable competitive advantage when they possess strategically valuable, rare, inimitable and non-substitutable resources (Wernerfelt, 1984; Barney, 1991; Eisenhardt & Martin, 2000; Das & Teng, 2000).

Resources can be divided into tangible or intangible, and they can be viewed in different ways. A firm's core competence can be seen as one of the most important strategic resource, but also physical, financial, legal, human, organizational, informational and relational resources[5] can be of strategic value (Wernerfelt, 1984; Barney, 1991; Prahalad & Hamel, 1990; Hunt & Morgan, 1995; Inkpen & Tsai, 2005; Tura & Harmaakorpi, 2005).
The resource based view gives motivation for cooperation when a company does not posses, is unable to produce or get enough of the valuable resources that are needed for operations and developing the operations further. In order to get access to these valuable but scarce resources, a firm may be willing to cooperate with a company that has those resources (Lado et al., 1997; Hamel et al., 1989; Miles et al., 2000; Das & Teng, 2000; Ritala et al., 2008).

Learning

According to Teece et al. (1997), the dynamic capability approach refers to the organizational ability to sustain competitiveness and to meet the future in a rapidly changing environment. The dynamic capability refers to the ability to renew the firms (core) competencies in response to the changing environment. This means the firm's capacity to renew, adapt and implement new knowledge and competencies inside the organizational barriers, but also the instinct to sense the opportunities and threats existing outside the organizational barriers (Teece et a., 1997; Teece, 2007). In this thesis, dynamic capability refers to learning and changing (e.g. exclusion of old processes or resources, and replacing them with something new). Kianto (2007) points that there are three differing streams in dynamic intellectual capital[6] research: 1) dynamic intellectual capital as

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[5] Hunt and Morgan (1995, p. 6) give examples of resources "as financial (e.g. cash reserves, access to financial markets), physical (e.g. plant, equipment), legal (e.g. trademarks, licenses), human (e.g. skills and knowledge of employees), organizational (e.g. competencies, controls, policies, culture), informational (e.g. knowledge resulting from consumer and competitor intelligence) and relational (e.g. relationships with suppliers and customers)".
[6] Intellectual capital is considered herein to be an important intangible resource of the firm, although e.g. Teece et al. (1997) and Kianto (2007) points that RBV and DCA differ:

value creation dynamics, 2) dynamic intellectual capital as activities and 3) dynamic intellectual capital as change capabilities. The dynamic capability approach gives motivation for cooperation, when a company needs to innovate or renew its operations e.g. knowledge or processes. In order to learn and innovate, a firm may be willing to cooperate with a competent company that has complementary resources and capabilities (March, 1991; Dussauge et al., 2000). Learning from a partner can be related to e.g. new technologies, customer intelligence or market penetration (Khanna et al., 1998, p. 201), so it means more than pure R&D operations with a partner.

Sharing of cost

According to transaction cost based view (Williamson, 1996, 1998), one of the strategically important decisions for a company is to decide whether to do operations (or make its components) itself, buy them from the market or cooperate with another firm. These strategic decisions are made through an analysis, where all costs need to be figured[7] and the most efficient (lowest costs) strategy to be chosen. Shortly, a firm needs to consider whether to make, buy or get a partner to get the components needed in its core business (Hennart, 1988; Williamson, 1996, 1998; Das & Teng, 2000). According to the transaction cost view, opportunism is present because companies act on self-interest (Williamson, 1998; Blomqvist et al., 2002; Ritala & Blomqvist, 2006). Transaction costs consists of all the costs related to a certain operation of the company, e.g. costs of "searching, planning, negotiating, monitoring and enforcing" (Blomqvist et al., 2002, p. 3). The transaction cost view gives motivation to cooperate, when a company does get products, supplies, services and even knowledge from the market at lower costs than they would be made-in-house (Williamson, 1996, 1998; Blomqvist et al., 2002).

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when RBV considers knowledge as a static asset; DCA defines knowledge emerging from interaction of organizations members and not being controllable.

[7] Considering the bounded rationality meaning human behavior with rational intention but limited knowledge (e.g. Williamson, 1996).

2.1.1.2 Prerequisites

When cooperative relationships are developed, some consideration to circumstances is needed. Academics have presented some essential preconditions for successful cooperation. Miles et al. (2000) call these time, trust and territory. Similarities can be found in Nonaka and Toyama's (2003) BA that can shortly be described as a time-space-relationship based (knowledge-creating) context. Extensively, even the ideas of "flow" by Csikzentmihályi (1997) can be noticed, as the author describes social flow as an interactive situation, where the actors are willing to pay attention to each others goals and where a fertile interaction needs both time and attention in order to generate learning and productivity.

The parties involved in cooperation need time spent together for discussions and change of ideas and experiences (Bengtsson & Kock, 2000; Miles et al., 2000, Nonaka & Toyama, 2003; Eng, 2006). This common time and communication generates trust, which is essential to deepen the willingness to cooperate, reduce the fear of the other party's opportunistic behavior (Uzzi, 1997; Välimäki & Blomqvist, 2004; Eng, 2006) and decrease control and monitoring. However, Blomqvist et al. (2005) argue that some trust must exist even before starting cooperation.

Territory or space does not only mean a physical place, but rather a positive atmosphere, where the parties feel bond and willingness to share, and where cooperative outcomes are shown (Miles et al., 2000; Nonaka & Toyama, 2003). A positive attitude is one important factor for enhancing the willingness to cooperate and for sharing knowledge (Bock & Kim, 2002; Eng, 2006). Evidently, the ability to cooperate is important. That ability means the capability to realize what knowledge is important to share, and also the competence to make this knowledge distributable and understandable for the partner (Luo et al., 2006).

2.1.1.3 Advantages and disadvantages

Academics agree, that cooperation is advantageous in many ways. Cooperation opens access to scarce resources (Lado et al., 1997; Hamel et al., 1989; Miles et al., 2000; Das & Teng, 2000), but also to relationships and networks (Inkpen & Tsai, 2005; Tura & Harmaakorpi, 2005). Cooperation can bring in new expertise and hence decrease the need for recruitment of new personnel (e.g. Hamel, 1991; Blomqvist et al., 2005). Cooperation can shorten lead times, open access to new markets and also build a better reputation (Bengtsson & Kock, 2000). Also, cooperation may produce synergetic outcomes, which a single firm cannot achieve alone. Cooperation enables a firm to specialize and concentrate on its core competence, and it also influences risk-taking when sharing the risks (Blomqvist et al., 2002).

The academic literature presents some occasions, when cooperation may cause less desirable consequences. According to the neo-classic economy-based theory, perfect competition[8] is seen as the most effective market mechanism (Hunt & Morgan, 1995), and cooperation is argued to hinder that useful competition (e.g. cartels and collusions). Therefore, antitrust laws are needed to give guidance and frames for cooperative firms (Bengtsson & Kock, 2000; Gnyawali & Madhavan, 2001; Rindfleish & Moorman, 2003). Though, e.g. Porter (2001) gives some critic to antitrust laws proposing that they hinder advantageous competition, which increases economic growth.

According to social capital theory, social networks and belonging to them is seen as valuable capital of the firm and having positive economic effects. The concept of trust, engagement and commitment are closely related to this theory (Dinda, 2007 Ref. Coleman, 1998; Portes, 1988; Putnam, 1995; 2004). On the other hand close relationships can also

[8] Perfect competition means a market situation, where no firm is strong enough to utilize the market for vast economic rents, and the prices are settled via supply and demand, cf. Adam Smith´s famous theory of invisible hand.

cause negative social control and isolation. Lado et al. (1997 ref. Janis, 1972) note that a longer cooperative relationship can turn into "groupthinking". That may limit the variety of new ideas and cause irrational thinking. Also, Tura and Harmaakorpi (2005) argue that very close relationships can end up in collective blindness, which may affect decision-making. Välimäki and Blomqvist (2004) claim that highly eager efforts towards consensus and compromising may cause the rejection of distinct and radical ideas, and does not lead to development, but to stagnation and rigidity instead.

Cooperation gives possibility for free riding unless trust exists and/or formal contracts are made, which is recommended for avoiding conflicts with e.g. intellectual property rights (Blomqvist et al., 2005). According to transaction cost based view, opportunistic behavior is often present in a firm's (cooperative) actions because the fundamental idea of the firm is to operate at the most profitable (lowest) costs [9] (Uzzi, 1997; Ritala & Blomqvist, 2006).

2.1.1.4 Summary

This chapter (2.1.1) explains background and motives for cooperation. Companies or their units cooperate toward common goals in order to share resources, costs. Also, learning of a partner can be one motive for cooperation. Cooperation needs time, communication and trust in order to be successful. Cooperation is not always only beneficial. Strong commitment and bonding may cause social lock-ups, but there may also be opportunistic behavior when cooperating with others. In the following figure (3) the basic idea of cooperation is presented. Company A and B cooperate towards common goals by sharing costs, resources or learning, which are the motives.

[9] According to the transaction cost view's basic ideas, companies act out of self-interest trying to minimize costs (Uzzi, 1997).

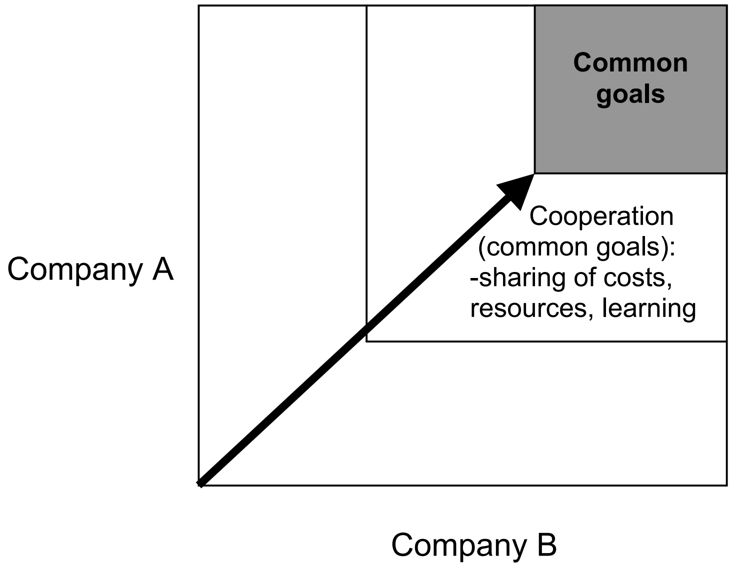


Figure 3: Illustration of cooperation.

2.1.2 Theoretical background for competition

Competition between organizations has been studied since the early 1900th century according to Barney (1986) who also describes three different types of competition: Industrial organization competition, where the structure of the industry or markets is the defining factor, Chamberlinian competition, where the unique resources are the defining factor, and Schumpeterian competition, where the unexpected, uncertain is the defining factor (Barney, 1986). The classic approach of competition is the industrial organization view, where firms in the same industry are seen as competitors (Barney, 1986; Porter, 1999). This view has developed into approach, where even e.g. clusters or regions are in competition (Porter, 1999). The Chamberlinian competition serves basis for the ideas of the resource based view, where resources are limited and companies have to compete for them. The Schumpeterian view leads to the dynamic capability approach, emphasizing the idea of the unknown future and a continuous need for learning and renewal.

Competition (in contrast to cooperation) does not need to be a reciprocal phenomenon. A company can determine its competitors in the environment or in business, but these competitor-companies may see this company as a non-competitive company to them. As Chen (1996, p.102) describes, “firms do not pose an equal threat to each other”. Competitors tend to react to each other’s actions in some way (e.g. price competition) but it does not have to be so (Chen et al., 2007).

2.1.2.1 Motives for competition

Companies compete to develop strategic, long-term advantages and to improve the firm’s own operation, but also to keep or gain a position in the market. In other words, competition occurs for value possession and utilization (Hunt & Morgan, 1995; Porter, 1987; Bengtsson & Kock, 2000; Birkinshaw, 2001; Tsai, 2002; Ketchen et al., 2004; Luo, 2005; Hunt, 2007).

<u>Market overlap</u>

According to Chen (1996), market overlap motivates companies for competition. Interdependent firms (c.f. companies with market overlap) react to each other’s moves, because they evidently sense these moves. According to scholars, the awareness, motivation and capability are seemingly some of the factors that drive a company towards competition (Chen 1996; Chen et al., 2007). Awareness means the visibility and the presence of other companies, motivation means market overlap between these companies, and capability means the competitive capability and resource mixture inside the company. There can be competition in operational timing (first-mover), and this also can be seen to refer to struggles to get market share (Ketchen et al., 2004).

<u>Resources</u>

Evidently, competition occurs in rivalry for scarce resources, internal position and support, and external market position. Firms compete for scarce resources, because these give the firm a competitive advantage. A unique bundle of resources prepare a company with a better capability to compete and survive in the market (Chen, 1996; Das & Teng, 2000; Matthews & Schulman, 2005; Chen et al., 2007).

Internal position and reputation

Also, in internal competition, units' internal power position may cause competition, when units' struggle after internal status and superiority. Even organizational reputation can be one motive for competition (Birkinshaw, 2001; Barney & Zajac, 1994; Bengtsson & Kock, 2000; Tsai, 2002; Matthews & Schulman, 2005; Luo, 2005).

2.1.2.2 Variety of competition

Competition may occur in multiple shapes. It can be inter-organizational in between different companies or even industries, or it can be internal competition, meaning competition inside a company or an organization. In contrast to cooperation, competition can be direct or indirect, and it can also be determined as offensive or defensive depending on the reason for competition according to Luo (2005). Offensive competition arises in a situation, where the parts are trying to capture a bigger market share from the same market, i.e. there is market overlap. With defensive competition Luo (2005) means a situation, where one part is seeking more scarce resources in order to maintain its position and competitive capability[10].

Internal competition

It falls natural that cooperation occurs inside an organization: all the co-workers and co-units are supposed to strive towards a shared goal. Also, competition does exist inside organizational barriers. According to academics, internal competition arises between organizational units in

[10] Cf. e.g. Porter's five forces theory, where there is (built) barriers to entry the market (Porter, 1980, 2001).

producing similar products or trying to serve similar customer groups, but also for internal position and support (Birkinshaw, 2001; Birkinshaw & Lingblad, 2005; Luo, 2005). Since resources inside an organization are limited, the units compete for these resources (financial, physical or human). Internal position means a strategically important position inside the organization and the power linked to this status. Internal support refers to the head-office's interest, support and allocation of resources. The freedom of the units (cf. managers interference) has an effect on internal competition that can be managed and encouraged (or suppressed) in order to gain benefits that competition brings in (Birkinshaw & Lingblad, 2005; Luo, 2005.)

Birkinshaw (2001) sees internal competition either being a top-down or a bottom-up situation. The top-down competition means managers strategic decisions of the future paths and resource allocations, and the bottom-up competition means a situation where different units try to attract manager's attention with their ideas in order to get resources and finance.

Vertical and horizontal competition

Competition can also be viewed from a vertical or horizontal perspective, where vertical means indirect and horizontal means direct competition. These vertical, indirect relations refer to buyer-seller relationships (supply chain), where the competitors are linked to each other via e.g. one buyer. In a vertical, indirect competition, the parts try to maintain interaction and communication to some extent because of their common interests. Instead, horizontal, direct competitors try to avoid interaction and communication. The relationship is informal and invisible, and the parties get information of each other via a third part (i.e. customers, fairs, advertisements or stock exchange). In a horizontal, direct competition, there are no transactions between companies (Bengtsson & Kock, 2000).

2.1.2.3 Advantages and disadvantages

Competition is argued to be one driving factor behind innovation and upgrading organizations competitive advantage (Hunt & Morgan, 1995; Porter, 1999; Bengtsson & Kock, 2000; Hunt, 2007). According to scholars, it is evident that competition improves the company's performance, but this only up to a certain point. Thereafter, competition affects performance negatively, and the units or co-workers stop cooperating and start acting in self-interest (Chen, 1996; Birkinshaw, 2001; Birkinshaw & Lingblad, 2005). Birkinshaw and Lingblad (2005) call this kind of negative or aggressive phenomenon as cannibalization that emerges from self-interest motives in internal competition.

According to academic literature, competition is an ongoing process, where organizations learn (reactive learning) from past actions and market signals. As it is presented in figure 3, organizations first compete for scarce resources, and then utilize these resources in order to overtake desired market position and show financial performance. That in turn may enable better opportunities in poaching scare resources or market position and prepare the organization for future competition (Barney & Zajac, 1994; Hunt & Morgan, 1996, Birkinshaw, 2001).

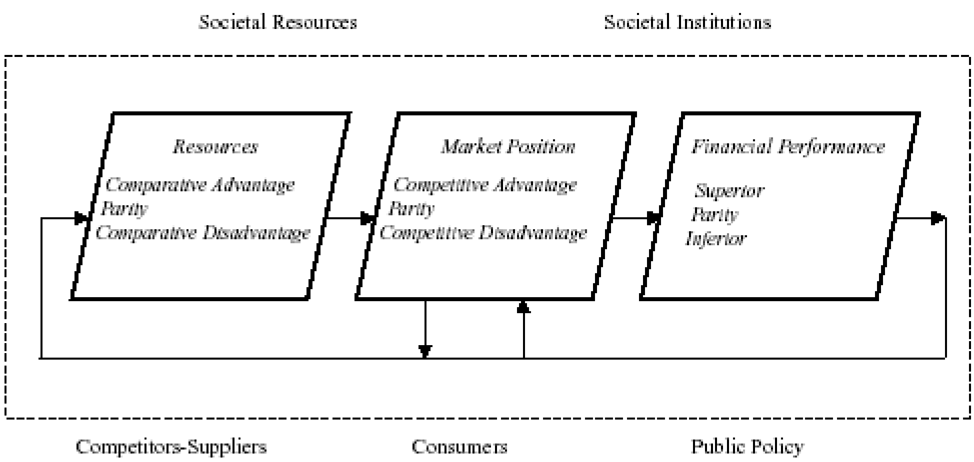


Figure 4: A schematic of the resource-advantage theory of competition
(Hunt, 2007, p. 278; Hunt & Morgan, 1996, p. 108).

Competition can create a non-cooperative atmosphere, where the parts act in self-interest. One risk, especially in internal competition, is that when there occurs feeling of failure, units' key persons can loose motivation or even quit (Birkinshaw, 2001). Also, there can be increased costs due to duplication of operations and an unnecessary use of resources in internal cooperation.

Shelby & Morgan (1995) present some criticism to perfect competition e.g. because of the homogeneous demand and imperfect information, and that perfect competition (meaning a market equilibrium), cannot explain innovativeness. Subsequent theories of competition are more complex as e.g. comparative advantage theory. Hunt and Morgan (1996) present some comparisons between the neoclassic and comparative advantage theory (see figure 4). The first refers to perfect competition, when the latter context is more complex considering consumers' preferences and imperfect information (human bounded rationality), and also firms' self-interest, superior economic rent seeking and a mixture of unique resources are in concern.

2.1.2.4 Summary

This chapter (2.1.2) explains background and motives for competition. Companies or their units compete towards individual goals in order to gain market share (get customers), possess and get valuable resources, or get a better reputation than their competitors. Competition can be vertical (i.e. supply chain) or horizontal (i.e. direct competitors). Competition is not harmful, but advantageous because it is one strong driver towards development in the company or its units. In the following figure (5) the basic idea of competition is illustrated. Company A and B compete with each other for markets (customers), limited resources and reputation.

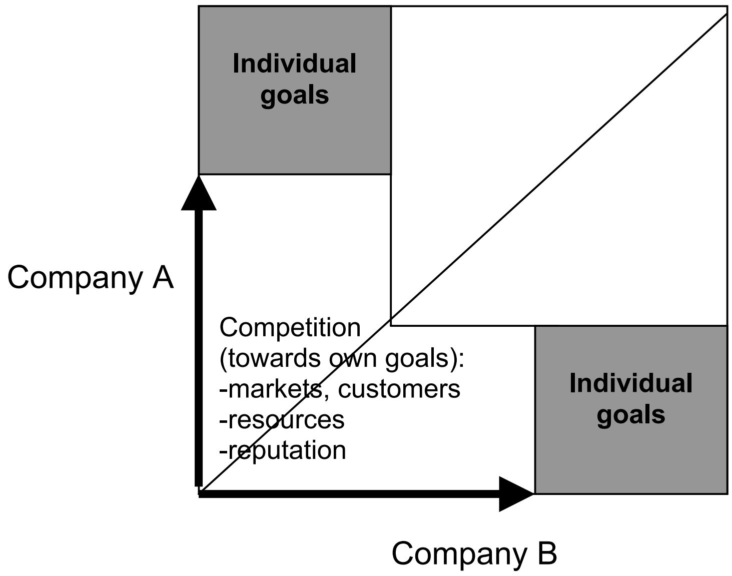


Figure 5: Illustration of competition.

2.2 The nature of co-opetition

Co-opetition is a contradictory phenomenon that has many aspects as an organizational strategy. Like Zerbini and Castaldo (2007) notes, an economic view justifies competition in rent and efficiency seeking, but also cooperation in partnership building for resource sharing. Simultaneous cooperation and competition can be found also in the social capital theory. Organizations are competing for a better position in the network, but they are also cooperating and having social exchange via organizational boundary spanners. Lado et al. (1997) approach co-opetition through three different theories: The resource based view is the basis why companies cooperate and compete for scarce resources. Game theory emphasizes the strategies, which a company has to conclude in business, and finally, socioeconomic theory defines social ties, norms and behavior but also human bounded rationality. Gnyawali & Madhavan (2001) explain why parts in co-opetitive relationships have strong ties: Competitive actions depend on the company's existing networks, e.g. cooperators, and a company cannot make inconsiderate competitive moves[11].

[11] Cf. the theory of structural embeddedness (Gnyawali & Madhavan, 2001).

2.2.1 Inter-firm co-opetition

In academic literature, inter-firm co-opetition is approached variously (Bengtsson & Kock, 2000; Dagnino & Padula, 2002, Quintana-Carcia & Benavides-Velasco, 2004). Co-opetition between companies shows in striving to get and use unique resources in competition, and at the same time cooperating by sharing other unique resources. In other words, co-opetition consists both of friendliness due to common interests and of hostility because of conflicting interests. According to Bengtsson and Kock (2000), it is obvious that competition arises in functions near customers, when cooperation occurs in functions away from customers. It seems also that a company (or its units) can only manage either of these relationships at once. In other words, one unit of the company can cooperate with the partner, and another unit can compete, but the same unit cannot manage to do the both at the same time (ibid.).

Co-opetitive relationship can be divided in three types: 1) cooperation-dominated, 2) equal or 3) competition-dominated relationship, depending on the volume of cooperation and competition in the relationship. The volume is not stable, but can vary during the lifecycle of the relation (Bengtsson & Kock, 2000).

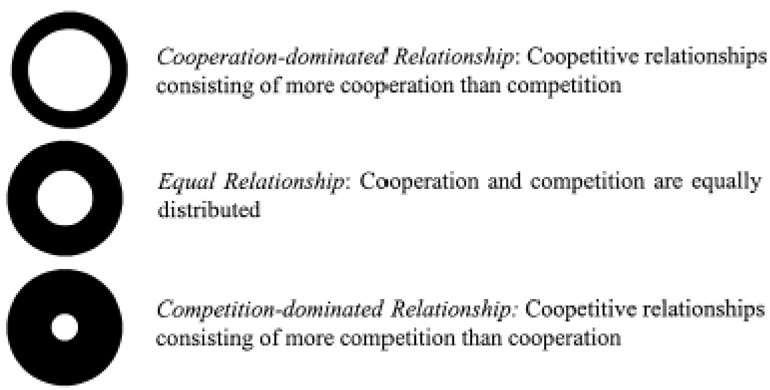


Figure 6: Different types of coopetitive relationships between competitors (Bengtsson & Kock, 2000, p. 416).

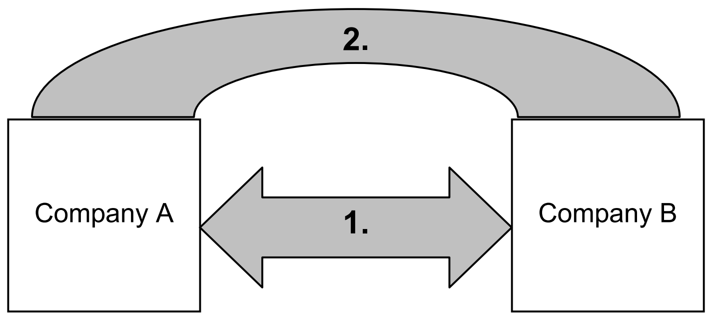
The structure of the relation (vertical, horizontal or network) is argued to have an impact. In academic literature, several types of structures are studied: vertical, horizontal and network relations. In vertical co-opetition (e.g. supply chain) organizations' common interests and interdependency are easily visible. The common gains are most often fairly shared. According to the transaction cost theory, companies' existence obligates to some self-interest, hence there is also competition and opportunistic behavior (Williamson, 1996, 1998; Dagnino & Padula, 2002, Quintana-Carcia & Benavides-Velasco, 2004). According to scholars, the vertical co-opetition can further be divided in up-stream and down-stream relations, where the first refers to co-partners[12] and down-stream refers to end-users (customers) (Quintana-Carcia & Benavides-Velasco, 2004).

The horizontal view (i.e. direct customers) is based on the companies aim for a strong and durable position in the market, and because of this, they are willing to cooperate with competitors. The horizontal co-opetition may be fertile for conflicts due to lack of mutual benefits (Bengtsson & Kock, 2000, Dagnino & Padula, 2002; Quintana-Carcia & Benavides-Velasco, 2004.) The network perspective is not widely studied, merely only mentioned by Bengtsson and Kock (2000, p. 413) who refer to network coopetition and explain it as relationships between buyers, sellers and competitors linked together by customers. On the other hand, Dagnino and Padula (2000) refer with their network co-opetition to co-opetition between companies, and that is called the inter-firm view of co-opetition in this thesis, and they refer with their macro perspective to co-opetition between wider networks e.g. clusters (more in chapter 2.2.3).

Herein it is understood, as the following illustration shows, that fundamentally in inter-firm co-opetition the starting point is the situation, where there first is competition. Two (or several) companies exist in the same market and they compete with each other for valuable resources or

[12] In the study of biotechnology firms these authors refer with up-stream relations to universities and research centers (Quintana-Carcia & Benavides-Velasco, 2004).

the market share. Then, cooperation is generated and added in this relationship, meaning that some common goals are discovered and sharing of resources, capabilities, risks or costs starts. Thereafter, the relationship becomes a co-opetitive relation.



1. Competition exists or arises between companies.
2. Cooperation is generated (i.e. common goals are discovered).
3. The relation becomes inter-firm co-opetition.

Figure 7: Illustration of inter-firm co-opetition.

2.2.2 Intra-firm co-opetition

Co-opetition inside an organization is an inadequately researched area, and up today there are only a few empirical researches made in this area (Tsai, 2002; Välimäki & Blomqvist, 2004; Luo, 2005, Luo et al., 2006; Walley, 2007, p. 24-25). Both cooperation and competition occur also inside organizational boundaries in between different units. Cooperation and competition can be seen like Luo (2005) as different axes where the degree of cooperation and competition defines a unit’s position and co-opetitive role, or like Välimäki and Blomqvist (2004) as separate process phases, where cooperation is a creative, chaotic phase producing various choices, and competition an organizing phase selecting solutions out of multiple choices.

Intra-firm co-opetition appears in knowledge transfer and organizational learning between units for organizations common benefits (cooperation) and in gaining internal resources and/or external markets for units' own benefits (competition. There can also arise internal competition for the internal position in the organization and for unit's reputation (Birkinshaw, 2001; Tsai, 2002; Luo, 2005; Luo et al., 2006.)

According to Luo (2005), organizational units cooperate technologically, operationally, organizationally and financially when sharing resources, expertise, knowledge and practices. Luo (ibid.) suggests that units compete for internal scarce resource, internal position and status, but even for external markets. Also, Luo (ibid.) proposes that coopetition is determined by some key factors. In cooperation, the units' strategic roles are important hence each unit is there for different operations. Additionally, the units' form influences cooperation, e.g. units under same ownership seems to be willing to cooperate more than units under different ownerships. Even technological linkage (or knowledge) is mentioned to affect cooperation. Units need each other's knowledge and technologies hence they cooperate. According to Luo (ibid.), competition is determined by local environment (e.g. customers, regulations and business culture) and units compete for internal scarce resources. Market overlap influences internal competition, when subunits target to same markets (seen as offensive competition). On the other hand, capability weakening has also an affect on competition, when units seek e.g. headquarters support and resources in the effort of trying to maintain their competitive advantage (seen as defensive competition) (Luo, 2005). Luo's (2005) model explicates aspects of cooperation and competition, and proposes the infrastructure for successful co-opetition strategy (more in chapter 2.4).

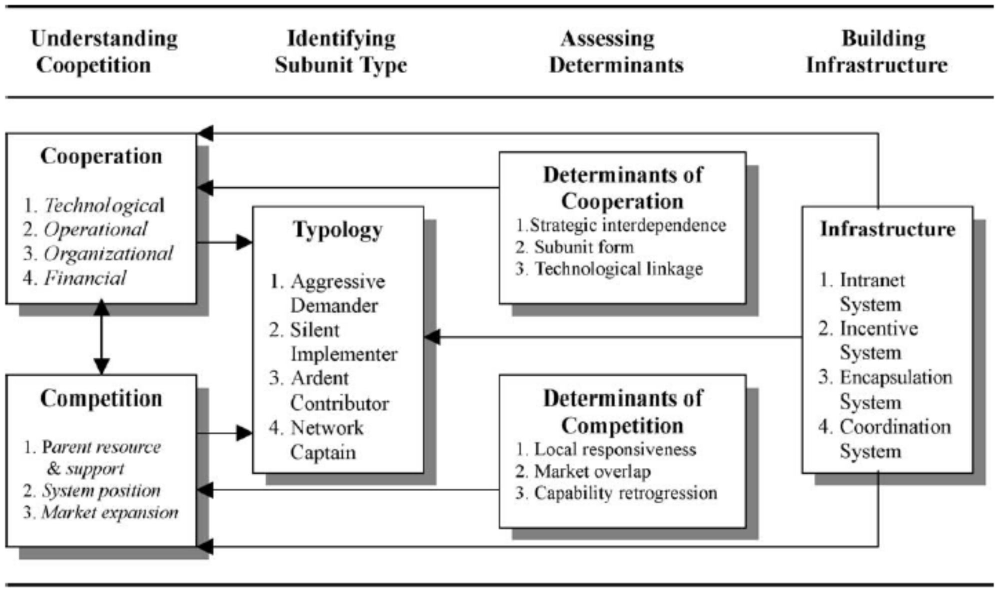


Figure 8: An integrated model of intra-firm co-opetition
(Luo, 2005, p.80).

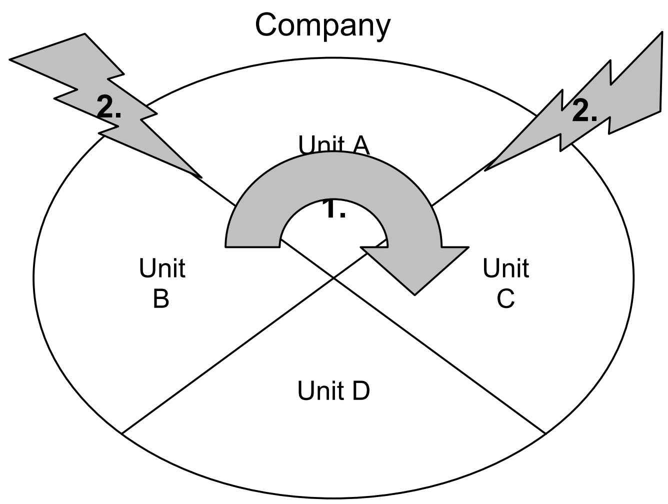
The structure of these internal relations is approached via formal hierarchy relations ("participation by command"[13]) and informal ("voluntary") relations. According to Tsai (2002.), both formal organizational hierarchy and informal organizational ties affects co-opetitive inter-unit relations. When the parties compete with each other, they have strong motives to penetrate each other's operational mechanisms, but they also have potential to understand co-units knowledge due to the similar business dynamics (e.g. resources and targeted markets) (Chen, 1996; Tsai, 2002). A formal hierarchy is obligatory for organizations, even if it seems occasionally to have a negative impact on knowledge sharing. In contrast, informal relations have obviously a positive impact on knowledge sharing, especially when internal units are competing for external markets (Tsai, 2002; Välimäki & Blomqvist, 2004).

Välimäki and Blomqvist (2004) propose that there are three different internal environments in co-opetition process. These environments need

[13] The term adopted from Eriksson & Lehtimäki (2001).

different types of managerial interference. In a stable enabling environment, trust and willingness for cooperation are created, and this needs a clear goal clarification and interaction. Networking and knowledge transfer takes place in an empowering environment that needs time, interaction, motivation and also freedom for creation. The managed environment is the hierarchic part, where the goals are decided and the results are measured (Välimäki & Blomqvist, 2004.)

In this thesis it is understood as the following illustration shows that fundamentally in intra-firm co-opetition the starting point is the situation, where there first is cooperation. Organizational units share the same goals and cooperate towards them. Then competition is generated or arises in this relationship, meaning that there arises struggle of the same markets, resources or status, or managers can augment competition in order to improve e.g. development. Thereafter, the relationship becomes a co-opetitive relation.



1. Organizational units cooperate towards the company's common goals.
2. Competition arises or is generated by managers.
3. The situation becomes intra-firm co-opetition.

Figure 9: Illustration of intra-firm co-opetition.

2.2.3 Additional approaches

Dagnino and Padula (2002) present a dyadic model of co-opetition, but also a theory of network co-opetition. Their dyadic co-opetition refers to two companies cooperating and competing in one or several areas. Network co-opetition means multiple companies cooperating and competing in one or several areas[14]. These academics argue that the intra-firm – inter-firm view of co-opetition is too narrow, and propose that co-opetition exists in three levels: micro, meso and macro levels. Micro level refers to co-opetition inside companies in between units and persons (cf. intra-organizational co-opetition), meso level refers to co-opetition in between companies (cf. inter-organizational co-opetition) and macro level means co-opetition in between clusters and industries (Dagnino & Padula, 2002).

2.3 Advantages and disadvantages of co-opetition

Many scholars agree that co-opetition is preferable to unmixed cooperation and competition as an organizational strategy (Brandenburger & Nalebuff, 1996; Lado et al., 1997; Hamel et al., 1989; Zineldin, 2004). Co-opetition is a beneficial relationship increasing the efficiency and effectiveness of companies. Resources are limited for all companies, and sometimes it is best to cooperate in order to get access to these resources. At the same time, competition pressures companies towards continual development in their operations (Bengtsson & Kock, 2000; Dagnino & Padula, 2002, Quintana-Garcia & Benavides-Velasco, 2004; Luo et al., 2006).

Co-opetitive relations are complex due to the differing nature of cooperative and competitive behavior. When co-opetitive strategy is

[14] Dagnino & Padula (2002) uses automobile industry as an example of network co-opetition.

shaped, both advantages and disadvantages need to be evaluated. Several benefits can be gained from co-opetition e.g. access to both new explicit and tacit knowledge, mutual learning, stimulated product development, reduced costs and efficient utilization of resources (Hamel et al, 1989; Lado et al., 1997; Rindfleisch & Moorman, 2003; Luo et al., 2007). Put differently, cooperation with a competitor increases both a firm's customer performance and profitability and innovativeness (Rindfleisch & Moorman, 2003; Quintana-Garcia & Benavides-Velasco, 2004; Luo et al., 2007). It is also argued that tacit knowledge can be shared and internalized only via actual cooperation, hence cooperation between competitors is beneficial (Miles et al., 2000; Quintana-Garcia & Benavides-Velasco, 2004; Nonaka, 2007; Luo et al., 2006).

Inter-firm co-opetition as an organizational strategy can bring benefits like reducing costs, when pooling resources and competences (e.g. R & D), information and knowledge sharing, tolerance of risk-taking, pro-activity in product development and anticipation of healthy competition (Bengtsson & Kock, 2000; Quintana-Garcia & Benavides-Velasco, 2004; Zineldin, 2004). In horizontally co-opetitive firms, there are higher levels of overlapping knowledge and lower levels of trust compared with firms in vertical co-opetition (supply chain). Overlapping information is shown to be harmful for innovative actions (Rindfleisch & Moorman, 2003). Upstream alliances (e.g. R & D, technology improvements) seem to have a stronger influence on a firm's profitability than downstream alliances (e.g. joint sales and marketing) (Luo et al., 2007).

Intra-firm co-opetition may generate organizational learning and development of processes or innovations, but even extend market overlap (Lado et al., 1997; Tsai, 2002; Välimäki & Blomqvist, 2004). Intra-firm co-opetition is also argued to improve organizational decision-making and to have an impact on both customer and financial outcome (Luo et al., 2006). Intra-firm co-opetition can unveil competing units latent know-how when knowledge is transferred (Tsai, 2002; Luo et al., 2006). It may also decrease the overlap information, though, overlap information is not always a waste, but also needed for the generation of innovations (Välimäki & Blomqvist, 2004). When an organization has a formal, bureaucratic hierarchy, cooperation tends to be more difficult resulting from the organizations headquarters interference and “commands” to cooperate, and there tends to be mistrust in knowledge (Tsai, 2002; Luo et al., 2006).

Intensive and frequent cooperation increases possibilities to understand and utilize complex information, and it decreases potential misunderstandings (Luo et al., 2006). However, if the mutual goals are unclear, resources are incompatible or the outcomes are unequally shared, there is a high risk for co-opetitive relationship to fail (Lado et al., 1997; Dagnino & Padula, 2002; Luo et al., 2006). Moreover, when the learning of a partner is unequal, the most dependent part can end up in a hold-up situation[15], i.e. this partner becomes that depending on the other partners e.g. knowledge that it cannot leave the relation. In a hold-up situation, the dependency is not reciprocal, but the other company may leave the relation after exploiting enough knowledge of the other company (Dagnino & Padula, 2002; Quintana-Carcia & Benavides-Velasco, 2004). Competition motivates to understand competitor’s actions, and to penetrate competitor’s knowledge and competencies. On the other hand, when cooperating with a competitor, there can be mistrust in received information but even unwillingness to receive information from the competitor in the fear of this possibly improving the source’s position and reputation (Luo et al., 2006.)

Also, trust may cause less desired situations. When there is a deep level of trust, companies may not dare to do necessary operations in the fear of harming the partner. This kind of “social lock-up” may be disadvantageous and difficult to break out of (Blomqvist et al., 2005). Nonetheless, co-opetitive relations evidently carry the risk that partners act opportunistically

[15] See different or lacking absorptive capacity, e.g. in Ritala & Blomqvist (2006, p. 10).

and capture outcomes of cooperation in self-interest. Audacious cooperation with a competitor can boost a much stronger rival. Such cooperation can hamper a firms operation by enabling the competitor first to monitor and then to imitate the firm's core competencies and tactics (Lado et al., 1997; Hamel et al., 1989; Dagnino & Padula, 2002; Rindfleisch & Moorman, 2003; Quintana-Carcia & Benavides-Velasco, 2004; Luo et al., 2007). Enthusiastic efforts to this kind of monitoring or protecting from it can again end in the loss of customer focus (Rindfleisch & Moorman, 2003), which may finally lead to the situation, where these intensive cooperative actions with a competitor have a negative impact on a firm's profitability (Luo et al., 2007).

2.3.1 Summary

The nature of co-opetition is explained in prior chapters. How co-opetition may occur between companies (i.e. inter-organizational co-opetition), but also, how it may appear inside a company (i.e. intra-organizational co-opetition). Generally, co-opetition is a conflicting phenomenon due to the co-existence of cooperation and competition. In cooperation companies or units aim towards common goal through sharing of complementary resources, when in competition the aim is to achieve individual benefits (individual goals). In the following figure (x) the prior presented illustrations of cooperation (figure 3, p. 21) and competition (figure 5, p. 27) are melted into one, as this is the case in co-opetitive relationships.

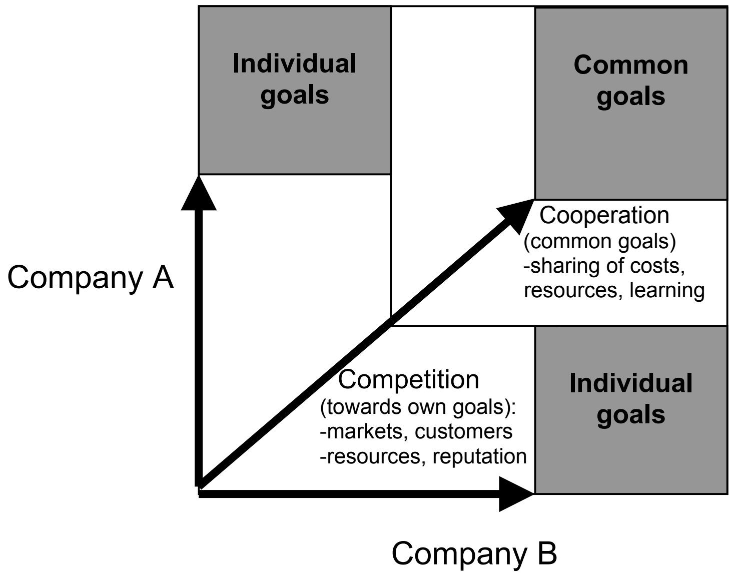


Figure 10: Illustration of co-opetition: cooperation and competition melted together.

2.4 Managing co-opetition

Co-opetition is shown to have both positive and negative outcomes. Many scholars emphasize the usefulness of co-opetitive strategies, and co-opetition as an organizational strategy being more effective than sole cooperation or competition (Luo et al., 2006). Also, academics emphasize that co-opetition is a challenging relationship and needs careful management because of its different components (Bengtsson & Kock, 2000, Dagnino & Padula, 2002). Because companies evidently cooperate in activities away from the customers, and compete in activities near the customers, the co-opetitive relationships need careful planning. It is obvious, that e.g. different units should not try to both cooperate and compete at the same time (Bengtsson & Kock, 2000). Cooperation needs to be planned, at its herein earlier mentioned prerequisites enabled. Also, when competing with another company or unit, it is preferable to analyze the competitor.

There are some criteria to take in to consideration when trying to establish a co-opetitive relationship with another organization: attitude, trust, integrity, strategic, cultural and technological fit and organizational agreements (e.g. costs and results) and integration (Dagnino & Padula, 2002; Quintana-Garcia & Benavides-Velasco, 2004; Blomqvist et al., 2005, Zineldin, 2004). Scholars have found some essential requirements that need to be fulfilled, and also, some investments to be made when forming or being in a coopetitive relationship. According to social capital theory (Nahapiet & Ghoshal, 1998), structural, relational and cognitive dimensions are important in order to feel belonging. While Miles et al. (2000) call these time, trust and territory, Tsai (2002) discusses organizational coordination as hierarchic structure and informal ties. Luo et al. (2006) emphasize ability and intensity of cooperation, whereas Blomqvist et al. (2005) states the importance of both trust and contracts. Välimäki & Blomqvist (2004, p. 21) point that cooperation needs indirect management while competition needs to be managed directly.

Some useful strategies can be found in network management perspective (Klijn, 2005), where the manager is not stable but can vary, or the management can be divided. The manager's role is to create structure and opportunities for interaction, but also to motivate the parts to participate. According to Klijn (2005) it is important to focus on the network's composition (e.g. actors positions), network's outcomes (costs and benefits) and network's interaction mechanism.

	'Classical' perspective	*Network perspective*
Dimensions		
Organisational setting	Single authority structure	Divided authority structure
Goal structure	Activities are guided by clear goals and well-defined problems	Various and changing definitions of problems and goals
Role of the manager	System controller	Mediator, process manager, network builder
Management tasks	Planning and guiding organisational processes	Guiding interactions and providing opportunities
Management activities	Planning, design and leading	Activating actors and resources, influencing network conditions and handling strategic complexity

Figure 11: Two perspectives on network management
(Klijn, 2005, p. 331).

2.4.1 Creation of the prerequisites for cooperation

As it is explained in prior chapters, competition is a relationship that may occur due to circumstances. Companies or their units try to attract same customers, struggle for same resources or perform best in order to get status. It is useful to analyze the competitive environment and tension. A company should determine whom it sees as competitors, and then scan competitor's operations, if possible. There is no need to plan the relationship itself, more to understand the causality. On the contrary, cooperation is a relationship that needs planning and certain circumstances in order to be successful and fruitful. The following chapters describe some of the prerequisites for cooperation. Also, one model for competitor analysis is presented.

2.4.1.1 Shared goal, resources and common language

One basis for cooperation according to scholars is a shared vision of common goal (Miles et al. 2000; Houldsworth & Alexander, 2005). The requirements and needs of both or all partners should be discussed early. Frequent interaction is important for the cooperation, and even so is a common language (Nahapiet & Ghoshal, 1998; Spekman et al., 1998; Houldsworth & Alexander, 2005). This meaning understanding each other, not only referring to native language, but even rhetoric and semantic meanings and "codes", hence the lack of common understanding can cause mistrust and passive behavior (Nahapiet & Ghoshal, 1998; Eriksson & Lehtimäki, 2001). When observing and comparing own inimitable resources with other firms a manager can easier find reasons to cooperate with a competitor with complementary (unremoveable) resources (Das & Teng, 2000). Also, the capacity to understand each other's knowledge and to learn may suffer if there is unequal absorptive capacity (Ritala & Blomqvist, 2006), and it is important to evaluate this capacity before starting co-opetition. Välimäki and Blomqvist (2004) state that it is important to have clear goals in competition, and describe the managerial environment to be important for focusing on the business and the target.

According to Birkinshaw and Lingblad (2005) common norms are important, meaning commonly shared understanding of accepted behavior. Not only for the managers but also throughout the organizations or units in this relationship.

2.4.1.2 Interaction, time and trust

According to scholars, time for social interaction is an important investment (Spekman et al., 1998; Miles et al., 2000, Tsai, 2002) and is needed for the partners to meet and create the essential trust and the insight of each other's capabilities (Nahapiet & Ghoshal, 1998; Bengtsson & Kock, 2000; Luo et al., 2006). Social interaction and its intensity are essential for co-opetition, and they are argued to have a positive impact on cooperation (Miles et al., 2000, Tsai, 2002, Välimäki & Blomqvist, 2004; Luo et al., 2006). Also, the ability to cooperate is important. According to Luo et al. (2006), this means identification of the valuable assets worth sharing, absorptive capacity of these and the capability to internalize them. In a hierarchical organization (e.g. centralized) cooperation may be less successful due to unwillingness of the units. This can be an outcome of a strong guidance of the head office that causes lack of confidence in head office's motives and fear of favouritism of one unit (Tsai, 2002.) Informal cross-unit interactions are effective in building information channels and creating trust. These volunteer informal ties are effective for sharing ideas and increasing knowledge flow and recommended to be fostered (Tsai, 2002), especially when individuals are argued to guard and share selectively the information they possess (Gilmour, 2003) and they may not share knowledge if they do not trust each other.

Trust is one important factor for successful cooperation. It is argued that trust decreases control and monitoring of the partner, and it increases the willingness to cooperate, even if trust may also cause a lock-up (Nahapiet & Ghoshal, 1998; Blomqvist et al., 2005). "Trust develops gradually, and a common future (common goal) is a strong motivator for a trusting relationship” (Blomqvist et al., 2002, p.10). Also, commitment shown in actions is argued to develop trust (Zineldin, 2004). According to Luo (2008), so-called boundary spanners are important, when creating a trustful relationship between organizations.

2.4.1.3 Territory and coordination

Territory means an invisible space or a form of interaction, where willingness and attitude for sharing, and voluntariness are core elements (Miles et al., 2000; Tsai, 2002). According to Nahapiet and Ghoshal (1998, p. 244), the structure of a network is important meaning whom to reach and how to reach them. An adequate mental territory (cf. attitudes) is needed for successful cooperation, and informal interactions are recommended cross organizations (Zineldin, 1998; Miles et al., 2000; Tsai, 2002; Luo et al., 2006). Positive attitude towards cooperation is important, since the lack of engagement can appear e.g. not respecting the common meetings (being late, leaving early or not showing up at all), and that this causes mistrust (Bock & Kim, 2002; Houldsworth & Alexander, 2005).

Organizational coordination is important (Spekman et al., 1998; Tsai, 2002). This meaning how an organization links its’ units together using a formal hierarchical structure and informal free-form ties. Both of these have a significant impact on cooperation, especially knowledge sharing (ibid.). According to Tsai (2002) a formal hierarchy (e.g. centralization) has a negative impact on cooperation with competing units causing inefficiency and passivity. It causes even mistrust in headquarters motives to interfere in the fear of favoritism. This kind of headquarters orders to e.g. cooperate may be called as ”‘participation by command” (Eriksson & Lehtimäki, 2001), which may not be fertile for cooperation. On the other hand informal, lateral ties based on voluntariness tend to have a positive effect on sharing e.g. of knowledge (Tsai, 2002). Also, Miles et al. (2000) point the importance of non-hierarchic management in cooperative relationships.

On the contrary, voluntary free-form interaction cross units have a positive impact on cooperation (Tsai, 2002; Bock & Kim, 2002). Välimäki and Blomqvist (2004) emphasize an empowering environment and indirect managing being necessary for voluntary and independent cooperation. Social interaction cross organizations is recommend, because it may enhance positive attitude towards sharing, foster trust, and uncover unofficial ties through which e.g. voluntary knowledge sharing is possible (Spekman et al., 1998; Bock & Kim, 2002; Tsai, 2002; Luo et al., 2006).

As Tsai (2002) presents, formal, organizational hierarchy, in the form of centralization, has a negative impact on cooperation and cause unnecessary costs for the organization. Units may become passive in highly centralized organizations. Cooperative actions are not voluntary, but based on authorized commands that do not enhance for example knowledge sharing. Centralization may also affect competition between units by increasing negative reactions to superior interference in decision-making (ibid.). Even if Tsai (2002) studied a multinational organization (intra-firm co-opetition) this unwillingness to cooperate because of formal hierarchy may even occur in between companies (inter-firm co-opetition).

2.4.1.4 Contracts and rules of reciprocity

When forming a cooperative relationship, the distribution of control and power and equality between the actors is important to discuss (Spekman et al., 1998; Bengtsson & Kock, 2000, Blomqvist et al., 2005). If cooperation serves benefits only for one participant, it tends to fade. Hence, all the participators must be willing to share or give away something of value, and therefore, it is essential to discuss a balanced sharing of cooperation outcomes in advance (Lado et al., 1997; Hamel et al., 1998; Zineldin, 1998; Miles et al., 2000; Ketchen et al., 2004). Even though such a contract may be difficult to negotiate due to human bounded rationality, shortly partners' imperfect information of the existing situation and potential outcomes (Blomqvist et al., 2005), some kind of an agreement regarding e.g. behavior code and etiquette, mutual goals, needed actions and common rules is important to make. Such a contract serves also partially as a trust creating mechanism (Spekman et al., 1998; Miles et al., 2000; Houldsworth & Alexander, 2005; Blomqvist et al., 2005).

According to Välimäki and Blomqvist (2004), competition needs to be managed traditionally, directly with goals and control, so a written contract is important for defining both individual and common goals, but even for specifying the sharing of the outcomes (Blomqvist et al., 2002; Blomqvist et al., 2005).

2.4.2 Analysis of competitor

Market competitors are willing to exploit each other's knowledge and competencies, but they also have a tendency to understand each other because of the similarities of their business logics (resources and/or targeted markets). Scanning who these competitors are, but also profiling similarities is one way to analyze the co-opetitive situation. Since one motive for cooperation with a competitor is that the competitor possesses complementary, unique resources and capabilities, it is reasonable to try to analyze the competitor (Chen, 1996; Bengtsson & Kock, 2000; Tsai, 2002, Luo, 2005.)

Co-opetition as an organizational strategy needs an analysis, where the competitive environment and competitors are in focus. According to Spekman et al. (1998), potential partners and their suitability to cooperation is of important to study before getting into such a relationship. That is also emphasized by Nalebuff and Brandenburger (1997) who apply a game theoretical basis, and point the importance of an evaluation of the environment before making actions. It is important to study the partners' competitive motives. Chen (1996) presents a competitor analysis model (figure 10), where both the overlap of markets and the competing companies' resource similarity are evaluated. Even if it may be difficult to get this kind of information of the competitor, the analysis is important for noticing the overlapping markets or resources hence these are the factors that according to scholars cause competition (Porter, 1987; Chen, 1996; Bengtsson & Kock, 2000; Birkinshaw, 2001; Tsai, 2002; Luo, 2005).

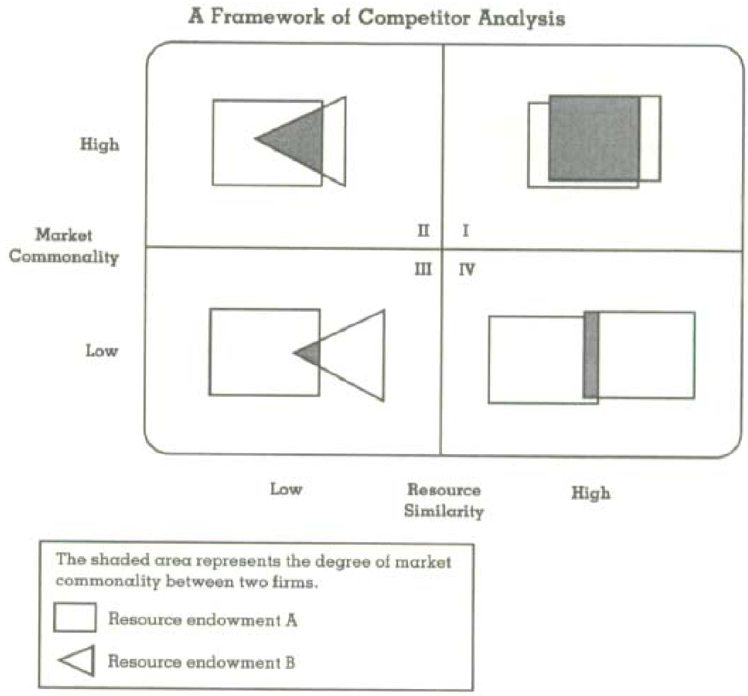


Figure 12: A framework of competitor analysis
(Chen, 1996: 108).

Chen (ibid.) points that one determining factor is the market overlap. The market overlap means competition where the companies or units try to attract the same customer groups. It also refers to competition where the companies or units offer very similar products or services. Meaning that they are not seen as complementors but as substitutes when the customer chooses one or the other instead of choosing both. Chen (ibid.) also mentions that according to the resource based view resources cause competition and are worth an analysis, although it may be difficult to get the view to competitor's resources. This means, that companies that need very similar (limited) resources in their operations, naturally compete for these resources.

2.4.3 Failure

Academics have studied motives, structure and determinants of co-opetition. Also, advantages and disadvantages have discussed, but there are not many suggestions for managers in a situation, where the relationship fails. Klijn (2005) presents, that because strategic relationships are planned for outcomes, a company should leave the relationships that are not advantageous, and search for new fertile networks instead. According to Birkinshaw (2001), in the study of internal competition, there is a possibility of a severe feeling of loosing, when failing to e.g. produce or get ideas through, and that this may lead to passivity. This situation should be considered in advance, and of course, avoided.

2.5 Summary

In this chapter, academic point of views to co-opetition are discussed. The first three sub-research questions are answered, starting with studying and describing the nature of co-opetition. Co-opetition is a conflicting and challenging concept that finds explanation from different academic approaches. The resource based view and the knowledge based view emphasizes that companies and their units have a mixture of unique resources, valuable knowledge and capabilities, which cannot be removed but which are be needed. Therefore, it is beneficial to cooperate with each other. Social capital theory presses the importance of relationship, and also knowledge or resources that can be accessed through these relationships. The environment is in continual change, therefore, companies have to concentrate in their ability to change. The dynamic capability view gives motives for co-opetition. No company can survive without some consideration to economic actions, and the transaction cost theory is one essential point of view, when discussing co-opetition and its motives.

When studying co-opetition, the motives can be best found by examining the motives for cooperation and competition separately. Companies or units cooperate towards mutual goals in order to get and share resources, expertise and capabilities, but also learning. In other words, companies or units cooperate for value creation. Cooperation may produce outcomes that companies or units cannot achieve alone. Moreover, cooperation gives companies or units the possibility to concentrate on their core competence. Obviously, competition finds it motives occasionally in the same theories than cooperation. Competition arises in companies' or their units' struggle for existence. Companies and their units have to compete for scarce resources both outside and inside the companies, but also for market shares and customers. Put shortly, companies and units compete for value possession and utilization.

There seems to be some fundamental factors to enable a fruitful cooperation. A common goal is one important factor, but even mutual time spent together, sufficient interaction and communication are essential for cooperation. Also, in cooperation, trust is needed. The attitude towards cooperation needs to be positive, but also the ability to understand each other is important. Cooperation has many benefits, but it has downsides as well. Intensive cooperation may hinder competition that is fertile to development. It may also lead to irrationality and narrowness of ideas in highly eager consensus efforts. Competition as well has both positive and negative outcomes. Competition is a strong driver towards companies' and units' development and learning. Very aggressive competition may lead to negative results in increased costs and overlapping operations.

In academic literature, co-opetition is approached both via inter-firm and intra-firm perspective. Co-opetition between companies appears in cooperating by sharing unique, valuable resources, and at the same time striving to get and use unique resources by oneself (competition). Because of this, co-opetition consists of both friendliness and hostility. It seems that companies cooperates in activities away from the customers, but tend to compete near the customers. There are different perspectives for inter-firm co-opetition: vertical, horizontal and network view. The vertical view refers to supply-chain relationships, the horizontal view refers to real competitors, and the network co-opetition means simultaneous cooperation and competition between clusters and multiple companies.

Intra-firm co-opetition is a less studied field, but it is evident that it exists inside companies. Intra-firm co-opetition appears between organizational units in knowledge sharing and organizational learning for organizations common benefits (cooperation), and in gaining internal resources and/or external markets for units' own benefits (competition). Co-opetition can also be viewed in between innovative companies' units and their processes. Units compete for internal scarce resources, internal position and prestige, but they also have to cooperate towards company's common goals. It seems that units share information through informal social interaction more willingly than through formal hierarchic ways. It is also obvious, that there is motivation to cooperate with a competing unit in order to get access to their knowledge and capabilities, and that understanding competitors knowledge is possible because of the similarity of business logics. Both inter-firm and intra-firm co-opetition needs management, and coopetition and competition need to be managed differently. Cooperation needs to be enabled by "freedom", whereas competition needs directive and traditional management.

This thesis also searches answers to question: what advantages and disadvantages co-opetition involves. Academics agree that because of its advantages, co-opetition is preferable to unmixed cooperation and competition. Co-opetition increases the efficiency and effectiveness of companies, it enables extensive use of scarce, unimitable resources, and it drives companies towards continual development in their operations. It is obvious, that co-opetition generates organizational learning, and may unveil latent know-how in companies. There are also some challenges in a co-opetitive relationship. If the learning pace is unequal, it may lead to a hold-up situation. There may also occur mistrust in received information, but even unwillingness to receive information from the competitor. Finally, a careless cooperation with a competitor can create a much stronger rival. Intense co-opetition and focus on the relation may end in the loss of customer focus, which may indeed have a negative impact on a firm's profitability.

The third sub-question of this thesis is to examine how co-opetition can be managed in companies. There are some fundamental factors to consider before trying establishing a co-opetitive relationship. Structural, relational and cognitive dimensions are important in order to feel bond. A shared vision or a common goal is important. Frequent interaction and a common language are essential, because of the lack of common understanding can cause mistrust and negative attitude towards cooperation. Also, commonly shared understanding of accepted behavior is important. Social interaction, its intensity and volunteer informal ties are essential for co-opetition. Also, trust one important factor, because it decreases control and monitoring of the partner. Contracts and rules of reciprocity need to be discussed in co-opetitive relationships. It is essential to discuss a balanced sharing of cooperation outcomes. Such a contract serves also partially as a trust creating mechanism. Since one reason to cooperation with a competitor is that the competitor possesses complementary, unique resources and capabilities, it is reasonable to try to analyze the competitor and the motives. In the following table the most relevant co-opetition articles, their contexts and major findings are recapitulated.

2.5.1 Table of co-opetition articles relevant for this thesis

Author	Context / Theoretical basis	Findings of co-opetition	Cooperation	Competition
Bengtsson & Kock, 2000	Inter-firm co-opetition A qualitative multiple case study in the field of industry: -two Swedish linen industry organizations -six Swedish brewery organizations -four dairy industry organizations in Finland. Basing on: Resource based view, industrial economy view, strategic alliances.	Co-opetition is defined as a dyadic complex relationship that consists both friendliness (common interests) and hostility (conflicting interests) at the same time. Co-opetition divided in three types: cooperation-dominated, equal and competition-dominated relationships. The activity position in relation to customer matters: cooperation in activities that are not near customer (e.g. product development) and competition in activities that are close to customers (e.g. sales).	Firms can compliment each other through cooperation by unique competencies, but also reduce costs, shorten lead times and improve reputation. In cooperation the actors are trying to maintain direct interaction	Competition is considered to be the driving force to innovative efforts and development of competitive advantage. Competition by nature is to try to avoid direct interaction.
Dagnino & Padula, 2002	Inter-firm co-opetition *(Intra-firm co-opetition)* Literary examples, mostly in automobile-industry. Basing on: Transaction cost view resource based view, industrial economy view, relationships marketing.	Co-opetition is defined as "an incomplete interest and goal congruence". Co-opetition is divided in four types: 1) simple dyadic, 2) complex dyadic, 3) simple network, 4) complex network by the number of interdependent firms and the level of value chain. Co-opetition strategy is presented in levels (micro, meso and macro) with different variables (actors, knowledge value and economic value). *Micro level referring to intra-firm co-opetition*.	Cooperation is interaction towards mutual commitment and shared values. If cooperation is not in balance it may cause a hold-up situation for the more dependent party.	Competition may cause a learning race, when the other may first exploit one actor's knowledge and thereafter the cooperation is cut off.

Author	Context / Theoretical basis	Findings of co-opetition	Cooperation	Competition
Quintana-Garcia & Benavides-Velasco, 2004	Inter-firm co-opetition A panel data of 73 small and medium biotechnology firms. Basing on: Transaction cost view, resource based view, game theory.	Organizational relationships seen as up-stream and down-stream relations. Competition with downstream relationships (competitors) is shown to have a positive effect on innovations. Co-opetition gives access to extended knowledge and capabilities, and opens a close view to competitor's moves but may also create a stronger competitor.	Cooperation seen as a relationship where competitors complement each other, and can concentrate on their own core competence. In cooperation the possible different absorptive capacity may cause problems in unequal benefits.	Competition seen as a structural relationship (vertical or horizontal competition), that maintains a tension and stimulates to development and innovation. When establishing a relationship with a competitor, there is a risk the costs of this effort may rise above the future benefits.
Tsai, 2002	Intra-firm co-opetition A quantitative case study in a petrochemical organization within 24 units. Basing on: Knowledge based view organizational capability View, social capital theory.	Multiunit organization seen as a social structure where organizational coordination and organizational capability are related. Official hierarchy (herein centralization) affects knowledge sharing negatively and unofficial unstructured ties (social interaction) affects knowledge sharing positively when units are competing for external market share instead of internal resources. Suggestions to manage managing co-opetition both by using formal organizational hierarchy ties and informal social ties.	Cooperation means capturing new knowledge by information sharing and mutual learning. Useful for cooperation to foster social cross-unit interaction informally.	Competitors tend to understand each other's knowledge due to similar business logic. Can cause negative attitude towards head office interference in decision-making.

Author	Context / Theoretical basis	Findings of co-opetition	Cooperation	Competition
Välimäki & Blomqvist, 2004	Intra-firm co-opetition Constructive, literary research. Model not empirically tested. Basing on: Knowledge based view, dynamic capability view, social capital theory.	Theoretical model of innovation process´ phases where both cooperation and competition are visible: Processes where input of explicit information increases chaos, thereafter a creative chaos (cooperation), and till the end processes to rearrange new information (competition) and to decrease chaos. When processes are in balance final output is innovation. Suggestions for managing co-opetition are made via environments (a stable enabling environment, an empowering environment and a managed environment). All these proposed to be managed differently.	Cooperation by sharing knowledge (tacit / explicit) enables emergence of innovations. Negative impact: efforts to consensus may hinder radical, new ideas.	Internal competition is used to differentiate value and bring in alternatives. Negative impact: Redundant knowledge and imbalance may cause block of cooperation.
Luo, 2005	Intra-firm co-opetition Theoretical research focusing on an international multi-unit organization's sub- units. Basing on: Resource based view, knowledge based view.	Co-opetition is defined as organizational units' interdependent actions in value creating (cooperation) and interdependent actions in trying to capture value (competition). A typology of co-opetition is presented (due to the degree of cooperation and competition): four roles are suggested: implementing, demanding, contributing and commanding.	Cooperative performance in four dimensions: technological, operational, organizational and financial. Cooperation is determined by strategic interdependence, subunits form (ownership) and technological linkage.	Competition for inter-company resources and support, intern position and extern market growth. Local environment, market overlap and capability weakening determine competition.

Author	Context / Theoretical basis	Findings of co-opetition	Coperation	Competition
Luo et al., 2006	Intra-firm co-opetition A quantitative study in high technology firms: data from 163 firms in China. Basing on: Knowledge based view, social embeddedness theory, social capital theory.	Inter-unit co-opetition improves a firm's customer performance and financial outcome and promotes knowledge sharing, thus should be strategically encouraged. It also reduces knowledge overlap. Co-opetition serves a possible strategy to find potential (tacit) value in knowledge creation. Both the ability and intensity of interaction are important.	Cooperative interaction enlightens useful knowledge and best practices for the whole company. Cooperation fosters effective strategic decision-making. Negative effect: when cooperating with a competitor customer orientation may weaken due to mistrust in information.	Competition may uncover invisible know-how when unit is absorbing strategic knowledge from co-unit. Negative impact: competition impedes gaining knowledge but also receiving it due mistrust but even to fear of the source unit's heightening position (value).

3 Empirical context: Co-opetition in public sector companies

This nine month long research started in September 2007 and ended in May 2008. The empirical research of this thesis was conducted as a qualitative research. The focus of this empirical part of the research was to study why and how organizations of public sector cooperated and competed with each other. Also, the management of co-opetition was under observation. The most suitable qualitative research strategy was chosen: The phenomenological research strategy, where the researcher aims to identify the phenomenon as described by the participants, and where the researcher utilizes own experiences, when trying to understand the phenomenon (Metsämuuronen, 200; Creswell, 2003).

3.1 Presentation of the case context and organizations

Since the main research object was to find out how co-opetition possibly occurs in a public company’s operation, there had to be study subjects that consisted of public company units, but also subject consisting of a public and private company. This was seen necessary because of the multifaceted nature of co-opetition, i.e. inter-firm and intra-firm co-opetition.

The empirical research consisted of three different companies: two public sector companies and one private company. These two public companies belong to a public group of companies. This public group of companies operates in the South-Eastern Finland, in a middle-sized city. The city is a commercial and business center for the municipal surroundings consisting of well over 100 000 inhabitants in the province. The surroundings and the city have a brisk Russian business, which provides the city a remarkable position with government-recognized status delivering several possibilities for public financing in the development and investment projects. The region is focused mainly on wood and metal processing, but also on power production technologies.

The parent company for the public group of companies is called herein the Group Company Ltd. This Group Company Ltd. is owned 100 % by the city. The Group Company Ltd. runs the group of companies industrial policy by developing its subsidiaries operative business. The parent company offers the group of companies financing, financial administration and other operative support services. The group of companies consists of 10 companies (September, 2007).

The first two companies of this empirical research belong to the Group Company Ltd. These public companies are called herein as Alpha Ltd. and Beta Ltd. The third company, Gamma Ltd., presents the private sector: Gamma Ltd. offers similar services in the same district, hence it was chosen as one comparative part of this case study, but there is also some common ownership. The parent company of Gamma Ltd. is a public limited company (Plc.), which is also a minor shareholder of Beta Ltd.

Shortly, Alpha and Gamma have a natural link to each other via common ownership being both public companies in the same group of companies. Beta and Gamma have also some link to each other because the parent company of Gamma Ltd. owns some stocks of Beta Ltd.

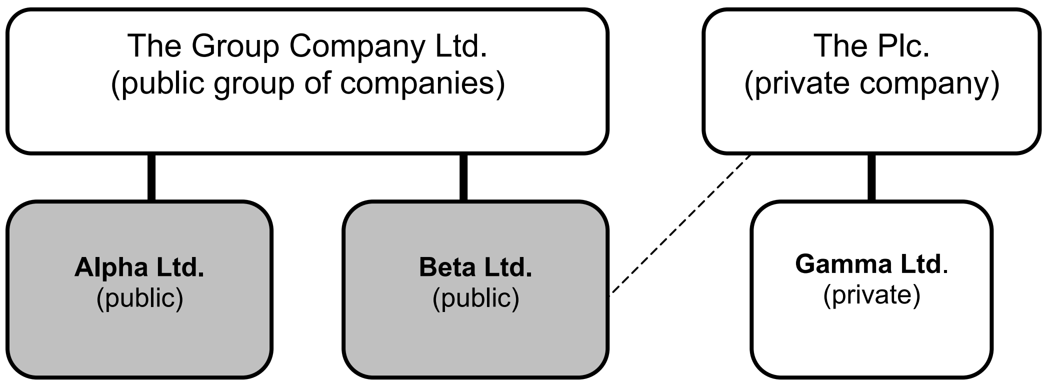


Figure 13: Case study organizations

3.1.1 Alpha Ltd.

Alpha Ltd. is a non-profit organization that offers guidance and development services for entrepreneurs in the city and its surroundings. The company designes different development projects and puts them in the practice. Through these services public financing is channeled to shareholder municipalities' entrepreneurs, because the services of Alpha Ltd. are free of charge for entrepreneurs. The fundamental idea is to follow the business strategy of the city, i.e. to make the region an inviting business environment and to create more jobs. Operational key factor is networks (company's home pages, CEOs presentation September 27th 2007).

The company was founded in 1999, and it is owned by the surrounding cities and municipalities. The company has complete service products aimed generally for entrepreneurs. These services consists of:

- general services for entrepreneurs
- start-up services for entrepreneurs
- internationalization guidance and services for entrepreneurs
- financing information
- facilities and location services.

The company acts also as coordinator in different projects guiding firms at necessary direction. The company has 12 employees, from which 9 persons serve and help entrepreneurs and 3 persons work with tourist information (company's home pages, CEOs presentation September 27th 2007). The company had recently organizational changes and changed even its' name.

3.1.2 Beta Ltd.

Beta Ltd. is a public, non-profit company that aims at promoting new businesses in the city surroundings. The company focuses on linking entrepreneurship, research and public administration, and by this Beta Ltd. aims at developing small and medium-sized enterprise's (SMEs) know-how, networking and internationalization. The fundamental idea is to create links between various parts of business environments, and to find new innovations in the intersection of different actors and industries. Operational key factors are partnerships, networks and enhancement of business activities (company's home pages, CEOs presentation September 27th 2007).

The company was founded in 2005, and it is mainly owned by the city. The city owns the majority of the capital stock, around one fifth is owned by the Plc. (see. the parent company of Gamma Ltd.), and a minor share is owned by a third part. There are no complete service products, but the services are based on projects that emerge from customer needs. These projects are financed through development and project financing. Some of Beta Ltd.'s service projects:

- eBusiness development for SMEs
- development of public sector's processes and strategies
- development of business growth of SMEs
- development of SMEs Russian operations

The company offers development services, and the company describes itself as a coordinator linking different parts know-how together. The company has 10 employees (company's home pages, CEOs presentation September 27th 2007).

3.1.3 Gamma Ltd.

Gamma Ltd. is a private, non-profit business incubator that aims at assisting starting technology-based entrepreneurs and at developing their business. The fundamental idea is to support and develop technology-based innovations from ideas into businesses via competent planning and development. Key factors are professionality, organizations support and networks (company's home pages, CEOs presentation October 9th 2007).

The company was founded in the late 1980 under another name. Today the company is a part of a bigger national public limited group concern. In year 2006 the Plc. bought out the total share capital and became the parent company. Yet Gamma Ltd. belongs to a private group of companies it finances operations (i.e. projects or programs) partially with public funding (company's home pages, CEOs presentation October 9th 2007).

The company has service products that are standardized by the Plc. company group. The main services are incubations services focusing on technology-based entrepreneurs, e.g.:

- business idea evaluation
- business planning and growth
- financing advices
- internationalization services
- partners, mentors and networks.

The company operates as a consulting company employing own experts, but also using external expertise when needed. In Gamma Ltd. works five persons (company's home pages, CEOs presentation October 9th 2007).

3.2 Research study method and data collection

A case study method was chosen for the study: The focus group interview was considered suitable for the study due to the exploratory nature of the research, where the research focused on discovering and describing a new phenomenon in a specified environment, rather than determining the quantity of it (Metsämuuronen, 2001; Creswell, 2003).

A city concern in a middle-sized city in Finland was chosen for the research context. The empirical part of the research started in September 2007 by first meeting the CEO of the Group Company Ltd. Thereafter, all the CEOs of the companies in focus were met, and the concept of coopetition and the main research question were presented. All the CEOs gave also a presentation of their companies.

The interview questions (appendix 1) were composed according to the sub-concepts that emerged from the main concepts during the research of the academic literature. A few questions were adopted and modified from Uzzi (1997). The CEOs of the three companies chose persons for the focus group interviews. In order to have a view to cooperation and competition between the companies, the qualifications for the interview were that these persons worked within similar business areas or comparable concepts in each company. All the three focus groups consisted of three persons. Before the interviews all the nine participants received a short presentation of both the key concepts and definitions.

All the focus groups were interviewed in February 2008 in every company's own premises. The interviews were half-structured with open-ended questions: The topics were the same for all the groups, but the order of the questions could vary some depending on the flow of the discussion. The researcher's role was to act as moderator, and to ask specifying questions that were needed during each interview (Metsämuuronen, 2001; Creswell, 2003). The average duration of these interviews was 66 minutes. All the interviews were taped and the records were stored on a computer for transcription. Thereafter, the transcriptions were codified in accordance with the key concepts and sub-concepts used earlier in the construction of the interview questions (Metsämuuronen, 2001; Creswell, 2003). This abstraction became the basis for this thesis's final analysis, where the empirical data was compared with the findings of the academic literature review. It was obvious in practice, that the analysis of a qualified research occurred partially simultaneously with the data collection state (Metsämuuronen, 2001; Creswell, 2003).

3.3 Role and nature of co-opetition in public sector companies: results based on the case study

This thesis' main research question was "*What is the role and nature of co-opetition in public sector companies?* This main research question was divided, and answers to the first three sub-questions were searched in academic literature. Findings to these three questions were presented in chapter two. These findings gave an adequate base to the empirical research. There were clearly some key aspects, which emerged in several academic articles.

The empirical qualitative part focused also on three sub-questions. In a search for co-opetition both cooperation and competition were studied. Even questions on co-opetition management were presented in the focus group interviews. The analyzing and measurement were made according to the key concepts and topics that had emerged in academic literature. After all the six sub-questions were studied via the empirical part of this thesis and after the empirical data was analyzed, the main resource question could finally be answered: What really is the role and nature of co-opetition in public sector companies, how does cooperation and competition occur, and how might these simultaneous relations be managed?

Inter-firm co-opetition

When the nature of co-opetition was studied, the companies where asked to describe how they perceived their inter-relations. All the companies described the relation similarly, where Gamma Ltd. operated as a subcontractor, delivering their special know-how in technology-based entrepreneurship when these public companies needed it. Both the public companies described their relation to Gamma Ltd. as a vertical relation (Bengtsson & Kock, 2000). The relation could even be defined as an up-stream linkage (Quintana-Garcia & Benavides-Velasco, 2004), where the companies are co-partners providing the end-user (i.e. customer) different services, and where the final customer is a third part (entrepreneur). This opinion was supported in Gamma Ltd. It was emphasized by all the companies, that the relationships were clearly cooperation-dominated, consisting of more cooperation than competition (Bengtsson & Kock, 2000).

Intra-firm co-opetition

Also, intra-firm co-opetition could be found in between Alpha Ltd. and Beta Ltd. in the same shape that it was defined earlier in this thesis (in chapter 2.2.2). These two public companies described both their inter-relation to be self-evident. Both of these companies and gave a view how they cooperated because they were parts of the same group of companies, and worked towards the same goals following the city's and the parent company's business strategies. There were evident descriptions how there were formal hierarchies and commands to participate. But also, how there were some informal ties between people who knew each other well, even if these informal ties were obviously something that could be developed and enhanced more, because they were seen as useful and trustworthy ties (Tsai, 2002).

3.3.1 Cooperation in public companies

One part of the empirical research focused on the sub-question: *Why and how do public sector companies cooperate with others*? As it came clear in the academic literary review, both motives and preconditions seemed to be essential for cooperation and these were studied in the empirical research. Also, advantages and disadvantages of cooperation were discussed and compared to findings of academics.

3.3.1.1 Motives for cooperation

<u>Common goals</u>

It came clear in the literary review that companies or their units cooperate towards mutual goals (Gnyawali & Madhavan, 2001; Quintana-Garcia & Benavides-Velasco, 2004). To study the goal congruence, the participants were asked, whether they had common goals with the other two companies, and how their goals probably differed causing conflicts? Evidently, the two public companies (Alpha Ltd. and Beta Ltd.) shared a very precise common vision, which was to improve the region's business life and to promote employment as it was according to the city's strategies. Gamma Ltd. had partially the same vision when its' goal was to trigger entrepreneurship of a specific business area. Due to these converging goals, the companies saw that they needed each other's competence and capabilities.

It came also clear that all three companies had common projects, where two or all three companies participated. The interviewees mentioned common agreements several times. It did not become quite clear if the companies had written or verbal contracts for cooperation. In this analysis, it was assumed that the contracts were written because of the nature of the public project financing: In the applications all participators and their roles are required. The interviews showed that the companies had also some differing goals, but these were not seen to cause any conflicts.

The participants were also asked to explain how they understood each other's operations. This question was meant to clarify the internal roles: common goals but also possible market overlap. The interviewees had the same view. The roles of the companies were mainly clear, and they knew enough of each other's business goals. Although it became obvious, that there was willingness to know and understand each other better, but there was not enough time for that kind of meetings. As a result, the interviews showed that both Alpha Ltd. and Gamma Ltd. and Beta Ltd. and Gamma Ltd. had some common goals (public-private companies). Also, Alpha Ltd. and Beta Ltd. had mutual goals (public units).

<u>Resources</u>

In this research, the ideas of the resource based view (Wernerfelt, 1984, 1995) were followed. Because of the heterogeneity of companies, the companies were willing to cooperate for resource possession. When searching the motive for cooperation, the interviewees were asked to describe the unique resources their company possessed, but also unique resources that they supposed to be found in these other two companies' possession. They were also asked what kind of valuable resources they shared with either of the other companies. It became obvious, that one "scarce" resource, which was not noticed as a resource in the academic literary review, was time. There was willingness to cooperate even more, but there was lack of time to organize e.g. common meetings, where more common goals and deeper common understanding could be created.

One valuable, unimitable resource was clearly own and others relationships (networks). There was evidently willingness to get access to other's networks, but also willingness to "offer" own relationships for others to utilize. As Beta Ltd. explained how valuable expertise Gamma Ltd. was supposed to have (there was not a clear view of how large these expertise networks were). This view got support from Gamma Ltd. who saw its' own networks useful and valuable for both Alpha Ltd. and Beta Ltd.

It was evident that the scarcest resources were economic resources. The interviewees had all the same view concerning financial resources. These were shared in common projects, and they were also one clear reason to cooperate. It came clear, that the financiers and sponsors demanded cooperation and expected larger projects with multiple participators, which did lead to cooperation in planning and executing these projects. Also, the competences were shared, e.g. in between Beta Ltd. and Gamma Ltd, where the first had used the competence and networks of the latter. Also, Alpha Ltd. and Beta Ltd. shared competence, when the latter showed and assisted the first in creating and planning publicly financed projects.

Even some human resources were shared, but this occurred only in between the public companies (Alpha Ltd. and Beta Ltd., which belong to the same group of companies). As a result, the interviews showed that the resources gave motivation for cooperation, and that there was cooperation in creating common projects or openings as some interviewee called them. This occurred both between Alpha Ltd. and Gamma Ltd. (public-private companies) between Beta Ltd. and Gamma Ltd. (public-private companies) and also between Alpha Ltd. and Beta Ltd. (public units). In other words, this empirical research confirmed, that public companies cooperate with private companies, but also, that public companies cooperate intra-organizationally.

Sharing of costs or risks

As one motive for cooperation was obviously, according to the transaction cost view, in the economic efficiency seeking (Williamson, 1996, 1998), the interviewees were asked if their companies shared costs or risks, and how this might have brought in benefits for their companies.

The interviews showed that there was insignificant cost sharing, except in the common projects, where the financial resources where shared but where the financial resources (searching financiers) were obviously the reason for cooperation, but not the cost sharing. Both Beta Ltd. and Gamma Ltd. shared the opinion, that there were shared risks in common projects. Both companies described how failure in common projects could have caused blots in their reputation, and this might affect future project financing (not getting any) and even loose of customers (mistrust in company's competence). Also, between Alpha Ltd. and Beta Ltd. the risk of becoming disreputable due to failure in common projects was discussed and supported. As a result, this empirical research did not support the academic theory that costs were one motive for cooperation between companies, but sharing of risks was noticed.

Learning

The dynamic capability approach (Teece, 1997, 2007) was also followed in this thesis, and reasons for cooperation were studied through this view. The participants were asked to describe situations for common learning, and what they assumed to have taught for one another during the common past projects. The interviewees had all the same opinion that learning was not one of the motives for cooperation. There was no evidence of common learning, neither of teaching others drove the companies to cooperate with each other. Although one participant from Alpha Ltd. emphasized that what these companies had learned together was cooperation itself. There were obviously some failures when trying to cooperate in the past, but there were also "lessons learned", and the companies nowadays knew how to function and communicate with each other. As well, Gamma Ltd. proposed that their service processes, which were standardized, might be useful to learn for Alpha Ltd. and Beta Ltd. for their service development. As a result, the interviews showed that learning was not a motive for cooperation between these public companies or between public and private companies in this empirical research.

Additional motives

It became clear during the focus group interviews that the owner had a strong role that had an impact on cooperation. There seemed to be strict guidance in the city´s business strategy for these two public companies, Alpha Ltd. and Beta Ltd., to cooperate with each other. Both of these companies described that their cooperation is natural. Also, because the parent company of Gamma Ltd. owned some shares of Beta Ltd. there seemed to be natural cooperation due to the ownership. There were some clues that this might not be the case, if there was not any common ownership. There was evidence, that ownership clearly had an effect and gave motivation (even commands) to cooperate.

3.3.1.2 Prerequisites

Interaction and time spent together

Social interaction and its frequency are shown to affect cooperation positively (Miles et al., 2000; Tsai, 2002). The participants were asked to describe the relationships with the two other companies. They were also asked how they maintained existing links with these companies, or how they established new links. The interviewees even evaluated advantages and disadvantages in this kind of relationships. To measure the quality of interaction, several factors were noticed, when analyzing the recorded data: personal contacts, and both formal and informal meetings. The frequency of interaction was evaluated by how occasional or regular meetings there were.

The interviews showed that physical nearness seemed to have an effect on cooperation. When there was only a short distance in between the companies, the informal social interaction happened on daily basis, as both Beta Ltd. and Gamma Ltd.[16] described. This clearly had a positive impact on relationships. It came clear in the interviews that there were no regular meetings between the companies (not even between Alpha Ltd. and Beta Ltd., which belong to same group of companies), but that meetings were organized occasionally depending on the common projects. All the participants agreed that there was good communication between the companies, although all agreed that it was not frequent enough, and this lack of meetings might have caused some occasional misunderstandings. All of the interviewees described how they knew persons in these other companies, and how this helped communication. Obviously, the organizational changes and recent recruitment of new personnel had affected cooperation. Some of the interviewees described how it was easy to work with people they knew, and how there was some doubtfulness in new persons competence or experience, when there were no common executed projects yet with these persons.

As a result, the interviews of this empirical research confirmed that interaction is essential for cooperation and the lack of it may cause misunderstandings. The interviews showed that there were no regular formal meetings between these three companies, although there seemed to be both willingness and need for them. The interaction was not dense, even if two companies met often unofficially because of their office locations, but that interaction and communication is essential for cooperation in order to have the opportunity to get to know each other and evaluate each other’s competence and experiences.

Trust

Trust is evidently one important factor in successful cooperation (Nahapiet & Ghoshal, 1998). The question of trust is important for cooperation, and the interviewees were asked to describe trust in their relationships with the

[16] Beta Ltd. and Gamma Ltd. are located in the same suburban district in the same block of buildings, when Alpha Ltd.’s location is in the city centre, appr. 7 km distance to Beta Ltd. and Gamma Ltd.

other two companies. They were also asked to describe possible opportunism.

The participants agreed that trust was essential for cooperation, and without it the cooperation was to fail. It became evident, that the participants trusted in each other's companies: their expertise and keeping their promises, but it was also obvious that the trust between public units and trust between public and private companies was different. Alpha Ltd. and Beta Ltd. seemed to have solid trust between the companies due to the belonging to the same group of companies. They did not think that they would harm each other, but they also trusted each other's expertise and competence. Both companies trusted also in Gamma Ltd.'s competence and experience, but there was also an understanding that the strategic motives of Gamma Ltd. were somewhat different due to the parent company (the Plc.). However, there seemed also to be some mistrust. This was apparently because of some events in the history. But also, because of the replacements and changes of personnel, who had not been able to prove their expertise and competency yet. The interviews showed that there was occasionally some moderate opportunism, but it was not considered to cause any conflicts.

As a result, the interview confirmed that it was very important that trust both existed and was created in cooperation. It became also clear, that when trust was created, people needed common time in order to get to know each other and evaluate each other's competences. It was obvious, that trust exists between all of these companies.

3.3.1.3 Advantages and disadvantages

It came clear during the interviews that there was advantage of the cooperation between the companies. The commonly planned, larger projects seemed to have better possibilities in getting financing. This can be compared to the basic ideas of co-opetition in creating a "bigger pie"

(Brandenburg & Nalebuff, 1996). It was also evident that the companies thought their customer service had improved when they cooperated with each other, when they could guide customers to one another (there was a so called “one-stop-shop” –service, that meant that whatever of these companies could get the first contact with the potential customer, and that this company forwarded the customer to the best suitable company). Also, it seemed to be advantageous to belong this common network and receive information via others.

The interviewees found a few disadvantages in their cooperative relationships. It was obvious, that the most influential negative factor was the lack of time and interaction, which caused misunderstandings in cooperative roles, and even some confusion for common customers. It was also discussed (and mentioned herein in risks) how there was a risk in cooperation with others. All the companies saw that the reputation was essential, and how partners could suffer by loosing customers or potential financiers, if one part did not complete its assignment in common projects.

As a result, the interviews showed how cooperation and commitment to common projects brought in advantages, when searching financing for these projects, and getting information via other companies. But cooperation seemed also to carry a risk of damages of the company’s own reputation. Also, it became obvious, that only commitment or agreements do not cover common time and interaction, which are also needed in relationships.

3.3.2 Competition in public companies

The empirical research section aimed to find some answers also to sub-question: *Why and how do public sector companies compete with others?* The reasons for competition and the advantages and disadvantages were discussed during the focus group interviews.

3.3.2.1 Motives for competition

Market overlap

According to scholars (Chen, 1996), one motive for competition is possible market overlap (i.e. similar products or services), hence the participants were asked to compare their own and the other two companies' services and products. The answers were analyzed by the similarity of products and services, the similarity or overlap of customers, and the overlap of the business.

The interviews and the companies' presentations showed that there was clearly market overlap in some areas. The geographic region for the companies operations was the same, even if one of the companies (Gamma Ltd.) could serve also other external (non-municipal) customers. There were also many similar services, e.g. financing services, service (guidance) for business growth and internationalization services. The interviewees explained how their roles were clear for themselves: Gamma Ltd. had focused on the technology-based business area, and the other two had not segmented that strongly, i.e. Alpha Ltd. served entrepreneurs in general, and Beta Ltd. aimed to give services for SMEs. The interviewees agreed that their roles seemed not to be very clear from the customer's perspective in every case. Customers could turn into any of the companies in the need of services because customers did not know which company to contact, but that these companies agreed that the "one-stop-shop" –service was one answer to this dilemma.

The interviews confirmed that even if there was market overlap, it did not cause aggressive competition, but that there was cooperation in this area, and the customer was guided to the best suitable company for services.
It came clear that the present public financing would change its form in the future and financing would be channeled directly to the customers instead of the companies or their projects, and that this future change would

probably cause different competitive tension between these companies. As a result, the interviews showed that there was clearly some overlap in business area, in services and products, and in customer segments. Even if this was considered to cause competition in the academic literature, the interviewees seemed not to consider it as a reason for competition between these companies.

Resources

According to the resource based view (Wernerfelt, 1984, 1995; Chen, 1996), resources are limited and companies have to compete for them. The interview question was to describe the necessary resources for own business. Thereafter, the interviewees were asked to evaluate whether there was these scarce resources enough for all. The participants were also asked to consider where the allocation of these scarce resources was decided.

The interviews showed it clearly that there was competition for financial resources. The public financing for projects was the limited resource all these companies competed for, even though they also cooperated on the same area. All the companies, Alpha Ltd., Beta Ltd. and Gamma Ltd. competed for the governmental public financing for their projects and programs, even if Gamma Ltd. was a private company, it utilized also public financing for its operations. This type of governmental financing was allocated by e.g. Employment and Economic Development Centre[17], Finnish Funding Agency for Technology and Innovation[18] and the Regional Council[19]. Also, the interviews gave a view, how all these companies even competed for the local, public financing that the city government allocated. These local financial resources were also limited, but needed in every company. Human resources were also seen as one valuable and scarce resource, but human resources seemed not to cause any competition

[17] In Finnish: TE-keskus
[18] In Finnish: TEKES
[19] In Finnish: (alueen) Maakuntaliitto

between these three companies. As a result, the interviews showed that the companies competed for financial resources (governmental and local public financing). Even if this competition existed, it seemed not to be very aggressive, but more like a factor that often looped back to cooperation again.

Internal position

According to (Birkinshaw, 2001; Tsai, 2002; Luo, 2005), companies' units compete for internal position and reputation. This was also studied and the participants were asked how the owner's role affected the business operations and relations.

The internal position (i.e. internal status) seemed not to be an important matter for the focus groups, not even in between Alpha Ltd. and Beta Ltd., which were parts of the same group of companies. There seemed to be no competition of headquarters attention, although it became clear that the city government allocated some financial resources, and therefore all the companies (including Gamma Ltd.) wanted to have a positive reputation and good performance in order to get this type of local public funding. As a result of this empirical research, internal position was not a motive for competition.

3.3.2.2 Advantages and disadvantages

The participants could not find many advantages of competition, because the common opinion of all three companies seemed to be that there was only some moderate competition of financing different projects. Some interviewees mentioned that competition is generally beneficial because it forces companies to continual improvement and development, and that it was obvious that when trying to accomplish something (even in some self-interest), the efforts may be advantageous to the surrounding companies as well. It became evident that the possible disadvantage of competition might be not being able to plan or execute common projects.

3.3.3 The synthesis: Co-opetition in public companies

As it is illustrated in figure 2 (p. 7), the objective of this thesis was to study simultaneous cooperation and competition (i.e. co-opetition) in public sector companies' relationships. After the focus group interviews were analyzed and the findings were compared to the theoretical part of this thesis, it could be noticed that co-opetition occurred in public sector companies, although the competitive part seemed not to be very aggressive but moderate instead. Both inter-firm and intra-firm co-opetition could be found in this empirical research, following the determinants that have been described earlier in this thesis. Like Brandenburger and Nalebuff (1996) describe coopetition, it is efforts to make a bigger pie (cooperation) and activities in dividing it up (competition). According to this empirical research, that happened in between these companies. There were projects that needed to be planned within larger groups (i.e. demands of the financiers), and this planning was done together. And then there were project roles and outcomes, which needed to be shared and divided between the companies before the execution of these projects. That is basically what co-opetition is about.

Finally, this empirical research confirms that motivation for cooperation exists both between public and private companies, but also between public units. The companies share some common strategic goals concerning the city's region and strategies that are written. They share resources (competencies and expertise) in common projects. And evidently, even the owner's role has an impact on cooperation and enhances cooperation when there is shared ownership.

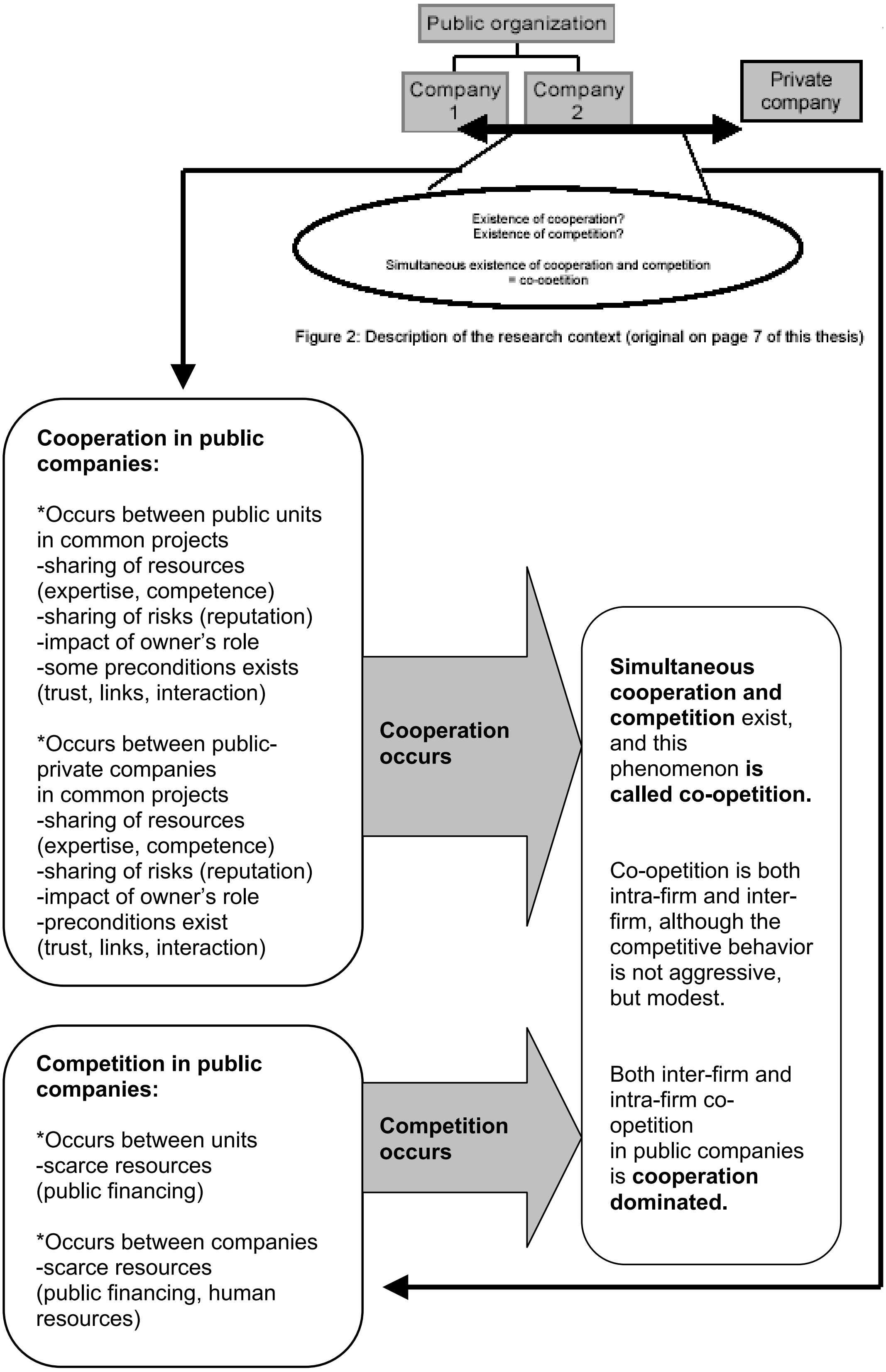


Figure 14: The synthesis: co-opetition in public sector

Some managerial implementations for co-opetition had already been found in academic literature. To compare if these findings could be implemented into the ideas of public sector management, the interviewees were asked how co-opetition could be managed in public sector companies, and also what benefits and drawbacks co-opetition might cause. Therefore the participants were asked the last sub-question: *How can co-opetition be managed in public sector companies?* The interviews confirmed that co-opetition needed management. It was obvious that the managing level needed to be the top management level. Co-opetition should not be managed at any operational level of the companies. It became also clear that there was a need for contracts or agreements to clarify the roles of co-opetitive parts in advance. The interviewees described how the internal roles between the companies needed to become clear before any common project, and that this was something that needed to be decided in between the top management (CEOs) in advance. It was also discussed, how the agreements (agreed operational limits) should be respected, and in case of disagreement, the top manager level should be the troubleshooting level. The operational level (the co-workers) should have the peace to continue their cooperation. There were not many opinions of advantages or disadvantages of co-opetition, and this might be the cause of the general denial of competition. When there was not seen to be competition, the discussion of simultaneous cooperation and competition was insignificant. Although, one participant commented that it was beneficial to have competitors near oneself, because that opened a window to competitors business, i.e. in some level they saw one another as competitors.

4 Conclusion and discussion

The role of public sector is evidently in change (e.g. Pollitt & Summa, 1997; Walsh et al., 1997; Rainey & Bozeman, 2000; Riege & Lindsay, 2006). These changes concern public companies, where some managerial ideas from private sector are adopted, and effectiveness but also efficiency are in key roles. Traditional thinking that public sector is out of reach of competition should be questioned, and this is done in this research. However, this discussion is new and revolutionary, and it seems that when trying to implant competitive elements in discussion of public sector operations, there is a risk of getting in to “collision course” with the debaters. These discussions require much more evidence and justification, and therefore it is necessary to continue this type of research.

Co-opetition is a contradictory theory, where both cooperation and competition coexist. When cooperation means activities towards common goals of two or more parties, shortly co-created value creation, competition means activities towards self-interest, in other words single actor value capturing. Cooperation consists of direct interaction of the parties, whereas in competition direct interaction is avoided (Bengtsson & Kock, 2000). Cooperation has evidently many advantages. However, there is academic evidence to motivate even the direct interplay between competitors. Competitors have similar business logics (resource similarity and/or sufficient market overlap) that may enable them to understand each other’s knowledge, competencies and operational dynamics (Chen, 1996; Tsai, 2002). However, it is already confirmed in academic research that these concepts coexist in private sector, both between companies and in between companies’ own units.

4.1 Theoretical contribution

This study shows that many academic findings of cooperation in private sector can be found even in public sector companies: The motives for cooperation seem to be similar, e.g. the sharing of resources and the sharing of risks (Lado et al., 1997; Hamel et al., 1989; Das & Teng, 2000; Miles et al., 2000). The prerequisites for cooperation appear to be exactly the same both in private and public sector. First, there is a need for common goals. In order to be able to cooperate, both mutual and frequent interaction and communication are essential for the cooperating parties to get to know each other and to build a picture of each other's experience and competence. Also, trust seems to be very important for a successful cooperation as well in cooperation in public sector. When there is mistrust or doubtfulness there seems also to be unwillingness to cooperate both in private and public sector (Spekman et al., 1998; Miles et al., 2000; Tsai, 2002, Luo et al., 2006).

The society is in change. Public sector has started to turn its utilities into companies. This is claimed to be one consequence of the modern view of competition: Public utilities have been safe, i.e. they cannot declare bankrupt, and this is one reason why e.g. the Competition Office in Finland has interfered and proposed these utilities to be transformed into companies. When this happens in the names of healthy competition, it would be peculiar to deny the occurrence of competition. One theoretical contribution of this work is trying to wake this kind of debate and research up. Even if it is still radical to discuss non-profit (public sector) companies and competition, many scientific findings and models of competition or at least competitive tension (Chen, 1996) apparently occur in public sector companies. Competition is less aggressive and not the type of economic competition (e.g. price competition) that it is described in academic papers of private sector competition. However, there seems to be competition at least for scarce resources.

The theoretical contribution of this thesis is very modest, but the research is path-breaking on a new field, and potentially awakes some academic interest for further research. It is important to continue this kind of research combining public and private sector, because it is clear that the environment is changing and new types of cooperative forms emerge.

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4.2 Managerial contribution

Both the academic literature and the empirical research show that there are some key factors to improve and create a beneficial relationship. If a public company discovers it being in a co-opetitive relation, it is essential do define the structure of co-opetition: is it inter-organizational or is it intra-organizational, and whether it is cooperation dominated or will it be competition dominated. It is also important to monitor on what organizational levels certain decisions will be made and daily operations will be executed. When cooperating with a competitor some level of competitor analysis needs to be done by top managers, and before starting the relationship a contract or an agreement of a fair division is recommended.

As in this case research, when having cooperation dominated co-opetitive relation, both cooperative motives and preconditions as well as some analysis of competitors are useful to consider. As Eng (2006) argues, managers should construct a structure for cooperation by enabling frequent interaction (common meetings), where information can be shared, and where trust is created and strengthened, and common understanding (goals) is created and supported. Luo (2008) supports this idea and emphasizes the importance of fairness in cooperative processes and actions. Also, time, trust and territory are needed (Miles et al., 2000) and managers should allocate resources (time and persons) for cooperative efforts and bonding (i.e. creation of personal ties) (Eng, 2006). It became obvious also in this empirical research, that informal interaction and communication are one of key attributes in creating cooperation and trustful ties. People need time in getting to know each other and for informal frequent communication. This is something that companies' managers should emphasize, especially when there are newly recruited (unfamiliar) persons. It seems to be beneficial to have the 'offices' near by each other, but if there is a distance between the locations, some type of unofficial happenings or activities may be considered.

The sharing of knowledge needs to be supported (attitude and willingness to cooperate) instead of protecting individual knowledge. Clarifying common goals and the importance of them can make this happen. Managers' should not underestimate the importance of explaining the importance of the mutual goals and cooperation with a company that is considered as competitor. People tend to protect their valuable knowledge and competence, and they need reasoning for starting to share these. Also, some level of internal benchmarking of co-opetitive partners may be useful for learning of each other's processes and competencies.

Also, it might be useful for public company managers to orientate in their common relationships with other public companies or private companies by using competitor analysis. This might clarify their business fields (decrease overlaps) and could lead to common projects, i.e. co-development of service processes in the so-called 'one-stop-shop – service. The competitive tension is not a threat for operation, but a window opened into development.

4.3 Limitations

Reliability and validity cannot be evaluated in a qualitative research at the quite same way as in a quantitative research (Creswell, 2003). The results of this study should not be generalized due to the research method (Metsämuuronen, 2001; Bruseberg & McDonagh-Philp, 2002). One case study may give proposals of a general behavior, but a lot more research is needed before generalizations. In a focus group interview, the researches presence can cause bias and the information gained can be "too colored" by the participants' opinions (Creswell, 2003). In these focus group interviews, the combination of the participants may have caused research bias. The internal power relations may have affected the answers, i.e. when a 'higher status person' answers first, the rest of the focus group agrees. Should these questions be presented for the same groups at another time or by another researcher, it is presumable that the answers could be similar to some extent. Should the questions be presented for other participants (working in these companies), the results would probably differ some. However, instead of validity, there can be said to be some trustworthiness and credibility (ibid.) All the three focus groups shared the major opinion of the existence of cooperation (yes, there is), and mainly denied the existence of cooperation (no, there is not, except in competing for financing the projects).

4.4 Further research directions

This thesis gives very general proposals that both inter-firm and intra-firm competition occurs in public sector. There is a need to study this area much more. Common public-private operations are increasing, the public financing will change its form from present funding to companies into future financial support directly to certain customer groups. Because there is undeniably competition at least in private sector, it would be peculiar to assume that competition would not occur wherever private sector companies operate. In the future research, it might be useful to concentrate on either inter-firm or intra-firm co-opetition in public sector companies but also in other public sector organizations and discover more of these topics. Some interesting research topics emerged during this research. One is how (and how long) organization's memory and its history have an effect on future actions like cooperation and competition. That kind of findings might be interesting for joint ventures and organizational split-ups (outsourcing). Another topic of interest is, what kind of networks truly are the ones that attract companies to cooperate with each other.

4.5 Reflections of the research process

When looking back to the starting point of this study, it is easy to have afterthoughts. A lot could have been done differently and a lot could have been done better. First, there is the importance of a careful plan: to make it carefully and to keep it determinately. There seems to be lack of time everywhere, and planned timetables or keeping them is not that easy. Today, it is clear how hard and precise work academic research is. It takes time too read piles of academic papers, some articles are challenging to understand, and finally, when this potentially happens, to spot these theories in practice and to understand and show their relevance is one part of the hard work.

One challenge was to find academic literature. Even if co-opetition research does exist under that name, and the phenomenon has been studied by combining cooperation and competition, but not called it co-opetition, exactly suitable papers for public sector does not exist yet. One of the examiners gave a good view due to his expertise in the subject, and gave also a clue what were the latest topics in the co-opetition research in international conferences. Though, there was no public sector research. The academic guidance was variable: it was comfortable to get personal meetings with the professor and the examiner, sometimes the group lessons gave views to working processes, and sometimes it felt more like an obligation to participate them, however interesting it is to discuss with others.

One challenge was the focus groups. These groups were chosen because of some joint ownership between them. The challenging part was to try to discuss competition, because it seems almost to be taboo to propose that public companies compete in some ways. There were strong preconceptions that competition cannot exist in public companies business. In the same way it was a challenge to figure whether the basic assumption of this work was too determined, and maybe there would really not be any competition to witness. In other word, the group discussions were challenging.

However, one enlightening part indeed, was to discuss with these focus group companies and to hear people to reveal their ideas and thoughts. There seems to be loads of insightful ideas around in the companies. The sad part is that there seemingly is lack of time. The educational part was to read all the academic papers and get new ideas and understandings. How cooperation is not “just an easy business”, but requires preconditions and good planning for to be fruitful. How competition is a useful driver and not something companies determinately aim for, but what occurs often due to the circumstances. And how competitors might work together because they often understand each others´ logics. How interesting it really is to melt these ideas.

As a whole, the process consists of moments of euphoria when understanding something new and witnessing it in everyday life. Of course, the process includes also many moments of tiredness and disappointment when everything has not gone as wished. Recovering from those feelings and forgiving own limitedness has again been one educational and useful process alongside the writing.

The delusions of the wisdom of myself and the greatness of this work have long ago been replaced with humbleness and a great respect for “true” academics. However interesting it is to research, it is hard work as well.

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Appendix 1: Half-structured open-ended interview questions

Main concept	*Sub-concepts*	*Operationalization (Interview questions)*
Cooperation Why and how do organizations of a public sector concern cooperate with each other?	Interaction	**1**. Describe the quality of your relationship with x/y? How do you build/maintain links with x/y?? What kind of benefits do you get from each relationship? What are the downsides?
	Goals	**2.** What kind of common goals do you have with x/y? How do your goals differ with x/y and/or could cause conflicts? How do you understand each other's operations?
	Motive: Sharing of resources (RBV)	**3.** Describe (unique) resources in your possession that could benefit x/y? What kind of (unique) resources x/y possesses that could benefit your company? What kind of resources do you share with x/y?
	Motive: Sharing of costs / risks (TCV)	**4.**What kind of operations do you have with x/y y in order to share costs? What kind of risks do you share? How much does this benefit you/them?
	Motive: Learning (DCV)	**5.** When you operate together with x/y, what do you learn from x/y? What do they learn from you? What have you learnt together?
	Trust	**6.**Describe the role of trust in relationships with x/y? Is there opportunism?
Competition Why and how do organizations of a public sector concern compete with each other?	Markets	**7.** Compare your products and services with x/y: -similarity of products / services? -similarity of customers? -overlap of the business?
	Resources	**8.** Describe the resources you need in your business operations? Are these resources available for all / is there enough for all? Who gets scarce resources? Who decides who gets them?
	Internal position	**9.** How does the role of the owner (public, private) affect to business operations: cooperation / competition?
Co-opetition How can co-opetition be managed?	Co-opetition	**10.** How can coopetition be managed in your organization? What are the benefits and drawbacks of it? **11.**Do you have opinions that You would like to discuss/mention but have not been asked in this interview?