

Dyadic cooperation and relationship effects
- An empirical study

Åsa Hagberg-Andersson

Department of Management and Organization
Swedish School of Economics and Business Administration
P.O.Box 287, FIN-65101 Vaasa
Finland
E-mail: asa.hagberg-andersson@hanken.fi

Henrik Virtanen

Unit of Business Economics and Tourism
Vaasan ammattikorkeakoulu, University of Applied Sciences
Raastuvankatu 31, FIN-65100 Vaasa
Finland
E-mail: henrik.virtanen@puv.fi

Sören Kock

Department of Management and Organization
Swedish School of Economics and Business Administration
P.O.Box 287, FIN-65101 Vaasa
Finland
E-mail: soren.kock@hanken.fi

Keywords: Cooperation, buyer-supplier relationships, adaptation, value

Abstract

There is a growing realization among both business practitioners and academic researchers that the competitiveness is often contingent on a firm's ability and possibilities to co-operate. There seems to be consensus that cooperation and relations are important, but there are still questions that are not answered sufficiently. For instance are all types of relations and cooperation equally important, and how do they affect the company's activities?

The purpose of this work-in-progress paper is to elaborate upon the importance of dyadic cooperation and the content in the relationship. The results of the study are based on a survey, which was sent to all suppliers of a focal buyer. The suppliers were asked about how they perceived that the relationship with the buyer had an effect on their profitability, market share, competitiveness and turnover. They were also asked about relationship contents and about the areas where they cooperated with the buyer. The main results indicate that cooperation can give both positive value (for e.g. market share and turnover), but also somewhat negative value (for e.g. profitability).

Introduction

A company is embedded in a network of ongoing relations and cooperation, which both enable and constrain the performance of the company. Actors, activities and resources are the three main building blocks in a network according to Håkansson and Snehota (1995). Co-operation is the mortar that unites different actors. It functions as a platform for joint activities and facilitates the exchange and combination of resources. Co-operation will begin when the actors find that joint activities will have an added value effect, continue as far as value is created in the network and be disclosed when the actors find the common activities purposeless.

The underlying driver of cooperation formation is the need to control uncertainty as much as possible. The formation process is encouraged by a realization that cooperation gives opportunity that might be unavailable to each of the partners, if they choose to stand-alone. The assumption is that a company functions in a context of interdependencies that affect its development.

The study of networks, interactions, relations and cooperation has a long history (Håkansson 1982; Håkansson and Snehota, 1995; Möller and Wilson, 1995). When it comes to cooperation, the researchers have, e.g. been interested in motives for cooperation (Axelrod 1984; Jarillo 1993), analysis of how cooperation should be organized and managed (Araujo, Dubois and Gadde 1999; Smith Ring and Van de Ven 1994), cooperation antecedents or facilitators (Spekman and Celly 1995), cooperation development phases (Tähtinen 2002; Dwyer, Schurr and Oh 1987), cooperation and competition (Bengtsson and Kock 1999), and finally researchers have also been interested in studying and discussing results of cooperation (Hagberg-Andersson 2006).

Their importance of cooperation for the competitive advantage of the company is a subject of increasing attention. Both business practitioners and academic researchers agree upon that competitiveness of firms is often contingent on a firm's ability to co-operate. There seems to be consensus that cooperation and relations are important, but

there are still questions that are not answered sufficiently. For instance are all types of relations and cooperation equally important, and how do they affect the company's activities?

The purpose of this work-in-progress paper is to elaborate upon the importance of dyadic cooperation and the content in the relationship. A notion that the significance differs, gives input to the management of them. Relations and cooperation can be formed with any of the actors in a business network (horizontally and vertically). In this paper we focus on vertical relations and cooperation.

The paper is structured as follows: in the theoretical section of the paper we discuss cooperation as channels to external resources. In the first section we also discuss motives for cooperation and how these partnerships with other actors creates value and gives access to opportunities in the network. In other words, we discuss the importance of cooperation.

In the next section we report on the research methods used in the empirical study. The research approach is quantitative. The empirical results of the study are based on a survey. We present and discuss the results of the study and we highlight issues of interest from the findings. Finally we present the conclusions drawn from the study and give some ideas for further research in the area.

Cooperation and resources

According to McLoughlin and Horan (2000) is the notion of interdependence at the core of the network approach. From a network perspective it is not relevant to view actors as isolated "islands" (Håkansson and Johanson, 1992; Håkansson and Snehota, 1989). Firms exist in interplay with other firms. Simply speaking it means that the actors need each other, especially when the resources are scarce. Access to external resources is made possible through establishing relationships or cooperation with other actors with relevant resources in the network.

Recognition of interdependence creates understanding for the need for cooperation. With recognition of their interdependence partners exchange resources. To bring about cooperation the partners must also recognize that the benefits of joint activities and shared resources are of great importance and outweigh the costs and the loss of autonomy. When choosing a partner for cooperation companies look for similarities before they make the choice (Freytag and Ritter 2005). All connections to other actors in a network are filled with opportunities and access to resources and knowledge, formed by complex interactions, adaptations and investments within and between the companies over time (Håkansson and Ford, 2002).

Contractor and Lorange (1988) discuss in their article different rationales for cooperation (cf. Ebers, 2002). Risk reduction, economies of scales, rationalization, exchange of complementary technologies, co-opting and blocking competition, access to external resources etc. are some of the rationales discussed.

One alternative type of cooperation is when the partners are making complementary contributions to the partnership. Creation of synergy effects trough input of

complementary resources is the aim. The complementary strengths and efforts of the partners add up to the value chain that can produce a more competitive end result. The other alternative is when the partners are providing similar inputs to the partnership. The partners pool resources, and the aim is to e.g. achieve risk reduction and save on costs through joint activities.

Over the years, the term “networks” has been studied and defined in many contexts and in many ways. Business networks and industrial networks are used as synonyms in the study as in accordance with earlier studies (Kock 1991). Business networks can be defined as “a structure where a number of nodes are related to each other by specific threads” (Håkansson and Ford, 2002:133), and the interaction taking place in them. Within this definition the nodes can be described as the firms and the threads as relationships. Included in the business network are the dyads of buyer and seller. These dyads are based on relationships, which are based on interaction between the two actors. Cooperation in business networks can be created through different activities and take place on different levels. It can take place vertically or horizontally. With vertical relations or cooperation, the relationship between the buyer/customer and supplier is meant; whereas the horizontal relation or cooperation is the relationship between companies on the same level in the supply chain (Nalebuff and Brandenburger, 1996). This is a way of expressing the relationship in a structural form. Bengtsson and Kock (2000) use roles instead of positions in vertical and horizontal relationships. It is also important to remember that the forms and roles of cooperation may change depending on the situation and time. Vertical cooperation may become horizontal or the other way around. When cooperation takes place on different levels the degree of involvement is less or more. A dyadic relationship between buyer and seller can mean scarce contact between the actors, they can buy regularly, they can exchange advice or have cooperation. It can also be a partnership type of dyadic relation, which goes much deeper than on the other levels. In a partnership the actors have more trust for each other and the cooperation involves activities, where there is a need of enough commitment. Easton and Araujo (1992:76) express cooperation as: "when two or more parties have objectives, which are mutually dependent". The extent of dependence can though be of different kind, depending on which kind of activities that are involved.

Cooperation in business networks is common in today's business life. The business network is concerned with both informal and formal cooperation. Powell, Koput and Smith-Doerr (1996) stress that companies in different industries are involved in a wide range of cooperative activities from R&D to marketing. These can emerge in various types of interfirm alliances i.e. R&D partnerships, joint ventures, collaborative manufacturing, and complex co-marketing arrangements. The multifaceted formal and informal cooperation can be illustrated by the response from the CEO of Centocor to a list of their formal agreements “the tip of the iceberg—it excludes dozens of handshake deals and informal collaborations, as well as probably hundreds of collaborations by our company's scientists with colleagues elsewhere” (Powell, Koput and Smith-Doerr 1996). In a Finnish survey carried out by Tsupari et al. (2004) they state that 40% of Finnish companies are involved in industrial activities in a partnership, based on a partnership deal. Some types of companies are more involved in networks than others. For example, big industrial firms and service companies are more integrated than companies in the construction industry.

According to the results of Tsupari et al. (2004), reasons for seeking cooperation were a lack of own resources, economies of scale and extended flexibility. Motives for cooperation were a bit different depending on which industry area the company belonged to. On the other hand, the highest obstacles for cooperation are difficulties to find suitable partners and a concern for loss of core competence and autonomy.

The importance of cooperation

Business practitioners and academic researchers have argued that competitiveness of firms is contingent on a firm's willingness and ability to co-operate. Cooperation benefits do not come for free. According to Spekman and Celly (1995), failure rates for different types of cooperation are high. This is especially the case when the partners are competitors (Park and Russo, 1996). Failure can, e.g. be attributed to the lack of experience or knowledge of what is required to make cooperation work. Ritter (1999) discusses in his article about the concept of "network competence". Loeser (1999) found in his research of cooperation networks out that it is important that aspects like conflict regulation, sharing of gain or loss, liability and know-how protection, etc. are discussed and decided already at start of cooperation.

Examples of different types of cooperative partnerships are supplier, marketing and distribution cooperation. Other examples are cooperation around R&D and technological innovation. Cooperation offers the partners benefits beyond those of a single actor. A critical question behind all types of cooperation is their ability to create value or competitive advantage for the involving partners. The division of activities and inputs allows the partners to specialize on their own distinctive competence and strengths, thus leading to increased competitive advantage (Jarillo, 1988). The idea behind, e.g. supplier cooperation, seen from the buyers' point of view, is that it gives them flexibility and allows them to grow rapidly, compared to a situation when the buyers are not involved in cooperative activities with suppliers.

The benefit to be gained from cooperation is often the *raison d'être* for the relationship. The benefits have to exceed the disadvantages, e.g. loss of independence. In other words, some value creation has to emerge in order to keep up interest. Cooperation has an impact on the competitive power of the company. According to the results of Tsupari et al. (2004) research of Finnish companies, the respondents estimate that their partnerships strengthen their competitive power. Their estimation of the affect of the partnership varies slightly according to the line of business, and also according to the activities in focus. Partnerships involving core business activities are estimated as having a slightly more affect on competitive power than partnerships involving e.g. marketing and R & D activities.

Research on networks, nets and cooperation has tried to label them depending on their function or value for the actors involved. Möller and Svahn (2006) discuss different types of ideal nets for value creation of knowledge and learning. Firstly, nets can be categorized into mature and stable nets constructed for carrying out current business. Secondly, local and incremental development nets focusing on renewal of current business can be identified. Finally the authors discuss emerging nets. Emerging nets again have different aims and create different value, e.g. rapid creation of radically new technologies.

Cooperation in business networks also include some kind of adaptation. According to Dubois and Håkansson (1997), adaptations are a necessity for maintaining or developing a relationship. The motivation for adaptive behaviour is more significant if the difference between the parties is large, i.e. the adaptation will be in a direct proportion to the differences that exist between the parties (Gadde and Håkansson, 1993). Adaptation to demanding customers can also strengthen the suppliers' competitive position since the result is superior products or production systems (Hallén, Johanson and Seyed-Mohamed, 1991). Adaptation can be seen as an active strategic investment into the relationship with another company (Hagberg-Andersson, 2006).

There are also risks in adaptation. The dependence on the buyer increases. The possibilities of finding new counterparts decrease if a company invests extensively in adaptations (Erbismann, Kock and Strandvik, 1998). From the buyer's point of view, it is not recommendable to control the supplier too tightly. Binding up a supplier too much limits both creativity and innovation (Gadde and Snehota, 2000). The investments connected to adaptations can be considerable and they cannot be transferred (Hallén et al., 1991).

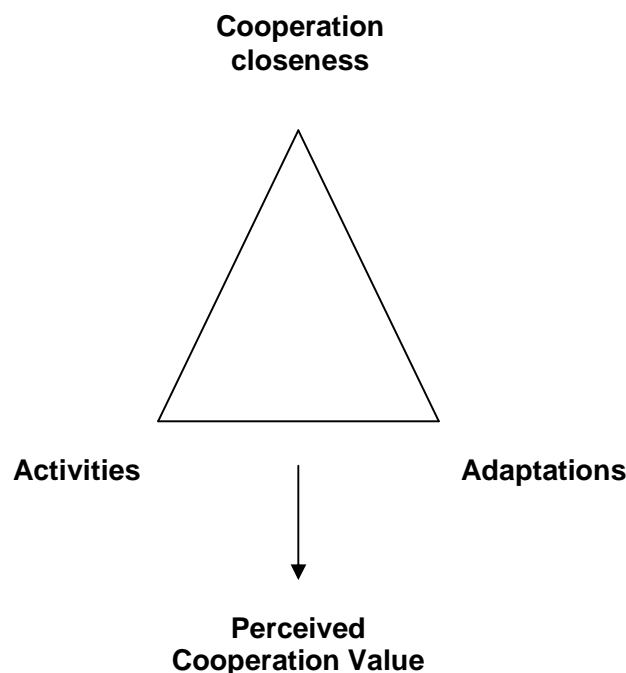


Figure 1. Perceived cooperation value is derived from cooperation closeness, adaptations, and activities

Earlier research (Kalwani and Narayandas 1995) has indicated that suppliers maintaining long-term relationships find the relationship more rewarding compared to those suppliers that use a transactional approach to servicing customers. Cooperating with different customers gives access to and knowledge about the market. It also provides the possibility to stay up-to-date about different cooperation areas. The relationship content and results has to outweigh the dependence and drawbacks of the

relationship. Being too dependent and adapting too much can imply a big risk to the supplier. The relationship quality has to be carefully analyzed from time to time in order to balance the benefits to the drawbacks. Only if the benefits outweigh the drawbacks in the long run the relationship is worthwhile to continue for the supplier. Too much dependency of the buyer, because of adaptation can for example imply too much risk and not be worthwhile the benefits and value of the relationship.

In figure 1 we have summarized our discussion and included the factors that influence on the value in the cooperation between the buyer and the suppliers. Closeness in the relationship will create an atmosphere of trust and mutuality. The activities carried out can be derived from the buyer's needs for external resources. In order to make the relationship work the interacting actors must invest in the relationship leading to the creation of adaptations. The outcome of the relationship will be the perceived cooperation value both for the buyer and the suppliers.

The study and the results

The empirical results of the study are based on a survey, which was sent to all 279 suppliers of a multinational industrial buyer. The size of the suppliers varied from 1 to 25 000 employees and the suppliers were located in 33 countries. The response rate of the survey was 54%, 150 questionnaires were returned. The focal buyer is a multinational company in the metal industry. The results of the study are based on an analysis of the suppliers' view of the cooperative relationship with the focal buyer.

The suppliers were asked about in which activities they had cooperation with the focal buyer. The activities were within production, product development, stock keeping, purchasing, quality work, environmental work, logistics and distribution, marketing, or within other activities. The analysis of our empirical data showed no relevant differences between cooperation activities. The respondents valued the activities as approximately equally important (mean 3,24 - 4,07 on a scale from 1 to 5). A check of the standard deviation gave the answer that the variation in the respondents' answers was large. In each area, about one third of the respondents (not the same respondents in every area) did not perceive that they cooperated. Instead the activities are more on a transactional basis.

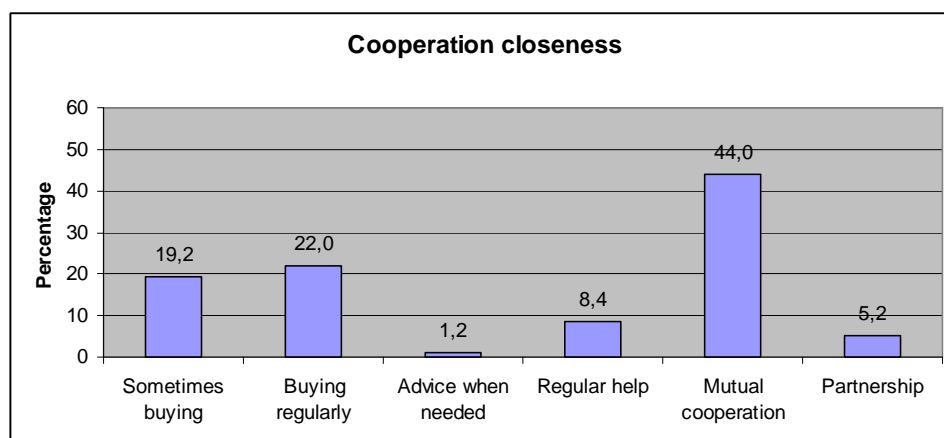


Chart 1. The perceived closeness of cooperation

The next analyzed question dealt with the perceived closeness of cooperation. The suppliers were asked to describe their closeness to the buyer on a scale from occasional buying to a close partnership. The results in chart 1 show that the suppliers regard their relationship with the buyer as close or very close.

The purpose of the following questions in the survey was to give an answer to who is the stronger partner in the relationship, how important the buyer is and how replaceable the buyer is if he chooses to switch to another supplier? The analysis reveals the suppliers' dependence on the focal buyer and it also reveals the buyer's power in the relationship.

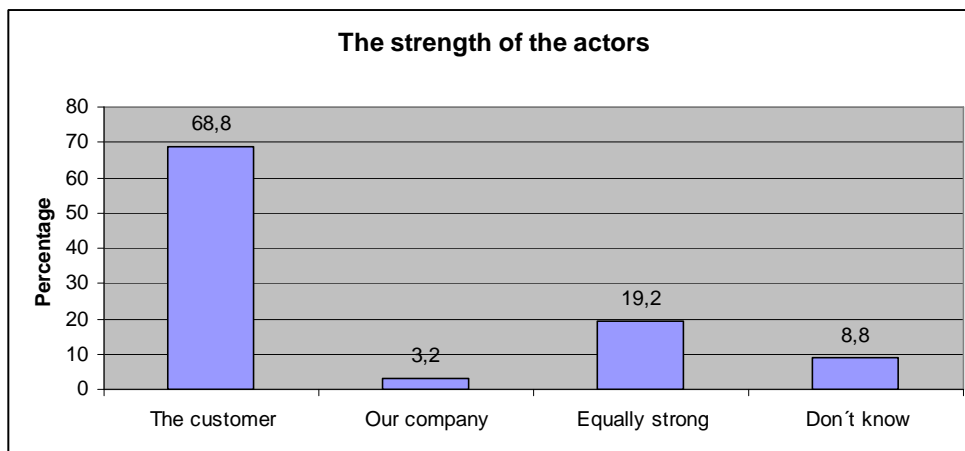


Chart 2. The perceived strength of the partners

First of all, as we can see from the results presented in chart 2, the suppliers feel that the buyer is the one with power in the relationship. The results are reflected in reality, since the focal buyer is a multinational company. The suppliers are smaller in size, which is usually the case in these kinds of networks of suppliers and sub suppliers.

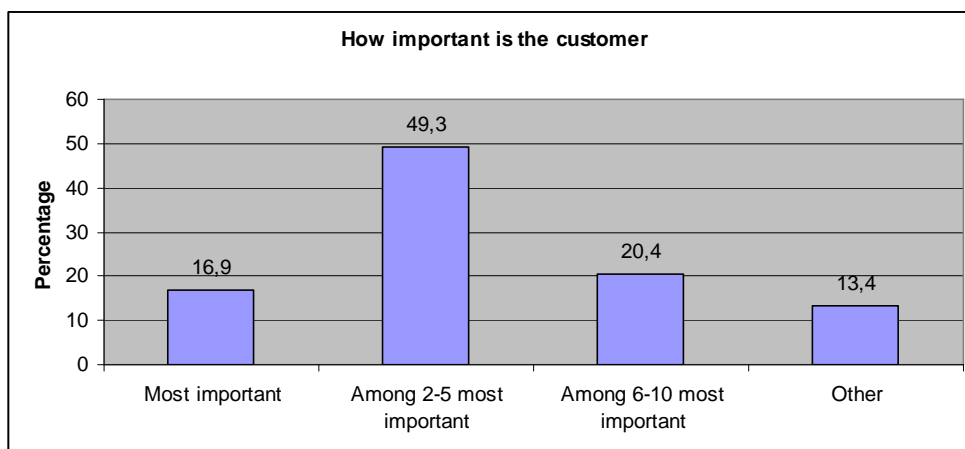


Chart 3. The perceived importance of the customer

Secondly, the suppliers rate the focal buyer as very important (chart 3). A majority of the respondents classified the buyer as either the most important or as nearly the most important customer. A large share of the suppliers' turnover is generated from business with the focal buyer.

Thirdly, the suppliers though rate their possibilities to replace the focal buyer as fairly positive. In an asymmetrical relation where one partner is strongly dependent on the other, there is a risk of losing a large proportion of the business if the relation ends. Or in other words, money will be lost if the buyer turns to another seller.

A majority of the suppliers hopefully perceive they have good possibilities to find other buyers. The question is hypothetical. We can yet among the suppliers identify a small group with very negative attitudes towards their possibilities to replace their relationship.

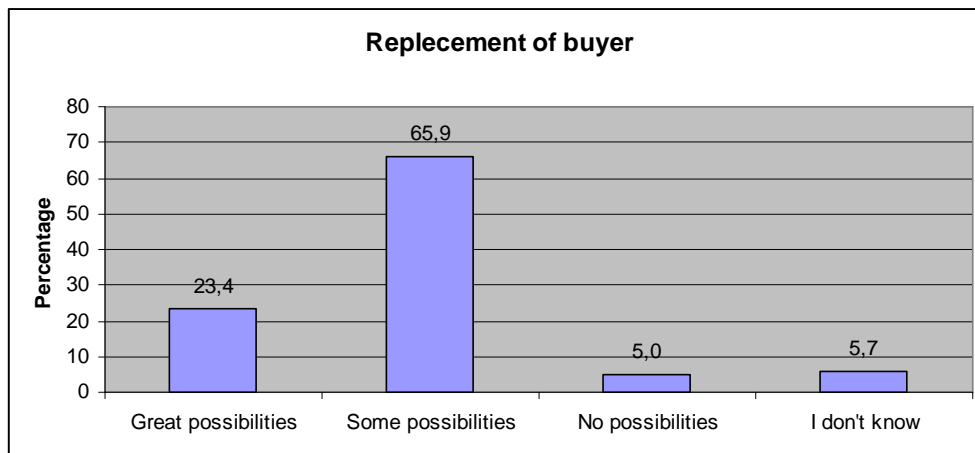


Chart 4. The perceived possibilities to replace the buyer

When it comes to adaptations in the relationship the suppliers were asked about how much of the turnover which was sold to the focal buyer and this was compared to how much the suppliers adapted to the focal buyer (chart 5). The results show that suppliers with a larger share of the turnover going to the buyer perceive that they adapt more.

As earlier presented the suppliers were asked about how important they perceived that the buyer was as a customer. This was compared to their degree of adaptation (chart 6). The respondents could choose between four different alternatives. The suppliers who stated that the focal buyer was not one of their ten most important buyers perceived that they had adapted to a lesser degree.

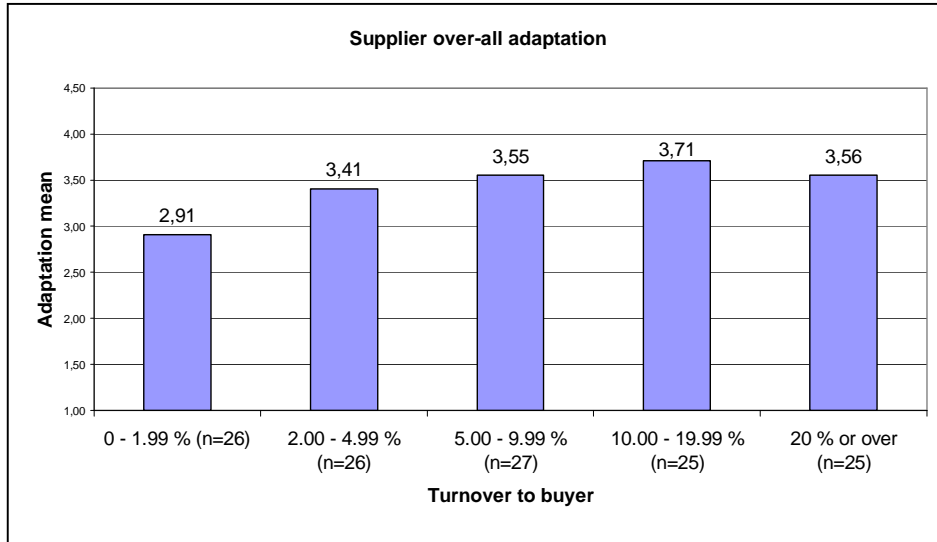


Chart 5. Turnover in comparison with adaptation

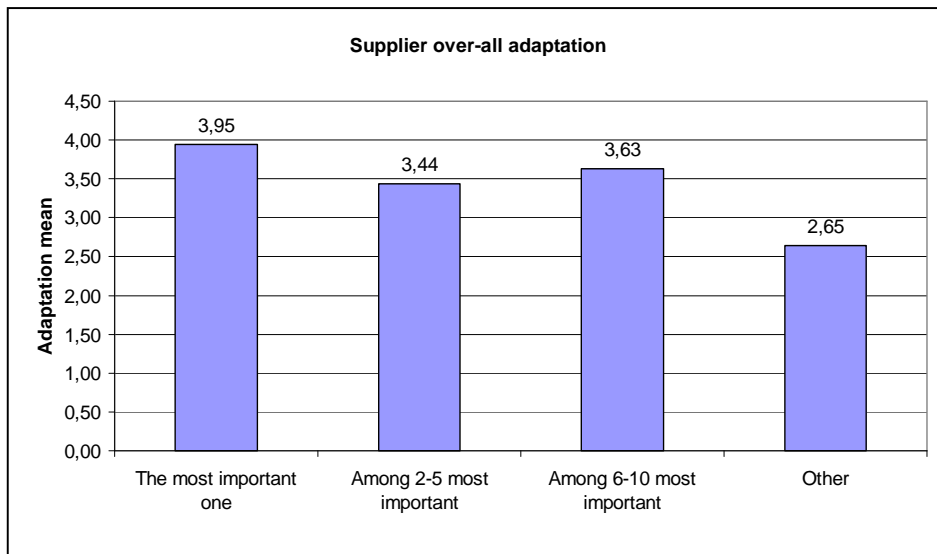


Chart 6. Customer importance in comparison with adaptation

The suppliers were also asked to state how long written contracts they had with the buyer (chart 7). A rather large proportion of suppliers had no written contracts at all, but the majority of the suppliers had a year to two years contracts or more. The length of contract was compared to the adaptation made towards the buyer. Suppliers with longer contracts, in written form, have made more adaptations in the relationship.

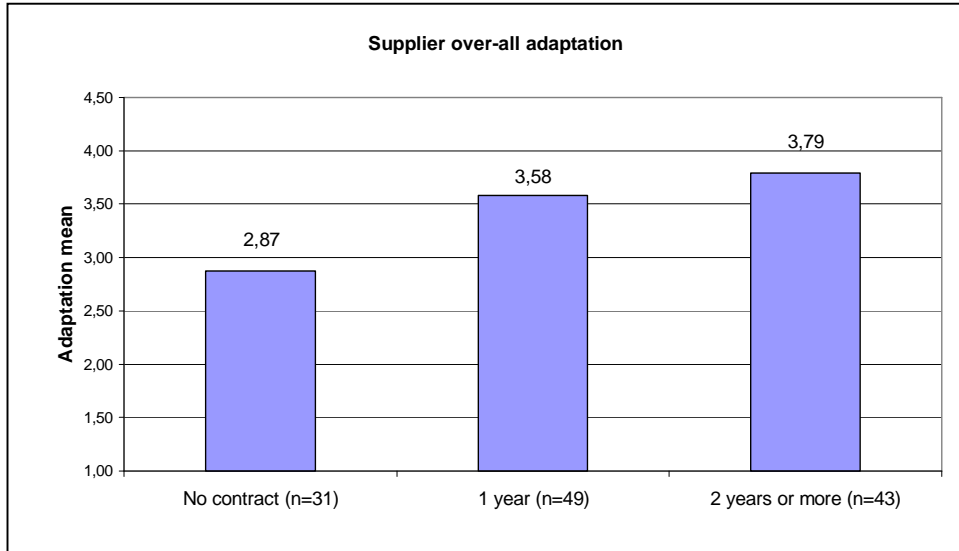


Chart 7. Length of contract in comparison with adaptation

The suppliers were finally asked about how they perceived that the relationship with the buyer have had an effect on the profitability, market share, competitiveness, turnover, relations to other customers, efficiency, quality systems, purchasing, technology, e-commerce as well as research and development.

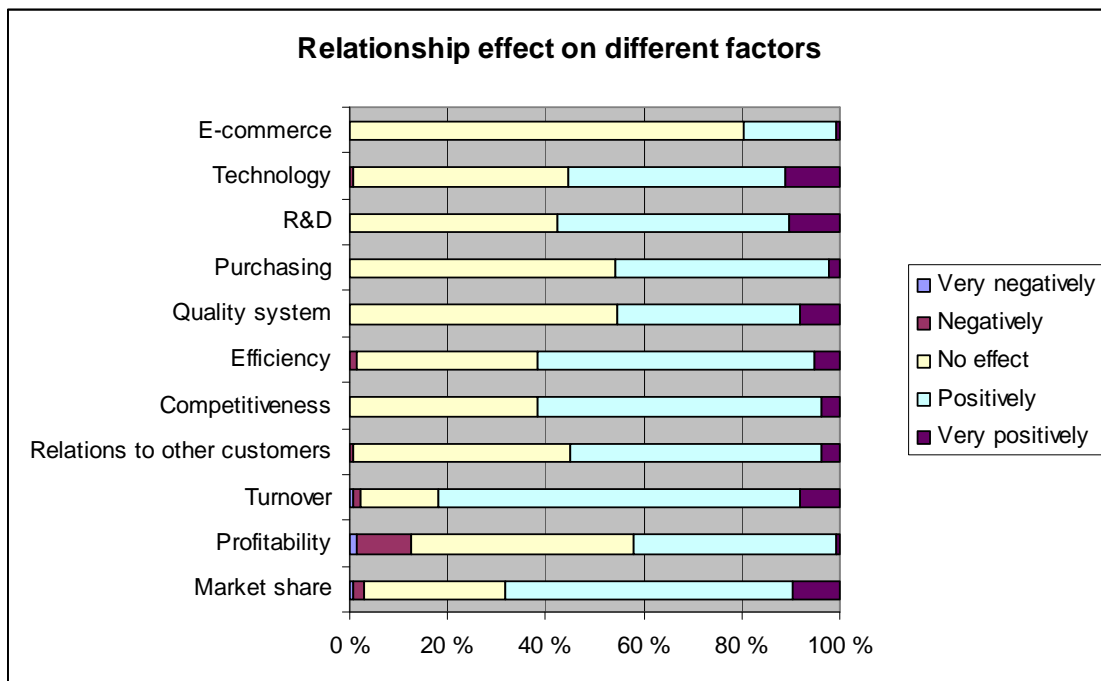


Chart 8. Cooperation value

The results presented in chart 8 shows that the respondents perceive that cooperation have a positive or very positive effect on e.g. market share, turnover, technology and R&D. Although the market share and the turnover are perceived as positively influenced, the respondents still do not experience an increase in profitability. It seems that the amount of work put in to the relationship sometimes is rather costly.

The purpose is to answer the question are all types of cooperation activities equally important, and what kind of value do they give the company? The results indicate that cooperation can give both positive value e.g. for the market share, but also negative value when it comes to profitability. On the other hand, an increase in market share will eventually have an impact on profitability. Cooperation creates value both on shorter and longer term.

Summary and conclusions

Cooperation with a multinational buyer gives benefits for the suppliers to work on a global market. In the paper the importance of cooperation between a focal buyer and its suppliers and the relationship effect and perceived cooperation value was analyzed in order to determine their impact on the suppliers' activities.

The suppliers were asked about which kind of cooperation they had with the focal buyer. They were also asked to state how they perceived their relationship with this customer. The suppliers regarded the relationship with the buyer as close. In the survey the suppliers were asked to state how they perceived the strength of both actors in the dyad. A majority of the suppliers saw the buyer as the stronger actor and they also rated the buyer as very important. They were also asked to estimate the perceived possibilities to replace the buyer, if this would occur. A majority of the suppliers stated that they had good possibilities to find other buyers.

The suppliers were also asked about their adaptation towards the buyer. The suppliers who stated that the buyer was not one of their most important buyers perceived they did not adapt to a larger extent. Those supplying a larger share of their turnover perceived that they adapted more. This was also the case with the suppliers with longer contracts. These suppliers adapted more, compared with the ones with no contracts.

The suppliers were finally asked how they perceived that the different activities with the buyer affected different factors, such as market share, turnover, profitability etc. The results reveal somewhat contradicting answers. According to the respondents cooperation affects market share and turnover positively. But when it comes to the impact on profitability the respondents are more reserved. Cooperation means to make sacrifices, i.e. input of resources in the shape of work, time, commitment etc. which on a shorter term impacts profitability.

One of the questions in the paper was if all kinds of cooperation between buyers and suppliers are equally important. The results of the paper show that the cooperative

activities are perceived as less or more important by the suppliers. The suppliers stated that some of the activities were perceived as more positive for their competitiveness than the others. Competitiveness of firms affects the ability to cooperate, not only with the customer in question, but also other potential customers. In general the results correspond with the results from the survey made by Erbismann, Kock, and Strandvik, (1998).

Cooperating in strategically chosen areas can be an investment into future activities as well. The suppliers in the study perceived that the cooperation in certain areas affected them positively, whereas they perceived that the cooperation in some areas did not give them any positive value. Cooperation can be seen as an investment into the relationship in question, and it can also be seen as an investment into other relationships in the future, as well (Hagberg-Andersson, 2006).

The most important issue is value created for the interacting parties, especially in the long run. This should outweigh the loss of the firm's autonomy. The closeness of cooperation shapes the atmosphere and creates the possibilities for future, common activities and the adaptations made show the commitment to the relationship. The adaptations made make the companies stronger or weaker, depending on the value created in the relationship. The suppliers need to analyze if their relationship with this focal buyer is important enough because of the way it affects their company's activities. In a long-lasting relationship the relationship should give more than it require.

References

- Araujo, L., A. Dubois and Gadde L-E (1999), Managing Interfaces with Suppliers, **Industrial Marketing Management**, 28, 497-506.
- Axelrod, R. (1984), **Från konflikt till samverkan**. Kristianstad: SNS Förlag.
- Bengtsson, M. & Kock, S. (1999): Cooperation and Competition in Relationships Between Competitors in Business Networks. **Journal of Business and Industrial Marketing**, Vol. 14, No. 3, 178-194.
- Bengtsson, M. & Kock, S. (2003): Tension in Co-opetition. In Harlan E. Spotts, (ed.) **Development in Marketing Science Vol XXVI 2003**, Academy of Marketing Science, Western New England College, 38-42.
- Contractor, F. J. and Lorange P. (1988), Why Should Firms Cooperate? The Strategy and Economics Basis for Cooperative Ventures. In Contractor, Farok J. and Peter Lorange (eds), **Cooperative Strategies in International Business**. Lexington Books, Lexington, 3-30.
- Dubois, A. and Håkansson, H. (1997), Relationships as Activity Links, in Mark Ebers (ed) **The Formation of Inter-Organizational Networks**, Guilford.
- Dwyer, F. Robert, P. H. Schurr and Sejo O. (1987), Developing Buyer-Seller Relationships, **Journal of Marketing**, 51 (April), 11-27.
- Easton, G. and Araujo, L. (1992) Non-economic exchange in industrial networks, in Axelsson, B. and Easton, G. (eds), **Industrial Networks. A new View of Reality**, Routledge, London, pp. 62-88.
- Ebers, M. (2002), **The Formation of Inter-organizational Networks**. Oxford University Press, New York.
- Erbismann, K., Kock, S. and Strandvik, T. (1998), Cooperation and Adaptations in a Supply Network Within the Process Industry. **Proceedings of the 14th IMP Conference**, Turku, Turku School of Economics and Business Administration.
- Freytag, P. Vagn and Ritter T. (2005), Dynamics of Relationships and Networks – Creation, Maintenance and Destruction as Managerial Challenges, **Industrial Marketing Management**, 34, 644-647.
- Gadde L.-E. and Håkansson H. (1993), **Professional Purchasing**. Routledge, London.
- Gadde L.-E. and Snehota I. (2000), Making the Most of Supplier Relationships **Industrial Marketing Management**, 29, 305-316.
- Hagberg-Andersson, Å. (2006), Does Adaptation Pay Off?, **Industrial Marketing Management**, 35, 202-209.

- Hallén, L., Johanson, J. and Seyed-Mohamed, N. (1991), Interfirm Adaptation in Business Relationships. **Journal of Marketing**, 55, 29-37.
- Håkansson, H. (ed.) (1982) **International Marketing and Purchasing of Industrial Goods. An Interaction Approach**. John Wiley & Sons, Chichester, 289-296.
- Håkansson, H. and Ford D. (2002), How Should Companies Interact in Business Networks?, **Journal of Business Research**, 55, 133-139.
- Håkansson, H. and Johanson J. (1992): A Model of Industrial Networks. In Axelsson, Björn. & Geoffry Easton (eds), **Industrial Networks: A New View of Reality**. Routledge, London, 28-34.
- Håkansson, H. and Snehota I. (1989), No Business is an Island: The Network Concept of Business Strategy. **Scandinavian Journal of Management**, 5, 187-200.
- Håkansson H. and Snehota I. (1995), **Developing Relationships in Business Networks**. Routledge, London.
- Jarillo, J. C. (1988), On Strategic Networks. **Strategic Management Journal**, 9, 31-41.
- Jarillo, J. C. (1993), **Networks in Marketing**, SAGE Publications, Thousand Oaks.
- Kalwani, M.U. and Narayandas, N. (1995). Long-term Manufacturing-Supplier Relationships: Do They Pay Off for Supplier Firms. **Journal of Marketing** 59, 1-16.
- Kock, S. (1991) **A Strategic Process for Gaining External Resources Through Long-Lasting Relationships. Examples from two Finnish and two Swedish Industrial Firms. Doctoral thesis**. Publications of the Swedish School of Economics and Business Administration. Helsinki.
- Loeser, B. O. (1999), How to set Up a Cooperation Network in the Production Industry. **Industrial Marketing Management**, 28, 453-465.
- McLoughlin, D. and Horan C. (2000), Business Marketing: Perspectives from the Market-as-Networks Approach. **Industrial Marketing Management**, 29, 285-292.
- Möller, K. and Svahn S (2006), Role of Knowledge in Value Creation in Business Nets, **Journal of Management Studies**, 43, 985-1007.
- Möller, K. and Wilson D. T. (eds.) (1995), **Business Marketing: An Interaction and Network Perspective**. Kluwer Academic Publishers, Boston.
- Nalebuff , B. and Brandenburger, A (1996). *Co-opetition*, Göteborg, ISL Förlag.
- Park, S. H: and Russo, M. V. (1996), When Competition Eclipses Cooperation: An Event History Analysis of Joint Venture Failure. **Management Science**, 42, 875-890.
- Powell, W. W., Koput, K.W. and Smith-Doerr, L. (1996): Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology. **Administrative Science Quarterly**, Vol. 41, No. 1, 116-141.

Ritter, T. (1999), The Networking Company. **Industrial Marketing Management**, 28, 467-479.

Smith Ring, P. and Van de Ven, A. H. (1994), Development Processes of Cooperative Interorganizational Relationships, **Academy of Management Review**, 19, 90-118.

Spekman, R. E. and Celly K. S. (1995), "Towards an Understanding of the Antecedents of Strategic Alliances", in Möller, Kristian And David T. Wilson (eds.), **Business Marketing: An Interaction and Network Perspective**. Kluwer Academic Publishers, Boston, 157-191.

Tsupari, P., Sisto, J. Godenhjelm, P., Oksanen, O-P. and Urrila P. (2004), **Yritysten liiketoimintasuhteet. Selvitys liiketoimintasuhteista ja verkostoitumisesta Suomessa**. Tilastokeskus & Elinkeinoelämän Keskusliitto katsauksia 2004/6.

Tähtinen, J. (2002), The Process of Business Relationship Ending – its Stages and Actors. **Journal of Market-Focused Management**, 5, 331-353.