School of Business

Knowledge Management

TRUST IN INTER-ORGANISATIONAL DYADIC RELATIONSHIPS

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The examiners of the thesis:
Professor D.Sc. Kirsimarja Blomqvist
Post-doctoral researcher D.Sc. Risto Seppänen

Marko Siro

Peltokulma 7 B

01690 Vantaa

Tel. +358 40 762 1973

marko.siro@iki.fi

ABSTRACT

Understanding the trust in organisations and the business relationships have been an emerging trend in past years. Researchers and executives and subject matter experts in companies have recognised the importance of managing the trust in inter-organisational relationships. Further, the interest both in academia and in business has raised an interest to understand dyadic relationships. The objective of this thesis was to examine trust in inter-organisational and inter-personal dyadic relationships.

Trust and the dyadic relationships were analysed in information technology services and outsourcing industry. Dyads were established between the supplier company operating in the industry and its customers. The empiric part of the study was carried out by an email survey that was sent to 331 respondents resulting with effective response rate of 48.7 per cent. Statistical analyses were applied to analyse the data sample.

In general, results indicated reputation, trustworthiness, capability and collaboration in dyadic trust relationships. Experience grown in duration of the relationship affected the trust positively. No drastic differences in trust were recognised when comparing supplier and customer responses.

TIIVISTELMÄ

Luottamuksen ymmärtäminen organisaatioissa ja liiketoimintasuhteissa on ollut nouseva trendi viimeisten vuosien aikana. Sekä tutkijat että yritysten johdossa ja asiantuntijatehtävissä toimivat ovat tunnistaneet luottamuksen hallinnan tärkeyden yritysten välisissä suhteissa. Lisäksi, tiedeyhteisössä ja liiketoiminnassa on noussut esille kiinnostus ymmärtää kahdenkeskeisiä suhteita. Tämän pro gradu-tutkielman tarkoituksena oli tutkia luottamusta yritysten ja henkilöiden välisissä kahdenkeskeisissä suhteissa.

Luottamus ja kahdenväliset suhteet analysoitiin informaatioteknologian palveluiden ja ulkoistusliiketoiminnan toimialalla. Kahdenkeskeiset suhteet tunnistettiin toimialalla operoivan toimittajayrityksen ja sen asiakkaiden vä-lillä. Tutkimuksen empiirisessä osassa lähetettiin sähköpostitse kysely 331 vastaajalle. Tutkimuskyselyn efektiivinen vastausprosentti oli 48,7. Vasta-ukset analysoitiin tilastollisin menetelmin.

Yleisesti, tulokset indikoivat mainetta, luotettavuutta, kyvykkyyttä ja yhteis-työtä kahdenkeskeisissä luottamussuhteissa. Kokemuksen kasvu suhteen pituuden myötä vaikutti luottamukseen positiivisesti. Radikaaleja eroja luottamuksessa ei tunnistettu toimittaja- ja asiakasyrityksiä vertaillessa.

FOREWORD

In loving memory of my mother (1949-2004).

I would like to give my gratitude to tutors and examiners in this Master's thesis, Professor Kirsimarja Blomqvist and Post-doctoral Researcher Risto Seppänen who provided me the support and guidance.

This study could not been completed without the support I received from the staff of the supplier company. Sincere thanks for the great help I received.

As well, there are lots of very special people from the "class of 2007" who deserve also sincere thanks: we had fun by sharing the thoughts and ideas. And fabulous time spent together at those Friday nights when we enjoyed dinners in Lappeenranta. Many of you superb people became lifetime friends. We often referred to term *nōn scholae, sed vītae discimus* – that became much of a concrete statement to me.

And biggest thanks of all goes to my fiancée for continuous support she gave during my studies.

Marko Siro, 25.01.2013

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1. INTRODUCTION

This Master's thesis research for Lappeenranta University of Technology's School of Business examines the trust in inter-organisational and inter-personal dyadic relationships. The context of the research is set in information technology outsourcing industry between the customer and information technology service company who have made an agreement to purchase and deliver service, or services.

1.1. The background of the research

It can be stated that understanding the trust in inter-organisational and inter-personal relationships have been an emerging trend in past years. Scholars and researchers in academia, as well the personnel in companies working at customer-facing roles from executive level to those who work at operational level have recognised the importance of understanding, developing, maintaining and managing the trust.

Why A trusts B? Why B does not trust A? Or why B thinks A trusts even when there is not trust? Questions raised by Blois (1999), in the research that emphasises trust to be a reciprocal activity.

Concept of trust means confidence in reliability and integrity between two parties (Morgan and Hunt, 1994), and as Zaheer et al. defines (2002) trust appear when group of individuals trust an entity like an organisation.

Organisations, particularly by the personal experience I have in information technology and outsourcing industry are in constant pressure looking for making profits with less cost. Trust, as stated by for example, Butler (1999) or Ganesan (1994) can increase profits and reduce transaction costs especially when long-term relationships are in question.

A unique and specific background in this study was to examine trust in dyadic relationships. Difficulties associated to gather and use dyadic data have been recognised by Beugelsdijk et al. (2009) and Lambe et al. (2002). In this study the access to dyadic data was possible with a great opportunity to use customer database of a specific supplier operating in information technology services and outsourcing industry. It could be argued that dyadic data can provide an intimate level for understanding the relationships of trust.

1.2. Objectives and the research problems of the research

The primary objective of the research is to study and analyse the inter-organisational trust in dyadic relationships. The objective is to conceptualise the appearance of the trust in dyadic relationships by the theoretical part of the research. Previous research is examined and utilised also for building a measurement framework, and to set hypotheses for researching the inter-organisational trust. The measurement framework is set to the context of the dyadic relationships to meet the objective of this study.

In the empirical part of the research the set hypotheses will be tested by means of statistical analysis. The hypotheses are set for testing the theory and the conclusions will provide the value of this study as the theoretical and managerial outcome.

In this study, the research problem to be answered is *how trust appears in inter-organisational dyadic relationships?*

The research is deepened by dividing the research problem into three sub-questions:

1) *How trust appears in dyadic relationships?,*

2) How trust differs between the supplier and the customer in dyadic relationships?, and

3) Will the length of relationship change the appearance of trust in a relationship?

The figure below explains the research problem and the sub-questions. As well, the illustration shows how research problem gets deepened with affiliated sub-questions. The aspiration in this research is to answer the research problem and the set hypotheses thoroughly.
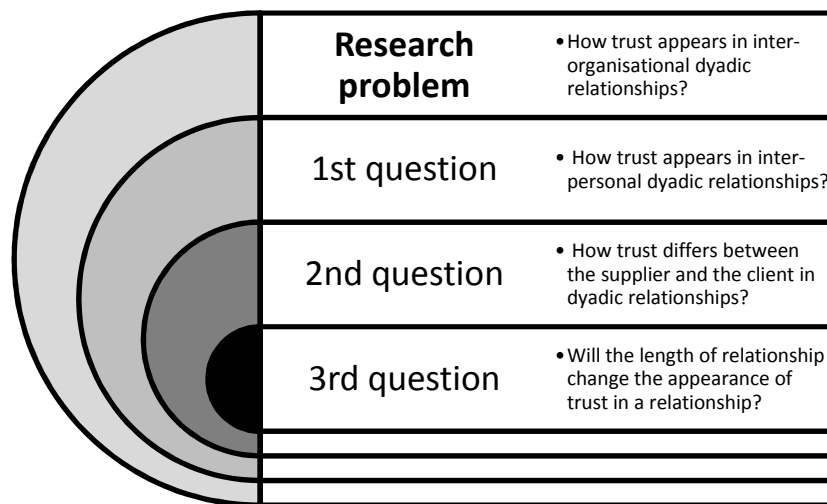
Figure 1: The research problem and questions of the study

1.3. Theoretical context of the research

The theoretical context of this research is explained in this chapter.

A holistic approach is required to understand the systemic nature of networks (Seppänen, 2008a, 62; Blomqvist and Levy, 2006, 44). This study analyses the buyer-seller networks by researching the dyadic relationships between the groups of customers purchasing services from one supplier. Each relationship between the supplier and a customer establishes a dyad – a relationship between two actors in a relationship. Recognised dyads

induce to the network of dyads. The holistic view of dyads is defined as dyadic relationships in this study.

Seppänen (2008a, 60) suggests that data should be gathered from both parties when dyadic relationships are researched. In this research the particular interest is to analyse data gathered from both ends of the dyad. The measures in Seppänen's research (2008a) are used in this study, with exception that two new measurements and three questions with free text field were added. Unit of observation (N) is set to contain both ends of dyad. In practice this mean that incomplete observations missing either from supplier or customer replies will be omitted from the sample. The theory and empiric research are explained in detail in later sections of this research.

At relatively early stage of this research the classifications of trust were recognised to be limited within the topics of inter-organisational trust and inter-personal trust. Firstly, reason for limiting the different classes of trust came from the measurement frame that was utilised from publication (Seppänen, 2008b), part of Risto Seppänen's doctor of science thesis. Secondly, the subject of dyadic relationships between the supplier and customer in this research resulted that these two classes of trust, inter-organisational and inter-personal are focused.

These key articles identified from Doney and Cannon (1997), Morgan and Hunt (1994), Riordan et al. (1997) establishes the basis for this thesis. For the measure framework key source was Risto Seppänen's doctoral thesis (2008a) from which the measures were utilised. Thorough reviews of the key articles are necessary also in quantitative methodologies used in latter parts of this thesis.

1.4. Managerial context of the research

The managerial or business context of this research is placed in the information technology services industry company (further called as a 'supplier') and customers served by the supplier. The subjects for the research have been chosen both from staff and customers at the supplier. This research is not a case study of any specific company but aim is to research, analyse and interpret the phenomenon in dyadic relationships and trust in inter-organisational and inter-personal business-to-business relationships.

Gathering and using dyadic data is difficult (Lambe et al., 2002, 148). Dyadic relationships require specific, certain and closed operating environment for recognising and analysing the distinctive character of dyadic relationships. In this research the dyad is recognised in relationships between the supplier and customers for the supplier.

Decision-makers in buyer firms value the collaboration and positive impacts in mutual commitment to build collaborative relationship with supplier. This can increase buyers' willingness to invest. (Ross, Buffa, Droge and Carrington, 2009, 39). Trust can be an option if investments cannot be limited or when contractual agreement does not apply (Selnes, 1998, 308).

It can be argued that information technology services operate in the '*industry of trust*'. Customers seek and co-opt with partners they can trust. Often, supplier companies not just deliver their services for processes for support functions or back-office work. The outsourcing industry has changed during past years that the selected partner also is granted to manage customers' key business processes (front-office) on behalf of the customer. The change from "*outsourcing the front-office instead of back-office*" is what I have witnessed during the 15 years of experience I hold from the information technology services and outsourcing industries. Often also the crucial business knowledge is given out when key functions or key processes are outsourced. The knowledge traditionally held "in-house"

(within the company) vanishes when enough time passes by after company has made the decision to outsource its functions or processes. Understanding the elements in building and maintaining trust can provide business benefits and revenue to the supplier. As scholars argue and as referred in this thesis the customer with good trust relationship can increase the willingness to invest and the transactions costs can be reduced when relationship is built upon trust.

Morgan and Hunt (1994, 33) argue that presence of trust and non-appearance of coercive forces is a combination that builds long-term relationship success.

Based on Morgan and Hunt's (1994) statement it can be argued that a written and detailed contract is form of mentioned coercive force. More detailed coercive forces can be seen in appendices of the contract that detail the service level targets and tolerance of faults in the delivery. No company operating and delivering with each other although can operate without detailed and written contracts. Having no contract at all is a utopian standpoint. The written contracts determine the baseline for delivery from any service supplier to any customer, the trust – *and how to recognise, establish, maintain and develop relationships of trust* – is a key element to understand and build as free from any coercive force as possible.

The contract agreed between two parties would seldom have clausal of trust in written form. I have witnessed a definition of trust in the written contract stated as "*I expect the supplier to be a trusted partner*" – although such clausal would barely alone lead to trust in a relationship. Continuous and systematic actions are required to build trust. Nor such contractual clausal would have any actual material elements how trust is measured during the contract period agreed.

I argue that the trust ultimately derives from collaboration between persons, not how the impersonal forms of company have defined the trust in

the contract or by any other mean. Persons establish the relationships between the companies at all levels that lead to trust between organisations. Trust based in dyadic (two-way) relationships defines how companies experience the trust either in inter-personal or inter-company relationships. Collaboration in complex business rarely can be a never-ending success story without problems in relationships. Adversities are natural to occur - but overcoming difficulties in a relationship could even build stronger trust.

The nature of trust should be commemorated. Albeit mentioned earlier that difficulties can build stronger trust. Losing or gaining trust may not be affiliated with good or bad experiences of operation but good or bad experiences of action and reaction. Appropriate outcome resolving the difficulty can be a success but still the trust may be lost. Actions any person made - not only to deliver expected material or immaterial outcome – are measured in dyadic trust relationship how person acts to display his *behaviour* and *reputation*, express *experience*, show *capability* and *goodwill* and how person expresses sufficient level of *self-reference.* These elements can be seen more important in appearance of trust than actual outcome produced or problem that was resolved.

In this study the purpose is to reveal how trust appears in relationships. As a main managerial input from this study I see that measures where trust occur, or measures where variance or lack of trust is recognised can provide grounding to establish meaningful and strong tools for the company delivering the services. Appearances of trust elements are *recognised and established* in this study – and can ignite the procedures for *maintaining and developing* the trust at the supplier. Managerial outcome at its best would be that continuous and systematic tools are set to measure trust in the relationships and corrective actions are utilised when deviations are recognised.

Customers targeted in this research are large and medium-size companies. This classification to determine the customer size is based on the

revenue these customers provide to the supplier company. Staff who participated this research has a customer-facing role with assigned responsibility of those customers' services identified. This careful selection of named customer responsible staff at the supplier company was made to assure that dyadic relationship is thoroughly researched from both sides of the dyad.

A written contract is established always between the customer and company delivering information technology services. Contracts can be considered to be a key when an information technology services company provide the service, or services. This contract agreed between two parties, the customer and company delivering the services sets the formal context for both trust in inter-company relationships, and as well is a basis for recognising the dyadic relationship. Even so, the inter-company trust has more elements than just a written and mutually agreed contract. These elements are explained in this research.

The understanding of trust in collaborative and dyadic relationship can provide value to the supplier company. Even this study is not a case study of any firm. The knowledge for not just in which state the customers consider trust to in relationship with the supplier, but also for how supplier's personnel consider important elements to be should provide very valuable information.

1.5. Exclusions and level of analysis of the study

This study has a focus on *inter-personal* and *inter-organisational* trust in *dyadic relationships*. Trust items are further classified to *behaviour, reputation, experience, capability, goodwill,* and *self-reference*. The classes other than mentioned above are not directly considered in this study.

Scholars have classified trust to several different categories. For example, Panayides (2007) classified trust to *relationship orientation*, Siquew et al. (1998) used classes of *benevolence* and *credibility*, and Moorman et al. (1992) examined *user trust*. Already from few examples it can be understood that research by scholars on trust has large variety and studies are dispersed. The focus in this study has been set to be in two main classes (*inter-personal* and *inter-organisational trust*) and the six subclasses (*behaviour, reputation, experience, capability, goodwill,* and *self-reference*).

Dyadic relationship can be seen as the interdependency that exists between companies doing business with each other that sets a need for co-operation (Anderson et al., 1994, 7).

Dyadic relationship can be seen as very specific relationship among the research. Dyad requires analysing both ends of the relationship. In this study the dyad is established from the business relationship between an information technology services supplier company, and the customers of this supplier company. Other relationships, for example end-users at the customer company are not included in this research. This study analyses exclusively dyadic relationships, not single actors in relationships.

Some scholars include the perspective of risks with trust in relationships (for example, Selnes, 1998; Shemwell et al. 1994). In this study different factors of risk are not considered. Assumption in this research is that trust-related risks are tolerated to acceptable level already at time when dyadic relationship has been established by the form of written contract between the supplier and the customer.

The results this study will provide a static snapshot established at the time of responding to the questionnaire. Purpose is not to examine and analyse how dyadic relationship under study has developed over the period of time. Nevertheless, the results from this research should provide ground-

ings as a managerial outcome to execute longer-term analysis for how relationships change over the period of time.

The intra-organisational relationships, in other words the relationships within one organisation are not included in this study. The customer relationship defined in this study creates always a relationship between two companies that are legally and organisationally different entities.

1.6. Structure and logical progression of the thesis

This study contains six main chapters. The structure and logical progression for these chapters are briefly introduced in this section. The structure is described in Figure 2 below.
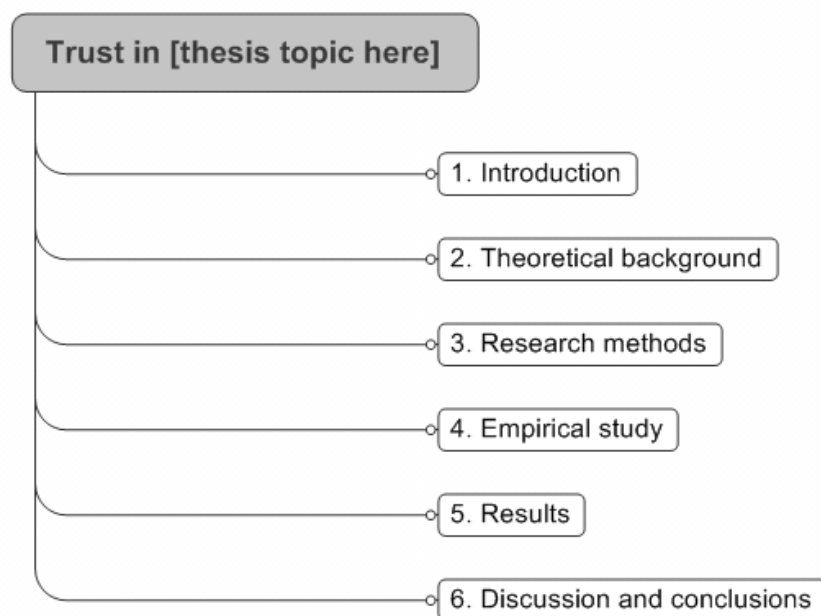
Figure 2: Overview for the logical progression of this study

Introduction part provides the background of the research and states the objectives and research problems set for this study. As well, the overview for the theoretical and managerial contexts of this research is explained.

The scope for this study is defined, including the exclusions and the analysis of the study.

Theoretical background provides the necessary literature review. A theory of trust and for dyadic relationships for this research is established. The theories of inter-organisational and inter-personal trust are set; including the literature review for the capability, goodwill and self-reference.

Research methods chapter explains the development of the measures utilised in this study by the mean of survey research. Scaling and the operationalization of the measures are further explained. The procedures to establish questionnaire, how questionnaire was tested before sending it to the respondents, how data was collected, analysed and coded are part of this chapter.

Empirical study chapter explains how the validity and reliability have been confirmed in this study. In particular, the validity and reliability are mirrored with the specific operational environment, the trust in dyadic relationships.

Results chapter provides the results from the statistical analyses. The hypotheses set are found under this chapter. Results by examining the basic statistical data, factor analysis and correlations are explained.

Discussion and conclusions explain how the research questions set were answered in this study. The theoretical contribution and managerial implications from results of this study are analysed and explained. The limitations in this study and proposals for the future research are proposed in this chapter, as well.

In next chapters the theory review is made. A literature review for the key theoretical elements in this research is explained in the next part of this study.

2.   THEORETICAL BACKGROUND

2.1. Trust

Scholars define that trust is a reciprocal necessity. Even so, the reason why A trusts B to do some agreed action is assumed to be established due to trust relationship. Even so, B may not trust A while A considers still being trustworthy in a relationship. Trust, or distrust in inter-personal relationships can be assumed from demeanour between parties in relationships. (Blois, 1999, 201)

Blois (1999) argues that trust relationship has a reciprocal nature, is impacted by the behaviour and demeanour of partners in a relationship, and further the scholar rises a question what brings the value for trust relationships? In this study the value is evaluated by researching the dyadic nature of trust relationships. It could be argued that dyadic study and reciprocal nature of trust relationships are closely related. Further the actors in a relationship can be explained with the A-B-X model (Riordan et al., 1977). More importantly, the value of relationships are validated and analysed with large number of observations between A (supplier) and B (customers). With this study the aim is to further understand the variables and elements that bring the value for trust relationships.

Inter-organisational trust and inter-personal trust are related, but represent different concepts (Doney and Cannon, 1997, 35). Trust is an inclination of confidence between two parties in a relationship (Moorman et al., 1992, 315). Trust is a belief and "generalised expectancy" of how parties in relationship will act between each other and what results they expect to achieve (Selnes, 1998, 309; Ganesan, 1994, 3). Definition of trust is that parties will fulfil obligations predicted and negotiate fairly even if opportunism is present (Zaheer et al., 2002, 348; Sako and Helper, 1998, 388). Butler (1999, 233) adds that trust is a complex construct with causality found on conditions of openness and receptivity.

Inter-organisational trust is an important element for preventing the opportunistic exploitation in a relationship (Larsson et al., 1998, 295). Ganesan (1994, 3) argues that when supplier is trusted the action of opportunistic behaviour is decreased and lowered transaction costs can be achieved.

Availability of sources for how supplier trusts customer seems to be rare and not easily found in the academia. Studies mostly examine how customers trust the supplier or vendor, not explicitly vice versa; even scholars identify the nature of trust to be dyadic. In my view the importance for customer-end of dyad ("to be trusted as a customer") should be highlighted. Doney and Cannon (1997, 37) recognise this by defining the supplier reputation being "the extent to which firms and people believe a supplier is honest and concerned about its customers". It should be noted that inter-organisational or inter-personal trust may have a calculative cause also in case customer trying to benefit by unfair manners from the relationship. Survey research in this thesis was delivered both to the supplier and customer for them to answer exactly the same questions. Revealing possible trust issues from supplier trusting the customer should be recognised in this research.

In this research the inter-organisational trust examined is a trust relationship between two parties (dyad). These two parties are companies representing the supplier and the customer. The inter-personal trust is a trust between the people working either at the supplier or customer company (dyad). As Zaheer et al. (2002, 348) argue, scholars have made a conceptual and empirical distinction between inter-personal and inter-organisational trust. In next subchapters the theory for these two terms will be further examined and explained.

2.2. Inter-organisational trust

Morgan and Hunt (1994, 23) conceptualise trust to be confidence in reliability and integrity between two parties. Zaheer et al. define inter-

organisational trust appear when group of individuals trust an entity like an organisation (2002, 349).

Strong predictors of trust are salient elements in inter-organisational relationships (Moorman, et al., 1993, 88; Moorman et al., 1992, 322). Trust can be seen expectation to behave in a mutually acceptable manner between a customer and a supplier organisation (Sako and Helper, 1998, 388).

Different acts of benevolence are seen important part of inter-organisational trust (Schoorman et al., 2007, 345). Mechanism for inter-organisational trust can be established through governance model that mitigate opportunism especially when uncertainty and dependency to partner exist in a relationship (Doney and Cannon, 1997, 35).

Lack of trust hampers inter-organisational relationships and may result that proprietary or crucial information to maintain good relationship are not shared between the companies.

2.3. Inter-personal trust

Trust can be provoked in a supplier firm and its representative collaborating with the customer (Doney and Cannon, 1997, 35). The importance of the formal governance mechanisms in inter-personal trust relationships exist. In addition to governance mechanisms, the informal self-enforcing agreements may be dependent upon personal trust relations and reputation (Dyer and Singh, 1998, 663, 669).

Inter-personal trust can be defined that an individual at customer organisation trusts an individual at supplier organisation, and vice versa (Zaheer et al., 2002, 349). Trust is a belief that individual's words and promises are reliable and set obligations between two parties are fulfilled (Schurr and Ozanne, 1985, 940). Inter-personal trust is willingness for being in a vul-

nerable position in a relationship (Schoorman et al., 2007, 347; Blois, 1999, 204; Geyskens et al., 1996, 307; McAllister, 1995, 25).

The word, actions and, decisions made by a person, and how another individual is willing to be confident and act upon those defines inter-personal trust (McAllister, 1995, 25).

Next three sections define the dimensions of trust used in this research and the measurements classified in the survey. The classes explained are the capability, goodwill and self-reference.

2.4. Capability

Capability in the context of trust can be defined how competent other party is of doing what has been promised to be done (Sako and Helper, 1998, 388). Capability is demonstrating of being able to fulfil promises and the reputation for trustworthiness (Blois, 1999, 207, 209). Capability to create and maintain trust includes fairness and transparency in decisions made and consistency in actions and promises made (Van Kleef and Roome, 2007, 46).

Barney (1995, 50) asks the question of value: "Do a firm's resources and capabilities add value by enabling it to exploit opportunities and/or neutralise threats?". While Dyer and Singh (1998, 660) emphasise competitive advantage for firms able to accumulate capabilities that are rare, valuable, and difficult to substitute or imitate.

Viewpoints these scholars represent support my personal thought on capability in the context of the trust: when treating a partner in fair manner, ensuring that transparency exist in the actions done and keeping the promises are simple efforts that show capability in a relationship. Value, not just value in a relationship but also value as the mean of financial benefit can add up when efforts on capability in trust relationship exist.

2.5. Goodwill

Goodwill trust is how initiative other party is for making open-ended commitments for mutual benefit without taking unfair advantage (Sako and Helper, 1998, 388). Goodwill is the expectation that a party will act and negotiate fairly even in case when possibility for opportunism is present (Zaheer et al., 1998, 141). Goodwill in trust relationship appears in lower need to safeguard against possible harmful behaviour of a partner (Blois, 1999, 204).

Confidence is related with the goodwill trust. When trust is based on confidence the risk attached to goodwill trust will decrease and mistakes are tolerated more if partners act in good faith. (Bunduchi, 2005, 335)

Zaheer et al. (1998) define goodwill trust at two levels, first being trust between individuals at personal level, and second being trust between organisations at organisational level. The measurements in the survey part of this thesis had these two levels included.

2.6. Self-reference

Blomqvist (2002, 157, 179) explains self-reference to be an ability and willingness to trust the partner, and as "ability to use others as a reference to self, to relate and learn from them". Henttonen and Blomqvist (2005, 108) define self-reference to be a person's or company's capacity to make rational and consistent decisions.

In the next section the dyadic nature in trust are explained.

2.7. Dyad and dyadic relationships

Dyadic relationship is a term that stems from multidisciplinary sciences. The aspects and theories for example from sociology, behavioural sciences and social psychology have been applied to business studies in this matter (Blois, 1999, 197).

Trust can be seen as a key factor in working relationship between two persons, as well trust enables the mature and successful business relationship between in inter-organisational relationship. Spanier (1976) established scales for measuring and assessing the quality of marriage. Gadel (1964) article in business administration recognised the importance of dyadic relationship for salesmen and assessed the homogeneity in hiring to match between salesmen and prospects, researching the variances when age is a major factor in a dyad.

Dyadic interaction theory with schematic "A-B-X –model" explains communicative acts and takes social behaviour, communication and attitude between the actors. A can be viewed as salesperson, B is a prospect and X is a product/service. (Riordan and Oliver and Donnelly, 1977, 530-531)
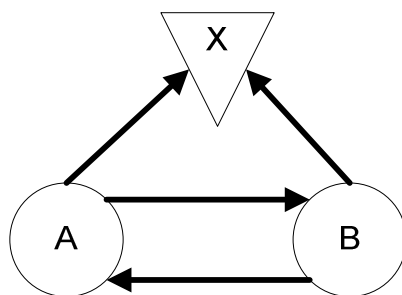
Figure 3:.Dyadic interaction theory, A-B-X-model. (Riordan et al., 1977, 530)

Dyadic interaction theory (Riordan et al., 1977) in its simplicity has a close similarity in my research of dyadic relationships in outsourcing business –

contractual arrangement between CC customer (A, in this example) and CC customer (B) results to service provided (X).

Considering only the dyadic relationship without clearly defined outputs partners produce can although be argued. The purpose for explaining A-B-X-model is that results of output from the relationship may impact the trust appearing in the dyadic relationship. Even so, the intrinsic focus in this study is the dyadic relationships and appearance of inter-organisational or inter-personal trust, not outputs as such. In this study of trust the element of service provided (X) (Figure 3.) is not relevant as an outcome of 'service'. From dyadic relationship in dyadic interaction theory (A to B; B to A) the output (X) can also be recognised as appearance of trust.

Lambe et al. recognises dyads as two-firm alliances (2002, 148). Vertical collaboration includes large number of relationships between buyers and suppliers (Johnsen and Ford, 2000, 2). The vertical pattern in dyadic relationships can be recognised in this research.

Customers having a long-term relationship with the supplier can achieve competitive advantages. The potential advantages are priority on information of new products and services and cost advantage by having best allowable prices. Orientation with long-term dyadic relationships can maximise the profits and reduce transaction costs invested for building an agreement satisfactory to both parties. (Butler, 1999, 233; Ganesan, 1994, 1, 3; Shemwell et al., 1994, 62)

Customer benefits can be seen to be valid also for supplier. In my experience particularly the transaction costs in information technology services and outsourcing industries can be very high when new customers are onboarding to the service delivery. Well-maintained and managed trust relationships should help the supplier company in reducing the costs and maximising the profits, as well as seen in the customer benefits.

Difficulties are associated for gathering and using dyadic data, but a dyad provides validity and scholars highly value gathering data from both sides of the firm (Beugelsdijk et al., 2009, 312; Lambe et al., 2002, 148).
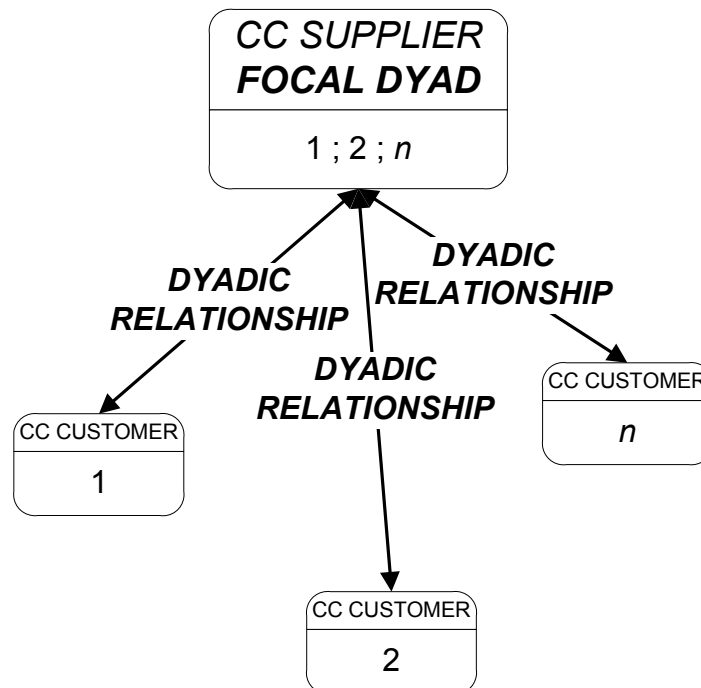
Figure 4: Illustration of dyadic relationships

In above figure the supplier has been marked as 'focal dyad'. Dyads counting up to number of relationships between the supplier (focal dyad) and customers (*n*) establishes the network of dyadic relationships. Conceptualisation of business networks can be advance by formulating business network constructs from the perspective of a focal firm (Anderson et al., 1994, 1). In this research the level of the business network is simpler; the core relationship between the supplier and customer is under examination. This core relationship between two actors means the dyadic relationship in this research.

Baum and Korn (1999, 252) describe focal dyad in two levels of competitor relationships, being either how competitors influence between themselves across the firm's interactions, or what is the salience of the size of firm in

within its relationship to other competitors. Single dyads have a salient role of business networks (Halinen et al., 1999, 781).

Next figure illustrates the single dyadic relationship between the supplier and the customer. In single dyadic relationship the actor establishing the focal dyad can be seen not to be important. Nevertheless, dyad is a relationship between two actors.
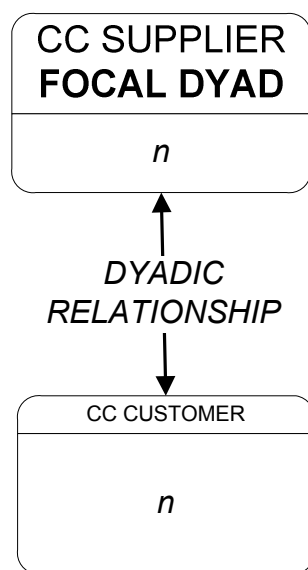
Figure 5: Illustration of a single dyadic relationship

In this research the dyad is defined as identified and existing relationship between the supplier and customer and where relationship is based on formal written contract between these two.

It is difficult to describe dyadic relationships without referring and understanding its collaborative character. Research on collaboration and collaborative behaviour is extensive. In this section the broad view required to understand the characteristics of collaboration in dyadic relationships is explained.

Relationship is a multidimensional term. Dimensions it can include are trust and bonding. The collaborative and long-term relationships are based

on dyadic interaction where the trust exists between the partners. (Panayides, 2007, 70; Ganesan, 1994, 2)

The dyadic relationship can have collaborative norms when both the supplier and customer are working toward mutual goals (Siguaw et al., 1999, 102). Collaborative dyadic relationship should be free from unrealistic economic returns. Firms striving purely for competitive advantage can lose opportunities for obtaining benefits of collaboration. Extensive competitive behaviours can lead to mistrust and weakened long-term performance. (Butler, 1999, 218-219)

As scholars state above the dyadic relationship is a bi-directional relationship connecting two actors who have common reason to collaborate with each other. In this research the dyadic relationship is established between a supplier and its customer. Reason to collaborate is established by the contractual term that exists between the supplier and customer. Bi-directional relationship means that both ends of the dyad are examined.

This section ends the theoretical background part of the study. In next chapter the research methods are explained.

3. RESEARCH METHODS

The research methods applied and process for data collection are discussed in this chapter. This study is a quantitative research where empirical part of the study was carried out at information technology and outsourcing industry's supplier and the supplier's customers. Customers were operating in number of different industries, for example in retail, forestry and public sector.

Companies recognised were identified based on the contract between the supplier and customer. Due to the dyadic nature of this study the N (units of observations) were recognised when both sides of the dyad, the supplier and customer representative had responded to the survey.
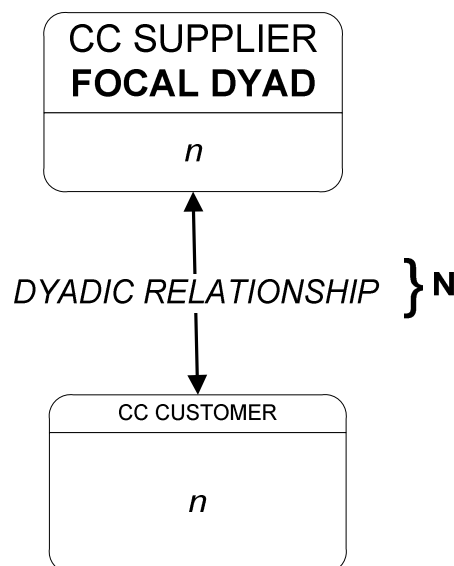
Figure 6: Illustration of unit of observation (N) in a single dyadic relationship

Above figure illustrates the frame of this quantitative research. A dyadic relationship is established when the respondents for a survey have been recognised to cover both supplier (focal dyad) and customer. The unit of observation (N) is created only when both ends have responded to the

survey. On single dyad if either supplier or customer response is missing the unit of observation is not created and inadequate responses were omitted from the further analysis.

3.1. Measure development

At the beginning of this research, the measures covering the subjects of trust, commitment and communication were examined from the existing literature. Total of 70 trust, 80 commitment and 40 communication related measures were identified and further examined.

The researcher decided to narrow the study to omit commitment and communication from the measure framework and cover only trust related measures. The decision was agreed with the examiner of this thesis to narrow the subject of the thesis. Further study by cross-indexing the 70 measures of trust with Seppänen's measurement frame from his doctoral thesis (Seppänen, 2008a) revealed that 23 measures were identical (Doney and Cannon, 1997; Ganesan, 1994) or a similarity was recognised (Panayides, 2007; Siguaw et al., 1999).

After narrowing the research to cover trust related measures only, and after recognising the similarities between earlier research by other scholars and with doctoral thesis a decision was made to use Seppänen's (2008a) measurement frame in my study. The new approach to measure trust in this study was recognised from the dimension of dyadic relationships. It should be noted that this research measured the supplier *and* customer (dyad), instead measuring only one organisation or any other type of focus group with unidirectional approach to measure.

The questions on the survey are analysed and explained in next sub-chapters. Theory for each subgroup of trust is explained.

3.1.1 Antecedents of inter-personal trust

The questions related to behaviour in antecedents of inter-personal trust are shown on below table:

Behaviour:

Table 1: Behaviour measurements of antecedents of inter-personal trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
BEHAPER1	1	Antecedents of inter-personal trust	Behaviour	Doney & Cannon (1997)	The contact person maintains regular contact with us?
BEHAPER4	2	Antecedents of inter-personal trust	Behaviour	Ganesan (1994)	The contact person is NOT open in dealing with us? (R)
BEHAPER5	3	Antecedents of inter-personal trust	Behaviour	Ganesan (1994	If problems (such as delivery delays) arise, the contact person is honest
BEHAPER6	4	Antecedents of inter-personal trust	Behaviour	Plank et al. (1999)	The contact person has done everything s/he can for our collaboration?

"*The contact person maintains regular contact with us?*" (1.): Doney and Cannon (1997, 37) appraise the importance of regular contact by assisting partner to predict more accurately predict the behaviour of other party. Distrust may appear if a party is lacking the information. Trust requires information by regular communication and repeated interaction between the parties.

"*The contact person is NOT open in dealing with us? (R)*" (2.) and *If problems (such as delivery delays) arise, the contact person is honest*" (3.): Ganesan (1994, 5) attaches these two questions to vendor's credibility and reputation by explaining that reputation for fairness can have positive impact to credibility that can be achieved by long-term reliable and consistent behaviour. Gaining credibility require honesty and openness in a relationship.

"*The contact person has done everything s/he can for our collaboration?*" (4.): This survey question has been unified from the group of questions

assessing salesperson trust (*inter-personal relationship*). Salesperson trust is defined as "a belief that the salesperson will fulfil his/her obligations" (Plank et al., 1999, 62, 64).

Theories behind the measures of behaviour emphasise open communication, honesty, fairness and partner's willingness to act in level of expected behaviour. Trust can be achieved when both parties are kept well informed, collaboration require constant and regular communications. If collaboration is not open and honest the credibility may be lost with the consequences of increased distrust to the relationship.

Reputation:

The questions related to reputation in antecedents of inter-personal trust are shown on below table:

Table 2: Reputation measurements of antecedents of inter-personal trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
REPUPER1	5	Antecedents of inter-personal trust	Reputation	Ganesan (1994)	The contact person has a reputation for being honest?
REPUPER4	6	Antecedents of inter-personal trust	Reputation	Doney & Cannon (1997)	The contact person is known to be a person who takes care of his/her partners?
REPUPER5	7	Antecedents of inter-personal trust	Reputation	Ganesan (1994)	The contact person has a reputation for being fair?

"*The contact person has a reputation for being honest?*" (5.) and "*The contact person has a reputation for being fair*" (7.): Ganesan (1994, 7) place four questions related to honesty on his research, and suggests that credibility is increased when reputation for fairness and honesty exist in partnership. Also, Plank et al. (1999, 62) emphasise that trust building between partners require being reliable and honest.

"*The contact person is known to be a person who takes care of his/her partners?*" (6.): motivation to help or reward enhance trust in a partnership (Doney and Cannon, 1997, 37).

Reputation requires fair manners and actions based on honesty. Party taking initiative can appear as motivated partner. This can build up reliability in a relationship leading to mutual benefits and rewards, such as further investments by the partner.

Experience:

The questions related to experience in antecedents of inter-personal trust are shown on below table:

Table 3: Experience measurements of antecedents of inter-personal trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH (FIN/ENG):
EXPERP1	8	Antecedents of inter-personal trust	Experience	Doney & Cannon (1997)	How long has this contact person been dealing with you?
EXPERP2	9	Antecedents of inter-personal trust	Experience	Doney & Cannon (1997)	How long has this contact person been dealing with your company?

"*How long has this contact person been dealing with you?*" (8.) and "*How long has this contact person been dealing with you?*" (9.): Doney and Cannon explain (1997, 41) that people learn through experience when the length of time grows in the relationship at personal level and claim that customers can estimate increased investment by the supplier when the relationship increases in time.

At the beginning of the relationship there can be recognised to be numerous unknown and open items in a relationship. As Doney and Cannon explain (1997) the personal trust relationship increases, or may also decrease if actions done do not support the trust building in a relationship. Increased learning of counterpart partner's habits may lead additional investments when mutual learning by experience is based on trust.

3.1.2 Antecedents of inter-organisational trust

The questions related to behaviour in antecedents of inter-organisational trust are shown on below table:

Behaviour:

Table 4: Behaviour measurements of antecedents of inter-organisational trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
BEHACOM1	10	Antecedents of inter-organizational trust	Behaviour	Möllering (2002)	The partner company treats us well?
BEHACOM2	11	Antecedents of inter-organizational trust	Behaviour	Möllering (2002)	The partner company continuously seeks to maintain a good relationship with us?
BEHACOM3	12	Antecedents of inter-organizational trust	Behaviour	Doney & Cannon (1997)	The partner company keeps its promises?
BEHACOM4	13	Antecedents of inter-organizational trust	Behaviour	Doney & Cannon (1997)	The partner company is genuinely concerned that our business succeeds?
BEHACOM6	14	Antecedents of inter-organizational trust	Behaviour	Seppänen (2008)	The partner company sometimes acts unpredictably or inconsistently? (R)

"*The partner company treats us well?*" (10.) and "*The partner company continuously seeks to maintain good relationship with us?*" (11.): Möllering (2002 [Seppänen, 2008a]) explains the general trust elements and their essential meaning in a relationship where questions referring to treatment and continuously seeking good relationships between partners refer to.

"*The partner company keeps its promises?*" (12.) Doney and Cannon (1997,37) explain the prediction process of developing trust to rely on partner's ability in estimating another party's behaviour. Trust requires mutual credibility and benevolence in a relationship. Constantly keeping and delivering the promises can develop partner's willingness to invest to the relationship, and "*The partner company is genuinely concerned that our business succeeds?*" (13.): Doney and Cannon (1997, 37) intentionality

process by explaining that when motivation to help the partner exist in a relationship more investments partners are willing to make in a relationship.

"*The partner company sometimes acts unpredictably or inconsistently?*" (14.): Seppänen (2008b, 76) states that partners in a relationship are expecting that another party will not act by inconsistent and unpredictable manners.

Treating partner well, keeping promises and acting in consistent and predictably manners are seen as key points by the scholars to reach emotions of good behaviour. When partner governs continuous actions to maintain good relationships and gain trust to partner's good behaviour the investments may be applicable in a relationship.

Reputation:

The questions related to reputation in antecedents of inter-organisational trust are shown on below table:

Table 5: Reputation measurements of antecedents of inter-organisational trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
REPUCOM1	15	Antecedents of inter-organizational trust	Reputation	Seppänen (2008)	The partner company has a reputation for being capable?
REPUCOM2	16	Antecedents of inter-organizational trust	Reputation	Doney & Cannon (1997)	The partner company has a reputation for being honest?
REPUCOM3	17	Antecedents of inter-organizational trust	Reputation	Ganesan (1994)	The partner company has a reputation for being fair?

"*The partner company has a reputation for being capable?*" (15.): An organisation can balance its weaknesses when the necessary capabilities exist (Seppänen, 2008b, 75). Reputation impacts the perception of partner's trustworthiness in a relationship (Seppänen, 2008b, 76).

"*The partner company has a reputation for being honest?*" (16.): Doney and Cannon (1997, 37) define reputation to be partner's belief for other party's honesty. Good reputation can enhance the credibility of the partner.

"*The partner company has a reputation for being fair?*" (17.): Ganesan (1994, 5) argues that partners who hold the reputation for fairness are trusted more. Partner who acts in fairness can gain credibility in its actions.

Company with good reputation can even balance its weaknesses when the reputation with emotion of trustworthiness exists. Honesty and fairness can add up credibility. In my view, it's easier for a company to face also bad times in a relationship when reputation is at good level. Overcoming difficulties and ensuring that partner continues to invest in a relationship becomes easier.

Experience:

The questions related to experience in antecedents of inter-organisational trust are shown on below table:

Table 6: Experience measurements of antecedents of inter-organisational trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
EXPERC1	18	Antecedents of inter-organizational trust	Experience	Heimeriks (2004)	How many partnerships has your company had during last five years?
EXPERC2	19	Antecedents of inter-organizational trust	Experience	Seppänen (2008)	What kind of experiences does your company have of these partnerships?
EXPERC3	20	Antecedents of inter-organizational trust	Experience	Doney & Cannon (1997)	For how long has your company been in partnership with this company?

"*How many partnerships has your company had during last five years?*" (18.), "*What kind of experiences does your company have of these part-*

nerships?" (19.), and "*For how long has your company been in partnership with this company?*" (20.): These three questions measure the length of the relationship with external companies and with the company under this research. Also experiences with external companies were asked.

Experience with the partners develops trust (Ganesan, 1994, 5). There is a positive impact with the length of the relationship for trust (Seppänen, 2008b, 76). Doney and Cannon (1997, 39-40) mention that most scholars agree trust to develop over time. They define length of time to be an investment partners are willing to make and that partners are in better position to predict the future behaviour of the other party.

Understanding what partner's emotion in other relationships they possess is seen quite important to a company. Benchmarking other relationships may reveal items that should be emphasised in a relationship. As well, understanding the length of relationship and analysing variance in responses may provide important information about how trust develops over time.

3.1.3 Inter-personal trust

The questions related to capability in inter-personal trust are shown on below table:

Capability:

Table 7: Capability measurements of inter-personal trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
TPERCAP1	21	Inter-personal trust	Capability	Smith & Barclay (1997)	The contact person knows this branch well?
TPERCAP4	22	Inter-personal trust	Capability	Seppänen (2008)	The contact person has good business know-how?
TPERCAP9	23	Inter-personal trust	Capability	[new]	The contact person is capable in finding solutions to deliver added value?
TPERCAP7	24	Inter-personal trust	Capability	Plank et al. (1999)	The contact person is NOT a real expert? (R)

"*The contact person knows this branch well?*" (21.): Role competence is how partners experience and understand the skills, abilities and knowledge of contact person required to complete and perform in given tasks (Smith and Barclay, 1997, 6).

"*The contact person has good business know-how?*" (22.): Seppänen (2008b) defines capability to be a set of skills, competences and characteristics that allow people to do what they are expected to complete in the means of business know-how and capability.

"*The contact person is capable in finding solutions to deliver added value?*" (23.): This is a new item. Theoretical background was not considered when question was added to the survey but a request was received from the supplier company to enquire how supplier's staff and customers consider added value delivery in solutions delivered.

"*The contact person is NOT a real expert (R)?*" (24.): In general, Plank et al. (1999, 62) define trust to be a global belief that partner, product and company fulfils their obligations as understood by the other partner. Partner's expertise, or lack of it as asked in this reverse-coded question, covers all aspects of how these scholars defined trust.

This study in dyadic relationships focuses on information technology services and outsourcing industries. In addition partners understanding and having good knowledge of branch and business know-how of their own company they should also understand partner's branch and business. The

skills, competences and characteristics of both parties are required in partner's knowledge, one delivering the service and other who have agreed to utilise a partner to deliver something on their behalf. Both partners have obligations to each other requiring that those obligations are well understood to ensure dyadic trust can be built. Expertise and knowhow should lead to investments in a relationship.

Goodwill:

The questions related to goodwill in inter-personal trust are shown on below table:

Table 8: Goodwill measurements of inter-personal trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
TREGW1	25	Inter-personal trust	Goodwill	Doney & Canon (1997)	The contact person is open when dealing with us?
TREGW5	26	Inter-personal trust	Goodwill	Doney & Cannon (1997)	The contact person is NOTtrustworthy? (R)
TREGW6	27	Inter-personal trust	Goodwill	Smith & Barclay (1997)	The contact person could take advantage of me if it would benefit him/her?

"*The contact person is open when dealing with us?*" (25.) and "*The contact person is NOT trustworthy (R)?*" (26.): Doney and Cannon (1997, 39) attach openness and trustworthiness to confidential information sharing between partners. Sharing confidential information is considered to be a substantial investment in a relationship. These scholars state that if one partner is not trustworthy, then another partner will also assume acting in untrustworthy manners if there is lack of trustworthiness in a relationship.

"*The contact person could take advantage of me if it would benefit him/her?*" (27.): Smith and Barclay (1997, 6) assess motives and intentions in a relationship. This refers to extent partner may recognise the behaviour out of acceptable behaviour even in case the relationship is based on actions of goodwill.

Often business relationships can hold mentionable amounts of information that partner consider confidential. Holding confidential information may lead that partner emotion distrust in a relationship. Sharing information openly should increase trustworthiness between partners. Information sharing should also lead to situation where relationship is more transparent where acts of taking unfair advantage from partner are suspected less in a relationship.

Self-reference:

The questions related to self-reference in inter-personal trust are shown on below table:

Table 9: Self-reference measurements of inter-personal trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
TPERIDE2	28	Inter-personal trust	Self-reference	Seppänen (2008)	The contact person is aware of his/her own potential?
TPERIDE3	29	Inter-personal trust	Self-reference	Seppänen (2008)	The contact person is aware of his/her own goals?
TPERIDE4	30	Inter-personal trust	Self-reference	Seppänen (2008)	The contact person has good self-knowledge?
TPERIDE6	31	Inter-personal trust	Self-reference	Seppänen (2008)	The contact person is aware of the strengths of the products/services of the company s/he represents?
TPERIDE9	32	Inter-personal trust	Self-reference	[new]	The contact person innovatively provides new opportunities to deliver benefits in our collaboration?

"*The contact is aware of his/her own potential?*" (28.), "*The contact person is aware of his/her own goals?*" (29.), "*The contact person has a good knowledge?*" (30.) and "*The contact is aware of the strengths of the products/services of the company s/he represents?*" (31.): Seppänen (2008b, 75) defines self-reference to be partner's awareness of his or her identity and capabilities towards to other and having ability to describe own values, principles and targets. Partner can be expected also to understand

importance and meaningfulness of actions and being able to prioritise those and to have ability to use others as a reference for self-reflection.

"*The contact person innovatively provides new opportunities to deliver benefits in our collaboration?*" (32.): This is a new item. Theoretical background was not considered when question was added to the survey. A request from the supplier company was received to include question how supplier's staff and customers establish and communicate new innovations and benefits in a relationship.

Self-reference, or how partners are aware of their identity and capabilities towards the other and who understand how they should work in means of values and principles and what they should achieve in means of targets. A working relationship with good self-reference in a dyadic relationship should increase possibility to meet expectation of another party.

3.1.4 Inter-organisational trust

Capability:

The questions related to capability in inter-organisational trust are shown on below table:

Table 10: Capability measurements of inter-organisational trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
TCOMCAP2	33	Inter-organisational trust	Capability	Seppänen (2008)	The products/services of our partner company are of good quality?
TCOMCAP3	34	Inter-organisational trust	Capability	Seppänen (2008)	The partner company knows how to price its products/services profitably?
TCOMCAP5	35	Inter-organisational trust	Capability	Seppänen (2008)	The partner company has the necessary technological know-how?
TCOMCAP6	36	Inter-organisational trust	Capability	Seppänen (2008)	The partner company has the necessary business know-how?

"*The product/services of our partner company are of good quality?*" (33.),
"*The partner company knows how to price its products/services profita-
bly?*" (34.), "*The partner company has the necessary technological know-
how?*" (35.) and "*The partner company has the necessary business know-
how?*" (36.): Seppänen (2008b, 75) describes that capability involves all
skills, competences and characters partners are required to do, including
capabilities in technological, business and communication means with
know-how on company's products/services.

Partner usually expects quality in products or services they acquire. It can
be argued that quality builds upon the technological and business know-
how. Good business partnership requires both parties understanding that
products and services delivered need to be profitable. Non-profitability
could easily lead to less quality that further can jeopardise the quality and
partner's willingness to invest to the relationship.

Goodwill:

The questions related to goodwill in inter-organisational trust are shown on
below table:

Table 11: Goodwill measurements of inter-organisational trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
TCOMGW4	37	Inter-organisational trust	Goodwill	Doney & Cannon (1997)	When making important decisions, the partner company also considers our welfare?
TCOMGW5	38	Inter-organisational trust	Goodwill	Doney & Cannon (1997)	The partner company keeps our best interests in mind?
TCOMGW7	39	Inter-organisational trust	Goodwill	Doney & Cannon (1998)	The partner company also wants us to succeed?

"*When making important decisions, the partner company also considers
our welfare?*" (37.), "*The partner company keeps our best interests in
mind?*" (38.) and "*The partner company also wants us to succeed?*" (39.):
Doney and Cannon (1997, 38-39) consider these items as supplier willing-

ness to customise. Partner could propose to make and complete invest-
ments that can help partner by some means (for example new technology
or new processes that meet partner's needs). Trust can be enhanced
when such investments are made. Key element is that partner provides a
feeling that investments are done on other party's behalf.

Dyadic relationship is mutual relationship where both partner must have
interest to each other. Decision-making when agreeing on something that
have impact to another partner should always be on agenda to show in-
terest that partner is willing to invest such mutual relationship. Ensuring
that partner can financially or technologically be in viable position when
decisions are made should increase also partner's future willingness to in-
vest to the relationship.

Self-reference:

The questions related to self-reference in inter-organisational trust are
shown on below table:

Table 12: Self-reference measurements of inter-organisational trust.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
TCOMIDE1	40	Inter-organisational trust	Self-reference	Seppänen (2008)	The partner company is aware of its own capabilities?
TCOMIDE2	41	Inter-organisational trust	Self-reference	Seppänen (2008)	The partner company has a clear understanding of its own potential?
TCOMIDE3	42	Inter-organisational trust	Self-reference	Seppänen (2008)	The partner company is aware of its goals?
TCOMIDE4	43	Inter-organisational trust	Self-reference	Seppänen (2008)	The partner company is aware of its values?

"*The partner company is aware of its own capabilities?*" (40.), "*The partner
company has a clear understanding of its own potential?*" (41.), "*The part-
ner company is aware of its goals?*" (42.) and "*The partner company is
aware of its values?*" (43.): Seppänen (2008b, 75) considers that a com-

pany with self-reference can stabilise its weaknesses by building the re-
quired capabilities both internally and externally.

Self-reference in inter-organisational relationships should, similarly than in
inter-personal relationships help companies to assess and ensure the con-
tinuity of a relationship. Understanding what company do and can do with
the targets set and company operating in set boundaries (values) should
help partners to overcome also difficulties that may occur in a relationship.
Investment decisions may be done in quicker means when companies are
aware of their self-reference.

3.1.5 Free text fields

Table 13: Free text field questions.

IDENTIFYER	Survey No.	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH:
FREEIPT1	44	Inter-personal trust	[none]	[new]	What is in your opinion considered most important in personal trust relationship between you and your contact person?
FREEIOT1	45	Inter-organisational trust	[none]	[new]	What is in your opinion considered most important in trust relationship between your company and partner company?
FREEOPEN	46	General feedback	[none]	[new]	Please provide any comments about this survey, if you wish

Survey was included with three free text field questions. No clear theoreti-
cal background was utilised in these questions but rather the opportunity
to give opinions about inter-personal trust (44.), inter-organisational trust
(45.) and overall opinions about this survey (46.) were asked.

Responses were not analysed by any statistical software. Some of re-
sponses are highlighted in this study when the reply may provide addition-
al information for this study.

3.2. Scaling

Questionnaire included 43 single-choice ordinal scale level questions. All single-choice questions were mandatory to answer. Two questions were free-text fields where respondents were requested to answer about the elements they consider meaningful in inter-organisational or inter-personal relationships. Last and third free-text field question allowed respondents to leave any feedback or comment about the survey.

A Likert scale has usually 5- or 7-point scales. The points establish ascending or descending scale. Likert scales are suitable for measuring questions that has no precise or fact-based answer (Hirsjärvi et al., 1997, 186, 189).

The scaling in this questionnaire follows mostly Likert 7-point (*Likert-7*) scale (39 questions out of 46), to follow scale used by Seppänen (2008a). All questions are forced to have a mandatory answer. Options to choose in Likert-7 scale in this research are: 1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree, and 7 = strongly agree. Question EXPERC2 has Likert-7 scale with differing options: 1 = mainly negative, 2 = somewhat negative, 3 = slightly negative, 4 = neither negative nor positive, 5 = slightly positive, 6 = somewhat positive and 7 = mainly positive.

Exceptions from Likert-7 scale are questions EXPERP1, EXPERP2 and EXPERC3 where length of time is asked, and EXPERC1 where total number of partnerships is asked. These exceptions to Likert-7 scale are with six-scale scaling where answer is chosen from the drop-down list. As well, three questions have been included with free text field and are marked as non-mandatory to answer. Free text fields were not analysed by statistical methods.

3.3. Operationalization

Operationalization means that measures are united with to concrete reality of observations (Eskola and Suoranta, 1998, 75). Trust can be viewed as a theoretical abstract. Trust is an intangible commodity, something that cannot be measured similarly than for example the commodities measured by scholars in natural sciences. Uniting the measures of trust with empirically measured mean was considered in this study through human behaviour. The measures were operationalized on questionnaire by asking questions that are easier for any respondent to approach. The abstract term, trust itself was not highlighted on questions. A respondent raised also a concern when explaining that 'trust' is the topic under research:

> SuppNN: *Why do you want to know if I and my customer trust each other, what if the study reveals that I'm untrustworthy?*

Above concern was explained that anonymity and confidentiality is ensured throughout the research and no single responds are analysed.

The data collection was carried out with standardised survey. Survey provides effective way to collect large amount of data that include many questions. Metsämuuronen (2003, 79) explains that measurement instrument can include different items, in which the role of single item's appearance is not critical but the instrument in its entirety has the significant matter.

3.4. Pre-testing of the questionnaire

At first, the questionnaire was tested by interviewing two senior management level persons at the supplier company in this research. The questionnaire follows the measurement scale from publication part of doctoral thesis of Risto Seppänen (2008a). As the measurement frame is utilised from earlier research any modifications to the set of questions were ex-

plained to be restricted. As a result of interviews two additional questions were requested to be added to the questionnaire in this survey research, namely being:

> *TPERCAP9 "The contact person is capable in finding solutions to deliver added value?"*, and

> *TPERIDE9 "The contact person innovatively provides new opportunities to deliver benefits in our collaboration?"*

In second phase of testing, the questionnaire was established and configured in 'Webropol' application and sent to 10 persons who were requested to answer the questionnaire in its entirety. 'Webropol' application's feature to send questionnaire via email was used. The questions were locked to be mandatory for each respondent to answer. Test followed the same principles than final questionnaire will follow. Only difference was that questionnaire was presented in one page, in other words the questions on questionnaire were not yet broke into several pages. The response rate of the test sample was 70%. The dispersion based on the results of the test sample was identified to be sufficient. The length in time required to complete the questionnaire was confirmed to be approximately five minutes. Few correction suggestions to grammar were received and one fault in scale were recognised and corrected to the final version of the questionnaire.

3.5. Data collection and analyses

The questionnaire was distributed to 331 persons (units) in total. Due to the dyadic nature of this research the gathering of the data were classified in two different groups, 1) the respondents at the supplier company, and 2) the respondents at customer companies. The questionnaire was distribut-

ed to 114 units (in some cases one person answered to more than one questionnaire) at the supplier, and to 217 persons at customers.

The selected respondents (units) working at supplier were working in different organisational units. The roles subjects of this research worked in were diverse, most of persons were working in client care unit, but also persons having a general management, project management or sales role were included.

The roles of the customer were not identified in depth. Practically any person at customer side of the dyadic relationship was selected to be a respondent, as long as respondents from customers were identified to have a professional relationship with the person working at the supplier. This identification set the importance for the dyadic relationship between persons and companies under research. Less consideration was made for the specific work role and professional background respondents in this survey had.

Approaching the clients of supplier raised questions and concerns. Comments and notes about the questionnaire that supplier's representatives raised were:

> *My customer is very concerned about the confidentiality of their business information,*

> *Customers under my responsibility require a non-disclosure agreement for any contact made with them,* and

> *My customer is highly confidential public sector customer, and all communications with the customer has to be channelled through customer's unit responsible for communications.*

The researcher explained that questionnaire in this study can be compared with the customer satisfaction surveys that supplier company delivers on timely basis to its customers. The questionnaire was delivered in advance to the supplier's representatives to explain the content, and particularly to explain that the survey does not include any questions that could jeopardise business confidentiality.

The anonymity and confidentiality of the survey research was emphasised with explanation that results are analysed by statistical methods to ensure that no single respondents are identified in this research. In most cases this explanation was sufficient to reduce concern about business confidential information. One public sector customer was not delivered with the questionnaire due to contractual requirements for ultra-high security. For two customers the researcher signed off personally non-disclosure agreements (NDA) to confirm that these customers are not identified in this research.

Comparing this study to the customer satisfaction survey although raised another concern at the supplier:

> *We have stated in the contract with the customer about how many questionnaires we send them annually. Additional surveys must be separately agreed with the client.*

Customer's decision-makers value collaboration and mutual commitment in their supplier relationships. Willingness to invest by trust increases when relationships are not highly controlled by contractual agreements (Ross et al., 2009, 39; Selnes, 1998, 308). It could be interpreted that with some customers the strict contractual agreements may lead to less trust and have negative impact for the supplier if customer willingness to invest is reduced. Contractual commitment in relation to number of surveys sent were not an issue after reviewing the situation with the customer representative.

The units of observations (answerers of the questionnaire) were not randomly selected but selection criteria were based on the information of current customer relationships that the supplier had. The key criteria in selecting the person to answer in this survey research were that person had a client-facing role with identified counterpart person at the customer company. Each identified supplier company representative was requested to provide email addresses of their customer counterpart persons.

The questionnaire was available only as online form in 'Webropol' application accessible via Internet. Exactly the same questionnaire was sent to all respondents, regardless if respondent was personnel of the supplier or at the customer company. The researcher carried out the delivery of questionnaires to respondents. Recognised personnel's email addresses working at the supplier company were first added to 'Webropol' application and sent to respondents. Reason for delivering the questionnaires first to the supplier's personnel was that they were advised about the research and its target. As well, staff working at the supplier company was recognised to have frequent communications and meetings with the customer's targeted in this research. Supplier company staff was able to explain with necessary details for what reason the research is made at the time the customer companies received the questionnaire.

The final response rate of the questionnaire was 49.8 per cent. 331 questionnaires were sent out of which 165 were returned. Generally, the response rate can be considered quite high.

Number of partially answered questionnaires was two. All questions except the free text field questions were defined to be mandatory to answer. Partially answered questionnaires were recognised if the respondent had closed the survey before completion. Zero value was entered for questions missing a value in partially answered questionnaires. Even so, the answers with zero values were filtered out in SAS Enterprise Guide software.

Qualified data of dyadic relationships:

128 questionnaires were identified to have respondents both at supplier and customer side. These questionnaires where dyadic relationship were identified qualified to analysis of dyadic data. Total of 37 questionnaires were filtered out from the analysis as either supplier or customer end of dyad had a questionnaire unanswered. Also two questionnaires that were only partially answered were not included. Only the responses where both Supplier and Customer had a questionnaire answered were included to the dyadic part of analysis.

In most cases the analysis of respondents generated the situation where questionnaire was sent to more than one respondent either at customer or at supplier side of the dyad. Multiple answers in single dyad were averaged in analysis.

The effective response rate of the questionnaire was 38.7 per cent including only responses where both ends of dyads responded.

Appropriate unit of observation is dyadic relationship (Ross et al., 2009, 40). Data is collected from perspective and viewpoint of the supplier. The supplier company's information about the customer companies' persons having a relationship with the supplier was utilised. The members of customer-facing staff were contacted and a request to provide contact details about the customers and persons working in relationship with the supplier.

The supplier company establishes a focal dyad in this research. This research considers that dyadic relationships are established through focal dyad with the direct relationships to numerous individual customers. The dyadic relationships between focal dyad (supplier) and number of customers establishes the unit of observation (N) in this research. Each dyadic

relationship or both ends of the dyad represents one unit of observation for analysis (Lambe et al. 2002, 148; Baum and Korn, 1999, 252).

```
┌─────────────────┐
│   CC SUPPLIER   │
│   FOCAL DYAD    │
├─────────────────┤
│        1        │
└─────────────────┘
         ↑
     DYADIC
RELATIONSHIP = (N)
         ↓
┌─────────────────┐
│   CC CUSTOMER   │
│                 │
│   1,2,3,...n    │
└─────────────────┘
```
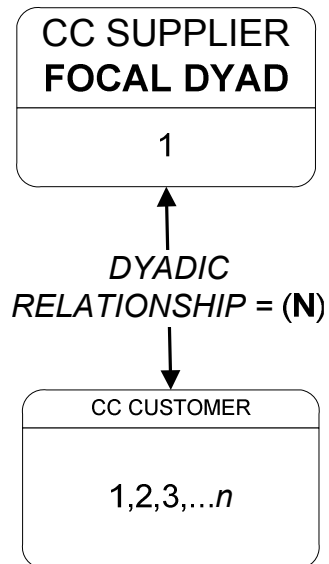
Figure 7: Illustration for appearance of the unit of observation (N) in single dyadic relationship

3.6. Data coding

"Observations presented in the form of matrix are called a data matrix" (Helenius and Vahlberg, 2008, 4). The data matrix is cross-functional as each observation presented in the data matrix is independent. The questionnaire did not include any socio-demographic or other demographic variables, such as age, profession, or level of education.

The answers were loaded to the software from data matrix maintained in 'Microsoft Excel 2007' software. Each question on questionnaire had an individual identifier. Respondents were also coded to ensure anonymously and confidentiality of this research.

	A	B	C	D	E	F	G	H	I	
1	Identifyer:	RESPCLAS	BEHAPER1	BEHAPER4	BEHAPER5	BEHAPER6	REPUPER1	REPUPER4	REPUPER5	EXF
2	Supl01	1	6	2	6	5	6	6	6	
3	Cust01	2	7	2	6	6	6	4	6	

Figure 8: Data matrix example

Value '1' designates the supplier and value '2' the customer in RESPCLAS variable. RESPCLAS variable was manually coded by the researcher in the data matrix. Questions BEHACOM6, TPERCAP7, TREGW5 and BEHAPER4 were reverse-coded in SAS software (for example value 7 was re-coded to value 1, or average value of 4.5 was re-coded to value 3.5).

Four different types of data matrices were established:
1) Data matrix including all responses,
2) Data matrix including all responses with dyadic relationship,
3) Data matrix including all responses with dyadic relationship where dyads were identified, and
4) Data matrix with average values for each dyad.

In 4), each single dyad contained two observations, one from customer and one from supplier end of the dyad. In case of multiple responses the values were re-coded into same variable by calculating the mean values. When only one respondent were recognised in a dyad the original value were used. The formula of arithmetic mean was used for averaging multiple responses:

$$\bar{x} = \frac{\sum x_i}{n}$$

With the fourth data matrix the responses in one dyad varied as:
1) Supplier: 22 dyads with single response, 10 cases with two responses and one case with three responses in a dyad,

2) customer:11 dyads with single response, 10 dyads with two re-
   sponses, three dyads with three responses, one dyad with five re-
   sponses and one dyad with 15 responses,

3) 21 dyads had at least two responses from one end of the dyad and
   single response from the other end of the dyad, and

4) five dyads had at least two responses received from the both sides
   of the dyad.

The collected data was coded and analysed with tool designed for analys-
ing quantitative data. Tool used in this research was 'SAS Enterprise
Guide 4.2' software. The answers were coded to the SAS software.

4. EMPIRICAL STUDY

4.1. Validity of the data

Dyadic data gathered from both sides of partner companies provides valid-
ity (Beugelsdijk et al., 2009, 312; Lambe et al., 2002, 148). Collecting and
analysing data in dyadic context can increase the validity of data com-
pared to if data would have been gathered only from single actor's per-
spective.

The final scales were selected to comprise only those responds where
both ends of the dyad, the supplier and the customer had answered. If ei-
ther end of the dyad were missing the answer was not included in the final
scales. Utilising only answers where dyadic relationship has been con-
firmed should increase the validity of this research.

Often one dyadic relationship had more than one respondent. The an-
swers were averaged in case of several respondents in one dyad. Validity
should increase when more than one respondent exist in a dyad. The de-
tails for numbers of respondents in each dyad are explained in chapter
3.6. Data Coding.

4.2. Reliability of the data

Reliability means accuracy in the used measurements. The essential of
reliability comes from understanding the bias, estimating the effect, and
from assessment of the impacts the bias causes to the research (Num-
menmaa, 2009, 346).

The formula of calculating Cronbach's alpha is:

$$\alpha = \frac{k \cdot \overline{r_{iJ}}}{1 + (k - 1) \cdot \overline{r_{iJ}}}$$

where α is reliability (internal consistency), k is total number of items in the measurement, and $\overline{r_{iJ}}$ is the average of items inter-correlations. (Nummenmaa, 1999, 357).

Cronbach Coefficient Alpha	
Variables	**Alpha**
Raw	0.955990
Standardized	0.960369

Cronbach Coefficient Alpha with Deleted Variable					
	Raw Variables		**Standardized Variables**		
Deleted Variable	**Correlation with Total**	**Alpha**	**Correlation with Total**	**Alpha**	**Label**
behaper1	0.380104	0.956073	0.381410	0.960475	BEHAPER1
rbehaper4	0.496576	0.955448	0.499535	0.959899	BEHAPER4 (R)
behaper5	0.608651	0.954786	0.611850	0.959346	BEHAPER5
behaper6	0.735255	0.954004	0.734047	0.958740	BEHAPER6
repuper1	0.720756	0.954379	0.722282	0.958798	REPUPER1
repuper4	0.692861	0.954350	0.695491	0.958932	REPUPER4
repuper5	0.676590	0.954497	0.680667	0.959005	REPUPER5
experp1	0.207952	0.957007	0.202539	0.961338	EXPERP1
experp2	0.335304	0.956468	0.325427	0.960746	EXPERP2
behacom1	0.789562	0.953680	0.785240	0.958484	BEHACOM1
behacom2	0.778277	0.953791	0.775398	0.958533	BEHACOM2
behacom3	0.733703	0.953961	0.725621	0.958782	BEHACOM3
behacom4	0.768980	0.953766	0.765328	0.958584	BEHACOM4
rbehacom6	0.615029	0.954735	0.609023	0.959360	BEHACOM6 (R)
repucom1	0.675205	0.954475	0.677198	0.959023	REPUCOM1
repucom2	0.696715	0.954441	0.697950	0.958920	REPUCOM2
repucom3	0.748907	0.954042	0.748575	0.958667	REPUCOM3
experc1	0.193756	0.958601	0.192286	0.961387	EXPERC1
experc2	0.251799	0.956713	0.257110	0.961076	EXPERC2
experc3	0.103721	0.957964	0.105457	0.961801	EXPERC3

Cronbach Coefficient Alpha with Deleted Variable					
	Raw Variables		**Standardized Variables**		
Deleted Variable	**Correlation with Total**	**Alpha**	**Correlation with Total**	**Alpha**	**Label**
tpercap1	0.694153	0.954286	0.692822	0.958945	TPERCAP1
tpercap4	0.656482	0.954574	0.660393	0.959106	TPERCAP4
tpercap9	0.762402	0.953930	0.766465	0.958578	TPERCAP9
rtpercap7	0.576018	0.954992	0.575038	0.959528	TPERCAP7 (R)
tregw1	0.719608	0.954287	0.723042	0.958795	TREGW1
rtregw5	0.535983	0.955151	0.539606	0.959702	TREGW5 (R)
tregw6	-.401174	0.960508	-.401167	0.964164	TREGW6
tperide2	0.563795	0.955081	0.574903	0.959529	TPERIDE2
tperide3	0.575063	0.955075	0.582989	0.959489	TPERIDE3
tperide4	0.590765	0.955021	0.603482	0.959388	TPERIDE4
tperide6	0.739951	0.954150	0.743883	0.958691	TPERIDE6
tperide9	0.742979	0.953980	0.745141	0.958684	TPERIDE9
tcomcap2	0.717277	0.954169	0.719484	0.958812	TCOMCAP2
tcomcap3	0.452003	0.955584	0.458364	0.960100	TCOMCAP3
tcomcap5	0.576834	0.954938	0.576752	0.959520	TCOMCAP5
tcomcap6	0.708418	0.954257	0.712893	0.958845	TCOMCAP6
tcomgw4	0.716970	0.954101	0.711199	0.958854	TCOMGW4
tcomgw5	0.693987	0.954277	0.689927	0.958959	TCOMGW5
tcomgw7	0.725677	0.954197	0.727827	0.958771	TCOMGW7
tcomide1	0.688207	0.954378	0.692836	0.958945	TCOMIDE1
tcomide2	0.761439	0.954089	0.767945	0.958571	TCOMIDE2
tcomide3	0.680396	0.954538	0.684293	0.958987	TCOMIDE3
tcomide4	0.621019	0.954776	0.633338	0.959240	TCOMIDE4

Cronbach's alphas were recognised to be very high in the variables in this research. The consistency with over 0.9 results should exist in the measurement frame utilised in this study.

5. RESULTS

The results in this thesis are based on findings established by using Microsoft Excel and SAS Enterprise Guide software's. The results from survey were collected and cross-indexed on Excel. All responses were first collected and further the responses with only partially answered were removed from the sample. Dyadic relationships were analysed to include replies where both the supplier and customer had answered to the survey. Identification column was added with values 1 and 2 to recognise responses representing supplier (1) or customer (2). Excel software was also used to calculate averages in cases where more than one response was received for single dyad.

SAS Enterprise Guide was utilised in statistical runs. Data in Excel format was imported to SAS Enterprise Guide software. Before statistical runs the data for reverse-coded questions were re-coded by entering the reverse-values for the questions (for example, value 1 became 7, and value 2.5 became 5.5 after re-coding).

The normality of data was examined and confirmed by reviewing the histograms before the statistical tests were conducted. Data were not detected to include disruptive outliers that would result skewness to the data.

5.1. Basic statistical data

Mean has objective to estimate the expected value of the population (Nummenmaa, 1999, 64). The arithmetic formula to calculate mean is presented in section *3.6 Data Coding*.

Variance is a statistical key figure that describes the typical distance from the mean. Variance is explained that greater the variance is, the farther from the mean have observations spread. (Nummenmaa, 1999, 67)

The arithmetic formula to calculate variance is:

$$\sigma^2 = \frac{\sum(x_i - \bar{x})^2}{n}$$

where σ^2 is variance, $(x_i - \bar{x})$ is difference between observation and the mean, and *n* is number of observations. The sample variance is marked with *s* (instead of σ^2) and difference of $n-1$ is calculated.

Standard deviation informs the average distance from the mean of distribution. This requires that the mean must always be reported with the standard deviation. Standard deviation can be calculated directly by using variance. (Nummenmaa, 1999, 69)

The arithmetic formula to calculate variance is:

$$s = \sqrt{\frac{\sum(x_i - \bar{x})^2}{n-1}}$$

where *s* is sample standard deviation, $(x_i - \bar{x})$ is the difference between observation and the mean, and *n* is number of observations

The minimum and maximum describe lowest and highest value for variable given by respondents. N is total number of respondents.

Two following tables (14. and 15.) describe the basic statistical figures of the sample in this research. The first part of the statistical figures are taken from the data matrix with all responses included ("all respondents"). In full sample the N for supplier answerers is 81 and for customer part N is 82. The second part is from data matrix where only responses where dyadic relationship was recognised ("dyads only"). N is equal at both ends (N=40) of the dyadic sample due to fact that only responses where both ends pro-

vided their view, and in case of multiple replies for one dyad under research the averages were calculated. Table 14 includes respondents from the supplier and table 15 from the customer.

Table 14: Mean, standard deviation and variances from the supplier.

CLASS	SUB-CLASS	Variable	All respondees	Mean	Std Dev	Variance	Min	Max	N	Dyads only	Mean	Std Dev	Variance	Min	Max	N
Antecedants of inter-personal trust	Behaviour	BEHAPER1		5.59	1.2	1.44	2	7	81		5.72	1.14	1.3	2	7	40
		BEHAPER4 (R)		5.35	1.48	2.2	1	7	81		5.54	1.4	1.96	2	7	40
		BEHAPER5		5.75	0.97	0.94	1	7	81		5.78	1.16	1.35	1	7	40
		BEHAPER6		5.14	1.24	1.54	2	7	81		5.34	1.22	1.49	2	7	40
	Reputation	REPUPER1		5.78	0.94	0.88	2	7	81		5.9	0.98	0.95	2	7	40
		REPUPER4		5.11	1.08	1.18	2	7	81		5.3	1.19	1.41	2	7	40
		REPUPER5		5.52	0.99	0.98	2	7	81		5.66	1	0.99	2	6	40
	Experience	EXPERP1		2.69	1.29	1.67	1	5	81		2.71	1.19	1.43	1	5	40
		EXPERP2		3.96	1.35	1.81	1	6	81		4.19	1.16	1.35	2	6	40
Antecedants of inter-organisational trust	Behaviour	BEHACOM1		5.25	1.09	1.19	2	7	81		5.34	1.09	1.18	2	7	40
		BEHACOM2		5.35	0.95	0.9	2	7	81		5.41	1.01	1.02	2	7	40
		BEHACOM3		5.26	1.01	1.02	3	7	81		5.42	1.03	1.07	3	7	40
		BEHACOM4		4.69	1.28	1.64	1	7	81		4.76	1.24	1.54	2	7	40
		BEHACOM6 (R)		4.01	1.54	2.36	1	7	81		4.5	1.6	2.56	2	7	40
	Reputation	REPUCOM1		5.54	0.92	0.85	3	7	81		5.68	0.87	0.75	3	7	40
		REPUCOM2		5.73	0.85	0.73	3	7	81		5.86	0.86	0.74	3	7	40
		REPUCOM3		5.32	1.03	1.07	3	7	81		5.58	0.98	0.97	3	7	40
	Experience	EXPERC1		3.78	2.11	4.45	1	6	81		4.24	1.86	3.45	1	6	40
		EXPERC2		5.38	1.15	1.31	4	7	81		5.44	1.08	1.16	4	7	40
		EXPERC3		3.81	1.55	2.4	1	6	81		3.58	1.52	2.31	1	6	40
Inter-personal trust	Capability	TPERCAP1		5.69	0.89	0.79	3	7	81		5.83	0.77	0.59	3	7	40
		TPERCAP4		5.33	0.99	0.98	3	7	81		5.49	0.9	0.8	3	7	40
		TPERCAP9		5.11	1.11	1.23	2	7	81		5.29	1.01	1.02	2	6.5	40
		TPERCAP7 (R)		4.83	1.56	2.44	2	7	81		5.2	1.37	1.87	2	7	40
	Goodwill	TREGW1		5.56	0.97	0.95	2	7	81		5.73	0.94	0.88	2	7	40
		TREGW5 (R)		5.86	1.1	1.22	2	7	81		5.99	1.1	1.22	2	7	40
		TREGW6		2.95	1.48	2.2	1	6	81		3.03	1.55	2.42	1	6	40
	Self-reference	TPERIDE2		5.25	0.97	0.94	2	7	81		5.36	1.06	1.13	2	7	40
		TPERIDE3		5.51	0.84	0.7	3	7	81		5.65	0.79	0.62	3	7	40
		TPERIDE4		5.54	0.88	0.78	2	7	81		5.68	0.81	0.66	2	7	40
		TPERIDE6		5.48	0.92	0.85	3	7	81		5.69	0.9	0.82	3	7	40
		TPERIDE9		4.98	1.13	1.27	2	7	81		5.06	1.08	1.17	2	7	40
Inter-organisational trust	Capability	TCOMCAP2		5.58	0.82	0.67	3	7	81		5.79	0.68	0.46	4	7	40
		TCOMCAP3		5	1.02	1.05	2	7	81		5.16	1.07	1.14	2	7	40
		TCOMCAP5		5.33	0.97	0.95	3	7	81		5.55	0.77	0.6	3	7	40
		TCOMCAP6		5.52	0.88	0.78	4	7	81		5.71	0.79	0.62	4	7	40
	Goodwill	TCOMGW4		4.41	1.22	1.49	2	7	81		4.53	1.15	1.32	2	7	40
		TCOMGW5		4.43	1.18	1.4	1	7	81		4.47	1.12	1.26	2	6	40
		TCOMGW7		5.06	1.03	1.06	2	7	81		5.08	0.99	0.98	2	7	40
	Self-reference	TCOMIDE1		5.28	0.99	0.98	2	7	81		5.54	0.89	0.79	2	7	40
		TCOMIDE2		5.2	0.99	0.99	2	7	81		5.48	0.88	0.78	2	7	40
		TCOMIDE3		5.43	0.91	0.82	2	7	81		5.63	0.85	0.72	3	7	40
		TCOMIDE4		5.54	0.94	0.88	3	7	81		5.72	0.91	0.84	3	7	40

Respondents from the supplier end of the dyad are covered in the table above. Relatively small change in means was recognised when comparing the change in means between the sample covering all responses and sample covering only those where dyad was recognised. All variables except EXPERC3 (reduced by -0.23) slightly increase in dyadic sample. Highest increases were detected in variables BEHACOM6 (+0.49) and in EXPERC3 (+0.46). The rest of increased values varied between 0.02 and 0.37.

Observation should be given to BEHACOM6 due to the increase in mean from 4.01 to 4.5 after answers without dyadic relationship were removed. The question of reverse-coded variable BEHACOM6 is "The partner company sometimes acts unpredictably or inconsistently". When analysing the

full sample the respondents at the supplier end of the dyad provided a neutral answer (4 = neither agree nor disagree). Mean of 4.5 is closer to more positive "tend to disagree".

Table 15: Mean, standard deviation and variances from the customer.

CLASS	SUB-CLASS	Label	All respondees	Mean	Std Dev	Variance	Min	Max	N	Dyads only	Mean	Std Dev	Variance	Min	Max	N
Antecedants of inter-personal trust	Behaviour	BEHAPER1		5.29	1.49	2.21	1	7	82		5.2	1.51	2.28	2	7	40
		BEHAPER4 (R)		5.54	1.4	1.96	1	7	82		5.68	1.28	1.64	1	7	40
		BEHAPER5		5.3	1.3	1.7	1	7	82		5.38	1.22	1.49	1	6.5	40
		BEHAPER6		4.87	1.46	2.12	2	7	82		4.62	1.43	2.03	2	6.5	40
	Reputation	REPUPER1		5.73	1.09	1.19	2	7	82		5.63	1.16	1.34	2	7	40
		REPUPER4		5.15	1.28	1.63	1	7	82		4.99	1.31	1.72	1	7	40
		REPUPER5		5.39	1.19	1.43	2	7	82		5.22	1.17	1.37	2	7	40
	Experience	EXPERP1		3.02	1.35	1.83	1	6	82		2.95	1.17	1.38	1	6	40
		EXPERP2		3.35	1.53	2.33	1	6	82		3.2	1.32	1.75	1	6	40
Antecedants of inter-organisational trust	Behaviour	BEHACOM1		4.55	1.51	2.28	1	7	82		4.26	1.51	2.27	1	6	40
		BEHACOM2		4.73	1.52	2.32	1	7	82		4.42	1.38	1.92	1	6.33	40
		BEHACOM3		4.22	1.69	2.84	1	7	82		3.76	1.53	2.35	1	6	40
		BEHACOM4		4.26	1.51	2.29	1	7	82		3.86	1.46	2.13	1	6	40
		BEHACOM6 (R)		4.09	1.53	2.33	1	7	82		3.87	1.46	2.14	1	6.5	40
	Reputation	REPUCOM1		5.11	1.28	1.63	1	7	82		5.07	1.25	1.55	1	6.5	40
		REPUCOM2		5.16	1.16	1.34	1	7	82		5.03	1.2	1.44	1	7	40
		REPUCOM3		4.77	1.3	1.69	1	7	82		4.52	1.27	1.61	1	6.5	40
	Experience	EXPERC1		2.39	1.59	2.51	1	6	82		2.2	1.44	2.08	1	6	40
		EXPERC2		5.52	1.42	2.03	1	7	82		5.55	1.25	1.56	2.5	7	40
		EXPERC3		4.37	1.41	1.99	1	6	82		4.35	1.31	1.72	1	6	40
Inter-personal trust	Capability	TPERCAP1		4.79	1.43	2.04	1	7	82		4.47	1.52	2.32	1	6.5	40
		TPERCAP4		4.85	1.2	1.44	1	7	82		4.67	1.34	1.8	1	6	40
		TPERCAP9		4.82	1.36	1.86	1	7	82		4.63	1.36	1.84	1	7	40
		TPERCAP7 (R)		4.82	1.5	2.25	1	7	82		4.64	1.51	2.28	1	7	40
	Goodwill	TREGW1		5.22	1.2	1.43	1	7	82		5.11	1.2	1.43	1	6.5	40
		TREGW5 (R)		5.76	1.38	1.92	1	7	82		5.76	1.23	1.51	1	7	40
		TREGW6		2.44	1.23	1.51	1	6	82		2.61	1.11	1.23	1	5	40
	Self-reference	TPERIDE2		4.8	0.95	0.9	2	6	82		4.79	0.85	0.72	3	7	40
		TPERIDE3		5.11	0.96	0.91	3	7	82		5.1	0.86	0.74	3	7	40
		TPERIDE4		5.2	0.91	0.83	2	7	82		5.19	0.89	0.78	2	7	40
		TPERIDE6		5.06	1.29	1.66	1	7	82		4.93	1.52	2.3	1	7	40
		TPERIDE9		4.45	1.45	2.1	1	7	82		4.29	1.47	2.16	1	6	40
Inter-organisational trust	Capability	TCOMCAP2		4.52	1.39	1.93	1	6	82		4.21	1.52	2.3	1	6	40
		TCOMCAP3		4.48	1.33	1.76	2	7	82		4.39	1.31	1.71	2	7	40
		TCOMCAP5		4.96	1.37	1.89	1	7	82		4.79	1.46	2.14	1	6	40
		TCOMCAP6		4.76	1.35	1.82	1	7	82		4.42	1.51	2.28	1	7	40
	Goodwill	TCOMGW4		4.05	1.51	2.27	1	7	82		3.79	1.65	2.74	1	7	40
		TCOMGW5		4.11	1.38	1.9	1	7	82		3.81	1.48	2.19	1	7	40
		TCOMGW7		4.91	1.29	1.66	1	7	82		4.68	1.36	1.86	1	7	40
	Self-reference	TCOMIDE1		4.7	1.27	1.62	1	7	82		4.43	1.42	2.02	1	7	40
		TCOMIDE2		4.76	1.16	1.35	1	7	82		4.61	1.32	1.74	1	7	40
		TCOMIDE3		5.01	1.11	1.22	2	7	82		4.88	1.24	1.54	2	7	40
		TCOMIDE4		4.93	1.11	1.23	1	7	82		4.9	1.25	1.57	1	6	40

Respondents from the customer end of the dyad are covered in the table above. Likewise with the samples taken from customer end of dyad, relatively small change in means was recognised when comparing the change in means between the sample covering all responses and sample covering only those where dyad was recognised. With the customer sample most variables reduced. Variation in the reduced means were from -0.46 to -0.01. Variable TREGW5 did not change between samples. Increase in means were recognised with variables BEHAPER4, BEHAPER5, EX-PERC2 and TREGW6 (between +0.14 and +0.17). More significant

changes in means were detected with variables BEHACOM3 (from 4.09 to 3.87) and BEHACOM4 (from 4.26 to 3.86) when comparing these two samples. Even so, these changes should not require extensive observation even the full sample provides more positive view for these two variables than the dyadic sample does.

In general, it could be considered that trust is at average level as explained by the observation units (supplier and customer answerers) under this survey research. Most results in average fall between the categories "neither agree or disagree" and "tend to agree".

In next subchapters the results are analysed in general level. Emphasis is analysing the results with dyadic relationship ("dyads only") on the table 15. presented above.

5.1.1 Antecedents of inter-personal trust - behaviour, reputation and experience

The below table provides the dyadic mean scores for antecedents of inter-personal trust. Scores given are analysed in the table.

Table 16: Analysis for antecedents of inter-personal trust.

Identifier:	Question:	Score (mean):	Analysis:
BEHAPER1	The contact person maintains regular contact with us?	5.2	Contacting regularly with each other is at 'tend to agree' level. Even so, the contacts can be made in quite simple manner and both sides of the party could benefit by investigating possibilities to contact each other more often. Higher satisfaction could be reached by adding efforts to communication which could benefit both parties in a relationship
BEHAPER4	The contact person is NOT open in dealing with us? (R)	5.68	The reverse coded question about openness provided the highest results. Respondents disagreed that another party wouldn't be open in a

			relationship. Openness exists relatively well in relationships and actors have low aim to take advantage by hiding issues from another party.
BEHAPER5	If problems (such as delivery delays) arise, the contact person is honest about them?	5.38	To some extent the honesty requires efforts in a relationship. Trusting that other party is honest in case of problems is at 'tend to agree' level.
BEHAPER6	The contact person has done everything s/he can for our collaboration?	4.62	The question may give too much freedom for respondents to consider what is the level of 'enough' in collaboration? Survey results provide a view that more efforts should be done in collaboration between the actors in dyads.
REPUPER1	The contact person has a reputation for being honest?	5.63	Honesty in inter-personal relationship is close to quite high 'agree' grade. Similarly than in question about openness (BEHAPER4) respondents felt relatively high degree of honesty in their relationships.
REPUPER4	The contact person is known to be a person who takes care of his/her partners?	4.99	Respondents tend to agree that in inter-personal relationships the care-taking exist.
REPUPER5	The contact person has a reputation for being fair?	5.22	Fairness in inter-personal relationship is at good level. There is no fact how written agreements affect this question? Written agreements may leave question open to respondents to analyse fairness. One party may consider that if a written agreement made initially is unfair leading to a consideration that contact person is unfair just when complying with the contractual obligations.
EXPERP1	How long has this contact person been dealing with you?	2.95	In average the actors have been dealing with each personally between one to two years. Often the contracts in IT services industry are made for three year period before renewal. Average seems to be quite high as sometimes contact persons may change during the contract period (for example, people changing to another position in company, or leaving the company). Long personal relationships can be considered as good mark in building the trust in the dyadic relationships.
EXPERP2	How long has this contact person been dealing with your company?	3.2	In average the persons have been dealing with the partner's company between one to two years. Often, in IT services industry, the contracts are made to 3 year period before the contract renewal takes place. The average result may refer that a deci-

			sion to change the supplier is often made during the renewal. Efforts given to first behaviour and reputation related items may also increase the length of the relationship persons have with the company.

In general, the respondents tend to agree that trust exist in the dyadic relationships in inter-personal level. Honesty, openness and fairness exist in the relationships in agreeable level.

Creating trust in a relationship can be seen as time-consuming process. Lengths of time in inter-personal and inter-organisational relationships are lower than often referred three-year contract period in IT services industry. To some extent people leaving a relationship for any reason can explain why the average falls to approximately two years' time period. It could be argued that efforts made to inter-personal trust can extend actor's willingness to stay in a relationship. Business benefits in long-term relationships can be extensive: supplier could secure stable cash-flow without need to invest setup work for new customer or does not need to invest overall to establishment of new customer relationship. Customers do arguably need to invest less in changed conditions and circumstances that are inevitable consequences when the supplier is changed.

5.1.2 Antecedents of inter-organisational trust - behaviour, reputation and experience

The below table provides the dyadic mean scores for antecedents of inter-organisational trust. Scores given are analysed in the table.

Table 17: Analysis for antecedents of inter-organisational trust.

Identifier:	Question:	Score (mean):	Analysis:
BEHACOM1	The partner company treats us well?	4.26	Average grades were given when respondents considered if partner company treats its partners well. Some dissatisfaction can be seen in

			inter-organisational trust. Fairness in inter-personal relationships was considered to be in better condition.
BEHACOM2	The partner company continuously seeks to maintain a good relationship with us?	4.42	Respondents gave relatively low grade, only slightly tending to agree that partner company makes continuous efforts into the maintenance of good relationship. This may signal that partners neglect the maintenance of relationship in company-level.
BEHACOM3	The partner company keeps its promises?	3.76	More respondents disagreed than agreed that the partner company is keeping the promises made. This may signal that there are trust issues in dyadic relationships.
BEHACOM4	The partner company is genuinely concerned that our business succeeds?	3.86	Respondents slightly tended to disagree with common interest of business results in dyadic relationships. To some extent this can be considered as worrying tendency as the companies participating the study represent industries who have outsourced their information technology or business processes to external supplier. Lack of common interest in successful business outcome by both parties may signal existence of distrust when common interest is considered.
BEHACOM6	The partner company sometimes acts unpredictably or inconsistently? (R)	3.87	The reverse-coded question about consistency and predictability in the relationship resulted that respondents considered partners to act more in unpredictable or inconsistent way. This may signal the lack of systematic actions in communication.
REPUCOM1	The partner company has a reputation for being capable?	5.07	Respondents tend to agree that the partner company is capable to provide service to its partners. This may attach to technical capabilities when companies providing or receiving services in information technology services industry is in question.
REPUCOM2	The partner company has a reputation for being honest?	5.03	Honesty in inter-organisational relationships received an average of 'tend to agree'. This should be quite good signal when considering actions to build long-term trust relationships. Good grounding for enhancements in other areas exists if the relationship is seen honest.
REPUCOM3	The partner company has a reputation for being fair?	4.52	Fairness in inter-organisational relationships was only by slightly considered to be in 'tend to agree' level. While respondents considered partner company to be capable and

			honest they gave lower points for fairness. In inter-personal trust the grades given were mentionable higher (average 5.22), even the persons in relationship represent the partner company. This may signal the lack of balance in contractual relationship. One party may be more powerful than another leading to the contract considered unfair by another party.
EXCERC1	How many partnerships has your company had during last five years?	2.2	The average of partnerships overall was 6-10 partners. The observation units targeted in this survey were recognised to be mid-size or large company's result that can be recognised from the replies. Smaller companies likely don't have that many relationships in their operations than larger companies do.
EXCERC2	What kind of experiences does your company have of these partnerships?	5.55	Respondents considered that experiences in the other partnerships are considered more positive than partnership under this research. This result may signal problems in the relationships between the companies in this research. Often, companies aim to succeed better than their competitors do. Making efforts to the dyadic relationships examined in this study should be considered.
EXCERC3	For how long has your company been in partnership with this company?	4.35	The length of relationship resulted to be from two to five years. The result signal relatively well the assumption that often the contracts are signed for three year period.

Overall, items of the trust in inter-organisational received lower grades than in questions related to inter-personal trust. The result can be seen slightly controversial as respondent trust more of the people than the companies in a relationship. This may signal that people representing the companies are more trusted than company as an institution delivering the services. To some extent it is understandable that personal relationships may develop at more intimate level than between companies.

Behaviour related questions in inter-organisational relationships provided only average or below-average grades. Partners in the relationship relatively clearly showed that keeping promises and considering disagreement

in when partner's success in business were analysed. Overall, behaviour related questions in inter-organisational relationships signalled that relationship may have trust issues and that partner may act in unpredictable or inconsistent means in a relationship.

Inter-organisational reputation related questions exceeded the results of behaviour. Respondents tended to agree that partner has reputation of being capable, honest and fair. Reputation seems not fully correspond to behaviour as reputation related questions had higher average. This may signal that generally companies under research have good reputation but there are issues to some extent in a delivery.

Expertise related questions resulted that companies under research have been collaborating with each other from two to five years. The length of relationship seems to fall well to outsourcing industry's usual contract length of three years'. From the trust perspective the result signals that there may be several relationships that end at the time when contract is renewed. It may mean that new relationships are established at somewhere else instead of continuing the contract between the supplier and customer. Responses also show that there are 6-10 partnerships overall in companies under this research. This may signal that partners are rather de-centralising their partners and leaving a door open to another partnerships. Result may be a sign that trust relationship is not at the level it could be. Overall, the partners also responded that other partnerships are more of a positive experience.

5.1.3 Inter-personal trust - capability, goodwill and self-reference

The below table provides the dyadic mean scores for inter-personal trust. Scores given are analysed in the table.

Table 18: Analysis for inter-personal trust.

Identifier:	Question:	Score (mean):	Analysis:
TPERCAP1	The contact person knows this branch well?	4.47	Respondents gave relatively low average points for how contact person understands the branch they work for.
TPERCAP4	The contact person has good business know-how?	4.67	Respondents considered only to some extent that their contact persons understand the business they work in.
TPERCAP9	The contact person is capable in finding solutions to deliver added value?	4.63	Capability to find solutions to provide added value to another party had relatively low scores. This may signal that partners in a relationship consider more of fulfilling the contractual obligations than actively delivering added value.
TPERCAP7	The contact person is NOT a real expert? (R)	4.64	This reverse-coded question resulted that respondents slightly tend to agree that contact person is an expert. This may be a signal of non-healthy business environment in case of outsourcing. It could be argued that when company decides to outsource their functions to external supplier the real experts should exist in both ends of the dyadic relationship.
TREGW1	The contact person is open when dealing with us?	5.11	Openness received relatively high points. Open relationship can be seen to exist in the relationships by companies under this research.
TREGW5	The contact person is NOT trustworthy? (R)	5.73	This reverse-coded question about trustworthiness in inter-personal relationships resulted close to 'agree' level. This may be a positive signal for building long-term relationships. Trustworthiness in inter-personal relationships should establish good grounding when efforts to build trust in the relationship are made.
TREGW6	The contact person could take advantage of me if it would benefit him/her?	2.61	Respondents tended to disagree that their contact person would take advantage if some personal benefit could be reached. This may although be also a worrying signal as it could be argued that result should have been better. Result may signal that there are also distrust in personal relationships and to some extent contact person are considered to take advantage if opportunity exist.
TPERIDE2	The contact person is aware of his/her own	4.79	Respondents considered that their counterparts in a relationship are

	potential?		aware of their potential. Although to some extent it could be argued that efforts to self-reference and potential in personal level should be enhanced. Lack of feeling of counterpart's potential may lead to situation of distrust in a relationship.
TPERIDE3	The contact person is aware of his/her own goals?	5.1	Respondents tended to agree that contact persons are aware of their goals. Some negative signal could be interpreted from the result. There may be unused potential in the relationship. Trust in a relationship could be enhanced when person's potential would comply with the understanding of the goals set.
TPERIDE4	The contact person has good self-knowledge?	5.19	The good self-knowledge had quite high score from the respondents. This may signal that counterparts in the relationship have good certainty and self-confidence, leading to good points in self-knowledge. Even so, the worrying signal may exist as self-knowledge were rated relatively much higher than contact person's potential.
TPERIDE6	The contact person is aware of the strengths of the products/ services of the company s/he represents?	4.93	Respondents tended to agree that contact persons are aware of their company's products and services. To some extent the relatively low score in knowledge of what contact person's company delivers as product or service could signal that there are unused potential in capability to understand the content of company's delivery.
TPERIDE9	The contact person innovatively provides new opportunities to deliver benefits in our collaboration?	4.29	The respondents neither agreed nor disagreed that another party in a relationship is actively delivering benefits. This may be a worrying signal as the stagnation in a relationship may result distrust of another person's capability, hence lower the trust in a relationship.

The grades received for questions related to inter-personal trust generally resulted that respondents were neutral or tended to agree with questions. Capability, goodwill and self-reference in inter-personal relationships can be seen to be in adequate level.

Capability related questions received the lowest grades in the category of inter-personal trust. To some extent partners in a relationship and their understanding of branch, business know-how and expertise were consid-

ered to be slightly over average by the respondents. This may signal that education and training to the delivery, promises made and contracts signed may be in inadequate level, resulting that partners are considering lower rates for overall understanding of the branch and the business environment partners work at. Relatively low level for the lack of expertise is controversial as often persons who work in a relationship between two companies at information technology and outsourcing industry should be considered as experts. Dyad consist the supplier side where high expertise in selling the products and services and in delivery should be considered, and on the other hand customers purchasing these products and services are often considered as experts in the business they represent. This controversial result may signal of unhealthy relationships where expertise of partner is trusted in relatively low level.

Respondent considered that openness, trustworthiness and avoiding taking unfair advantage of the partner were in good level. These results could be seen as important when further efforts to build trust in a relationship between partners are made. Inter-personal relationships that are open, where partners can trust each other and where unfair advantage in partner's loss exist less should provide good basis for building the trust in dyadic relationships.

Self-reference related questions assessed in this research were at relatively good level. Partners were seen to have relatively good level of understanding in the goals set and in their self-knowledge. Slightly lower grades were given to partner's understanding of their own potential and knowledge of the products and services the company they worked at represented. Even so, stagnation at some level could be recognised from the results. Delivering new opportunities and at the same time having close to average result in knowledge of the products and services may signal that the relationship could be maintained more proactive means. Proactive relationship and trust building in the industry of information technology services and outsourcing could benefit both partner's in the dyad. Customer's

willingness to invest may increase if they are actively delivered with new opportunities and when partner truly understands the products and services delivered to a partner.

5.1.4 Inter-organisational trust - capability, goodwill and self-reference

The below table provides the dyadic mean scores for inter-organisational trust. Scores given are analysed in the table.

Table 19: Analysis for antecedents of inter-organisational trust.

Identifier:	Question:	Score (mean):	Analysis:
TCOMCAP2	The products/services of our partner company are of good quality?	4.21	Respondents assessed that partner company has average quality in their products and services. This may to some extent signal difficulties in a delivery.
TCOMCAP3	The partner company knows how to price its products/services profitably?	4.39	Respondents tended slightly to agree that partner has knowledge in pricing the products and services. This may signal that capability in delivery has difficulties.
TCOMCAP5	The partner company has the necessary technological know-how?	4.79	Respondents tended to agree that technological skills exist. Capability in companies in a relationship with information technology services industry although could be higher. This may signal that partner's trust on technological skills are lacking to some extent.
TCOMCAP6	The partner company has the necessary business know-how?	4.42	Respondents slightly tended to agree with business skills of the partner. This may signal distrust to some extent in a relationship.
TCOMGW4	When making important decisions, the partner company also considers our welfare?	3.79	Respondents slightly tended to disagree that partner company considers their welfare when important decisions are made. This may be a worrying result that signals unhealthy relationship and appearance of distrust.
TCOMGW5	The partner company keeps our best interests in mind?	3.81	Respondents slightly tended to disagree that partner company considers their best interests. This may be a worrying result that signals unhealthy relationship and appearance

			of distrust.
TCOMGW7	The partner company also wants us to suc- ceed?	4.68	In contrary to TCOMGW4 and TCOMGW5 the respondents tended to agree that partner company pre- fers the other party to succeed as well. The result is slightly incon- sistent with the results from two ear- lier questions. This may signal that groundings for goodwill exist and trust appears for partner company's willingness to consider success for both ends of the dyad in a relation- ship.
TCOMIDE1	The partner company is aware of its own capabilities?	4.43	Respondents gave relatively low points for the partner company's capabilities. The result is in line with the respondents points for personal capabilities. This may signal the lack of trust in a relationship. Outsourcing of the information technology or business processes would require strong capability from both parties in a dyad.
TCOMIDE2	The partner company has a clear under- standing of its own potential?	4.61	Respondents gave relatively low points for the partner company's potential. The result is in line with the respondents points for personal potential. This may signal the lack of trust in a relationship. Distrust for partner company's potential to com- ply with the business environments requirements may lead to unhealthy relationship.
TCOMIDE3	The partner company is aware of its goals?	4.88	Respondents only slightly tended to agree that the partner company un- derstands its goals. This may be a signal of distrust in a dyadic rela- tionship. If goals are considered not to be understood it could result to issues in a trust relationship.
TCOMIDE4	The partner company is aware of its values?	4.9	Respondents tended to agree that partner company is aware of their values. Arguably, understanding the values company represent provide the frame for building the relation- ships of trust.

The grades received for questions related to inter-organisational trust generally resulted lower grades than in inter-personal trust. Capability, goodwill and self-reference in inter-personal relationships can be seen to be in average level.

Result in capability in inter-organisational trust related questions received the intermediate grades. To some extent partners in a relationship and their understanding of the products and services delivered, and for partner's understanding how to price those profitability resulted an average grade. The result may signal particularly to the supplier end of the dyad that delivery difficulties exist at the level that may not be satisfactory. For the business and technological know-how the respondents provided lower than tend to agree grade. This could signal the lack of skills in business and technology in the inter-organisational relationship.

The trust for partner for considering other party's welfare when making decisions and for keeping the also best interests of partner in mind resulted with relatively low grades. Slightly controversially, respondents signalled that they tend to agree although partner's willingness to want success to another party. This may signal that goodwill exist in a relationship at acceptable level, but in practical actions partners in a dyadic relationship feel that they are let outside of the consideration. This may signal unhealthy relationship to some extent.

The self-reference in inter-organisational relationship resulted to average grades. Respondents tended to agree that the partner company understands its potential, goals set and values. To some extent the results may indicate dissatisfactory level of self-reference at the inter-organisational level.

5.2. Exploratory factor analysis

The factor analysis has been developed to be a method for analysing several variables' fluctuation (Nummenmaa, 2009, 397).

Exploratory factor analysis (EFA) is useful when researcher has an idea for what kind of theory combine variables under research. The objective in

exploratory factory analysis is to analyse large number of variables in smaller group and to understand commonalities in variables that combine several variables to theoretically and pragmatically sound way. (Metsämuuronen, 2008, 42)

The theory of trust can be recognised to be scattered and broad in the academia. Even so, the theoretical background in this research is relatively clear. The main articles described in chapter "*1.3. Theoretical context of the research*", supported with articles from other scholars provide solid grounding for the theory in this research. Utilising exploratory factor analysis can be rationalised in this research.

Metsämuuronen (2008, 42) adds that variables must have real correlations between the variables when exploratory factor analysis is utilised. Correlations between variables should be larger than 0.30 and outliers may lead analysis to provide biased results. The sample size should be large, but smaller sample than 300 is enough if correlations between variables are high.

The outliers were analysed and checked from the survey results with SAS EG software. No outliers requiring removal were recognised.

Correlations calculated by SAS Enterprise Guide (EG) software were imported to Excel software. Calculations for the observations were done, resulting that out of total 40 observations 616 observations had larger value than 0.30 in supplier part of the data, and 611 observations had value over 0.30 in customer part of the dyad in this research. 106 supplier and 111 customer data observations had value less than 0.30. In sample and factor analysis calculated for both parts of the dyad the 80 observations resulted that 599 observations had larger value than 0.30, and 141 observations provided less than 0.30. Survey data in this research were recognised to have real correlations and factor analysis can be seen as an applicable quantitative method. Survey questions related to experience and also free

text questions were omitted from the factor analysis run performed in SAS EG software.

Kaiser's measure test is for calculating ratio between correlation and correlation added with partial correlation. If Kaiser's measure test gives value 0.6 or higher the correlation matrix is applicable for factor analysis. Variables that do not correlate with other variables can be removed from the test (Metsämuuronen, 2008, 46).

With all variables and observations the factor analysis of full data sample representing both sides of the dyads provided total Kaiser's measure of sampling adequacy (MSA) to be 0.906. Based on the result the Kaiser's measure test supports that sample is applicable for factor analysis. Over 0.9 MSA result can be considered to be a marvellous value.

Eigenvalue describe the volume that each factor can explain from full data sample's variation (Nummenmaa, 2009, 403). Factor analysis resulted to six factor loadings. These six factors explain 76.25 per cent of the variance in the sample. The first factor covers major proportion 53.70 per cent of the variance.

Table 20: Eigenvalues and variance explained by each factor.

Eigenvalues of the Correlation Matrix: Total = 38 Average = 1			
	Eigenvalue	Difference	Proportion	Cumulative
1	20.4051379	17.6599027	0.5370	0.5370
2	2.7452351	0.9895076	0.0722	0.6092
3	1.7557276	0.1089913	0.0462	0.6554
4	1.6467363	0.3046896	0.0433	0.6988
5	1.3420466	0.2616422	0.0353	0.7341
6	1.0804044	0.1658086	0.0284	0.7625

Variance Explained by Each Factor					
Factor1	Factor2	Factor3	Factor4	Factor5	Factor6
20.405138	2.745235	1.755728	1.646736	1.342047	1.080404

Next table shows the rotated factor pattern table with interpretations only for loaded six factors. Full rotated factor pattern table is presented in Appendix 2.

Communality informs how well the variance of single variable can be described together with all factors. Value should be larger than 0.3 as smaller values indicate that factor analysis could not explain single variable's variance in applicable level. (Nummenmaa, 2009, 403)

The final communality estimates' total is 28.98. The communality values varied from 0.58 to 0.88. Based on the result from communalities there's no need to omit any variable from the factor analysis as all are well-beyond the applicable level of 0.3.

In next subchapters the loaded factors are explained and analysed. Each factor has been named to comply with variables loaded in each factor.

5.2.1 Factor 1 – inter-organisational reputation

The first factor was loaded with nine variables. Items were recognised to indicate reputation in inter-organisational trust:

BEHACOM1	The partner company treats us well?	0.77753
BEHACOM2	The partner company continuously seeks to maintain a good relationship with us?	0.76784
BEHACOM3	The partner company keeps its promises?	0.72545
REPUCOM3	The partner company has a reputation for being fair?	0.69206
TCOMCAP2	The products/services of our partner company are of good quality?	0.67423

BEHACOM4	The partner company is genuinely concerned that our business succeeds?	**0.64730**
REPUCOM1	The partner company has a reputation for being capable?	**0.63404**
REPUCOM2	The partner company has a reputation for being honest?	**0.55119**
BEHACOM6	The partner company sometimes acts unpredictably or inconsistently? (R)	**0.51362**

Variables in factor 1 are attached to categories in inter-organisational trust, with sub-categories of antecedents in inter-organisational trust behaviour (BEHACOM1, BEHACOM2, BEHACOM3, BEHACOM4, BEHACOM6 and reputation (REPUCOM1 and REPUCOM2), and one in inter-organisational capability (TCOMCAP2).

The large values in these variables indicate desire to partners is treating well each other, to maintain good relationships and to keep the promises made. Respondents indicate desire for reputation of fairness exists, partners are interested in other partner's business succeeding and that good products and services are desired from the partner. Interpretation from this first factor loaded indicates also desire of capable, honest, predictable and consistent partner.

5.2.2 Factor 2 – inter-personal trustworthiness

The second factor was loaded with 10 variables. Items were recognised to indicate trustworthiness in inter-personal trust:

TREGW1	The contact person is open when dealing with us?	**0.68458**
TREGW5	The contact person is NOT trustworthy? (R)	**0.63693**
BEHAPER4	The contact person is NOT open in dealing with us? (R)	**0.63106**
REPUPER5	The contact person has a reputation for being fair?	**0.60997**
REPUPER1	The contact person has a reputation for being honest?	**0.58032**
TPERIDE4	The contact person has good self-knowledge?	**0.57539**
REPUPER4	The contact person is known to be a person who takes care of his/her partners?	**0.56529**
TPERIDE2	The contact person is aware of his/her own potential?	**0.51477**
BEHAPER5	If problems (such as delivery delays) arise, the contact person is honest about them?	**0.50944**
TREGW6	The contact person could take advantage of me if it would benefit him/her?	**-0.67432**

Variables in factor 2 are attached to categories in inter-personal trustworthiness, with sub-categories of goodwill (TREGW1, TREGW5 and TREGW6), behaviour (BEHAPER4 and BEHAPER5), and reputation (REPUPER1 and REPUPER4), and self-reference (TPERIDE2 and TPERIDE4).

The large values in these variables indicate desire to partners show trustworthiness to each other, openness in collaboration and fairness and honesty in actions performed in a relationship. Respondents indicate desire for partners having good self-knowledge and understanding the potential they possess. Partners indicate they prefer that possible problems are reported in honest means and that partner does not apply taking unfair advantage even if benefits are seen.

5.2.3   Factor 3 – inter-personal capability

The fourth factor was loaded with six variables. Items were recognised to indicate capability in inter-personal trust:

TPERCAP7	The contact person is NOT a real expert? (R)	0.73762
TPERCAP4	The contact person has good business know-how?	0.73480
TPERCAP9	The contact person is capable in finding solutions to deliver added value?	0.71137
TPERIDE6	The contact person is aware of the strengths of the products/services of the company s/he represents?	0.69362
TPERIDE9	The contact person innovatively provides new opportunities to deliver benefits in our collaboration?	0.68447
TPERCAP1	The contact person knows this branch well?	0.63130

Variables in factor 3 are attached to categories in inter-personal trust, with sub-categories of capability (TPERCAP1, TPERCAP4, TPERCAP7 and TPERCAP9), and self-reference (TPERIDE9).

The large values in these variables indicate desire that partners are experts in their actions with understanding the business they represent. The added value of the products and services they deliver, with awareness of the strengths of products and services delivered and that partners are innovatively delivering new solutions for mutual benefits are desired. As well, the branch know-how person's represent are indicated in the third factor loaded.

5.2.4 Factor 4 – inter-organisational capability

The fourth factor was loaded with six variables. Items were recognised to indicate capability in inter-organisational trust:

TCOMCAP3	The partner company knows how to price its products/services profitably?	0.78433
TCOMIDE4	The partner company is aware of its values?	0.71168

TCOMIDE3	The partner company is aware of its goals?	0.63956
TCOMCAP6	The partner company has the necessary business know-how?	0.62599
TPERIDE3	The contact person is aware of his/her own goals?	0.60585
TCOMIDE2	The partner company has a clear understanding of its own potential?	0.50932

Variables in factor 4 are attached to categories in inter-organisational trust, with sub-categories of capability (TCOMCAP3 and TCOMCAP6), self-reference (TCOMIDE2, TCOMIDE3 and TCOMID4) and reputation (RE-PUCOM1 and REPUCOM2), and one in inter-personal self-reference (TPERIDE3).

The large values in these variables indicate desire to partners understand the value of the products and services they deliver, are aware of values and goals of the company they represent. As well, the business know-how and the potential of the company partner represents are indicated. Interpretation from the third factor loaded indicates also that person representing the company is aware of the goals set to him/her.

5.2.5   Factor 5 – inter-organisational trustworthiness

The fifth factor was loaded with five variables. Items were recognised to indicate trustworthiness in inter-organisational trust:

TCOMGW5	The partner company keeps our best interests in mind?	0.74087
TCOMGW4	When making important decisions, the partner company also considers our welfare?	0.71839
TCOMCAP5	The partner company has the necessary technological know-how?	0.63366
TCOMGW7	The partner company also wants us to succeed?	0.57121
TCOMIDE1	The partner company is aware of its own capabilities?	0.50810

Variables in factor 5 are attached to categories in inter-organisational trust, with sub-categories of goodwill (TCOMGW4, TCOMGW5 and TCOMGW47), capability (TCOMCAP5) and self-reference (TCOMIDE1).

The large values in these variables indicate desire in willingness to keep partner's interests, welfare and success in mind in decision-making and collaboration. As well, the technological know-how and the capabilities of the company partner represents are indicated.

5.2.6 Factor 6 – inter-personal collaboration

The sixth factor was loaded with two variables. Items were recognised to indicate communication in inter-personal trust:

BEHAPER1	The contact person maintains regular contact with us?	0.81908
BEHAPER6	The contact person has done everything s/he can for our collaboration?	0.49106

Variables in factor 6 are attached to categories in inter-organisational trust, with sub-category of behaviour (BEHAPER1 and BEHAPER6).

The large values in these variables indicate desire to partners' willingness to communicate regularly and that partners are giving necessary collaborative effort in the relationship.

5.3. Correlation analyses

Expertise and how expertise correlates with inter-organisational dyadic relationships were examined with correlation analyses. The results of the analysis were separated by the roles of respondents. Customer and supplier data was analysed separately to understand possible differences in

correlations. Particularly the separation was made as the supplier (focal dyad) may have numerous partners they cooperate with, while customers may have less.

Inter-organisational trust items were selected to the analysis and examined how these items correlate with the expertise. As scholars state, experience develops over time and through experience partners learn from each other (Seppänen, 2008b, 76; Doney and Cannon, 1997, 39-40; Ganesan, 1994, 5).

Results were analysed by examining Pearson's correlation. If correlation is close to value 1 the positive connection to another variable can be identified. Or, if value is close to -1 then strong negative correlation exists. The formula to calculate Pearson's correlation is:

$$r = \frac{s_{xy}}{s_x \times s_y}$$

where r is variance, s_{xy} is correlation between x and y, s_x is x minus variable's standard deviation, and s_y is y minus variable's standard deviation, and. (Nummenmaa, 2009, 279-280)

P-value based on Pearson's test of correlation coefficients is used to test the recognised significance levels. P-values signal of the probability for alternative hypothesis being incorrect. Values vary between zero and one. If value is close to one (1) the probability is high for that null hypothesis (H_0) is correct. If value is close to zero (0) the probability is high for that alternative hypothesis is correct. P-values can be considered as percentage figures, for example P-value 0.5 can be considered to signal 50 per cent probability. (Nummenmaa, 2009, 148).

Statistical runs have been performed with five per cent risk limit. When analysing the results the assumption is that results that are lower the risk lim-

it are considered with high probability to have null hypothesis correct. Results with over five per cent risk limit are considered with high probability to have alternative hypothesis correct.

The hypotheses set for examining how length of the relationship affects the trust in inter-organisational relationships are:

H_0: *The length of the relationship does not correlate with inter-organisational trust.*

H_1: *The length of the relationship correlates with inter-organisational trust.*

As well, the hypotheses were set to examine how trust differs between the supplier and customers in inter-organisational relationships are:

H_0: *There is no significant difference between customer and supplier for how trust appears in a relationship?*

H_1: *There significant difference between customer and supplier for how trust appears in a relationship?*

Table 21: Correlations between expertise and inter-organisational trust at supplier part of the dyad

	Pearson Correlation Coefficients, N = 40										
	Prob > |r| under H0: Rho=0										
	TCOM CAP2	TCOM CAP3	TCOM CAP5	TCOM CAP6	TCOM GW4	TCOM GW5	TCOM GW7	TCOMI DE1	TCOMI DE2	TCOMI DE3	TCOMI DE4
EXPER C1	-0.06438	-0.05616	0.02474	-0.15059	0.33953	0.31093	0.04906	-0.06789	-0.04306	-0.06655	-0.05955
	0.6931	0.7307	0.8796	0.3537	0.0321	0.0508	0.7637	0.6772	0.7919	0.6833	0.7151
EXPER C2	0.16129	0.12336	-0.07311	0.24688	0.01977	-0.08408	0.11618	0.13388	0.12645	0.25141	0.18691
	0.3201	0.4483	0.6539	0.1246	0.9036	0.6060	0.4753	0.4102	0.4369	0.1176	0.2481
EXPER C3	0.16982	0.08791	0.09721	0.16938	-0.06847	-0.10289	0.16898	0.03413	-0.04140	0.07722	0.11253
	0.2948	0.5896	0.5507	0.2961	0.6746	0.5275	0.2972	0.8344	0.7998	0.6358	0.4894

Table 22: Correlations between expertise and inter-organisational trust at customer part of the dyad

		Pearson Correlation Coefficients, N = 40 Prob > |r| under H0: Rho=0									
	TCOM CAP2	TCOM CAP3	TCOM CAP5	TCOM CAP6	TCOM GW4	TCOM GW5	TCOM GW7	TCOMI DE1	TCOMI DE2	TCOMI DE3	TCOMI DE4
EXPER C1	0.00179	-0.06510	0.09079	0.21840	0.09290	-0.02699	0.09943	0.06508	0.17666	0.17531	0.21440
	0.9912	0.6898	0.5774	0.1758	0.5686	0.8687	0.5416	0.6899	0.2755	0.2793	0.1840
EXPER C2	0.27483	0.26666	0.06358	0.29389	0.30989	0.25915	0.39681	0.26101	0.43310	0.37249	0.31366
	0.0861	0.0963	0.6967	0.0657	0.0517	0.1064	0.0112	0.1038	0.0052	0.0179	0.0487
EXPER C3	0.43739	-0.12906	-0.12226	0.17168	0.27698	0.25041	0.33089	0.16189	0.27105	0.25626	0.38793
	0.0048	0.4274	0.4523	0.2895	0.0836	0.1191	0.0370	0.3183	0.0907	0.1105	0.0134

The variable EXPERC3 ("For how long has your company been in part-nership with this company?") were analysed. Two other questions about expertise considered the number of other partnerships company has had (EXPERC1) and experiences with the other partners (EXPERC2).

The customer respondents considered that the length of relationship would not correlate with quality of products and services delivered while respondents from the supplier end of dyad considered that there is corre-lation (TCOMCAP2).

Both the supplier and customer respondents considered that the length of relationship would correlate with the profitable pricing (TCOMCAP3) of products and services partner delivers. Also, correlation was detected in necessary technological know-how (TCOMCAP5) or business know-how partners hold (TCOMCAP6).

The responses from the customers showed that length of the relationship does not correlate with the desire that partner succeeds (TCOMGW7) and that partner company is aware of its values (TCOMIDE4). For these two questions the supplier responses examined showed that correlation could exist.

For questions related to considering welfare of the partner in important de-
cisions made (TCOMGW4) and keeping partner's interest in mind
(TCOMGW5) both customer and supplier responses showed that correla-
tion exists, although customer responses provided less probability that
may be analysed that customer believes less often that length of the rela-
tionship would change supplier's habit in these items.

Examining how partners are aware of their capabilities (TCOMIDE1), un-
derstand their potential (TCOMIDE2) and are aware of their goals
(TCOMIDE3) resulted that correlation exist to length of the relationship.
Although customer responses had less probability for correlation detected.
This may result from the operating environment where customer can con-
sider these items in more realistic way when analysing the supplier. Sup-
plier may have difficulties analysing customer's capabilities and potential
and goals set due to relationship customer has with the supplier that is
dependent on the specific services and products purchased.

Based on the result the H_1 hypothesis is valid. This study shows that
length of the relationship would correlate with items of inter-organisational
trust.

As scholars explain the experience with the partners develops trust (Ga-
nesan, 1994, 5) and a positive impact with the length of the relationship for
trust exist (Seppänen, 2008b, 76). Doney and Cannon (1997, 39-40) men-
tion that most scholars agree trust to develop over time.

Results show that in dyadic relationships the trust relationship correlates
with the experience. It can be stated that more experience partners have
from each other the more developed is the appearance of trust between
the partners.

For the hypotheses to understand how trust differs between the supplier
and customers in inter-organisational relationships the H_0 hypothesis can

be seen to be valid. There is no significant difference in trust between the supplier and customer. To some extent, result can be interpreted that both dyads develop the trust in similar ways over the time and when experience with the partner is based on more time in collaboration.

6. DISCUSSION AND CONCLUSIONS

In this study the dyadic relationships in inter-personal and inter-organisational relationships were analysed. The study began by examining the theoretical literature review and was followed by developing the measurements for this study. The survey with the measurements was created and sent in total of 331 respondents. The dyadic relationship was recognised in 128 responses that established the effective response rate of 38.7 per cent.

6.1. Answering the research questions

In this chapter the results and how they answer the research questions are analysed.

The main question in this research was:

How trust appears in inter-organisational dyadic relationships?

Appearance of trust in inter-organisational dyadic relationships was recognised with the factors loaded for inter-organisational trust (factors 1, 4 and 5). Trust in inter-organisational dyadic relationships appears in partner's expectations for reputation, capabilities and trustworthiness. The figure below describes the items of trust that appeared as a result of factor analysis for inter-organisational trust.

Figure 9: Appearance of trust in inter-organisational relationships

Respondents indicated that they expect their partner company to treat them well, make efforts in maintaining good relationships and considering also partner's success while delivering good products and services. Expectations for partner keeping promises, being fair, capable and honest and act in predictable and consistent manner were indicated. In inter-organisational trust respondents also indicated that they desire partner to understand the value of products and services delivered while desiring willingness that partner considers also other party's success, welfare and interests. Indications of trust in were also seen in desire that partner has necessary business and technological knowledge with the potential partner is holding, and that partner understands the goals and values set to them.

The first sub-question was:

How trust appears in inter-personal dyadic relationships?

For the first sub-question about appearance of trust inter-personal dyadic relationships was recognised in analysing the results of the survey. The factor analysis loaded factors 2, 3 and 6 for inter-personal trust. Trust in inter-personal dyadic relationships appears in partner's expectations for trustworthiness, capabilities and collaboration. The figure below describes the items of trust that appeared as a result of factor analysis for inter-personal trust.

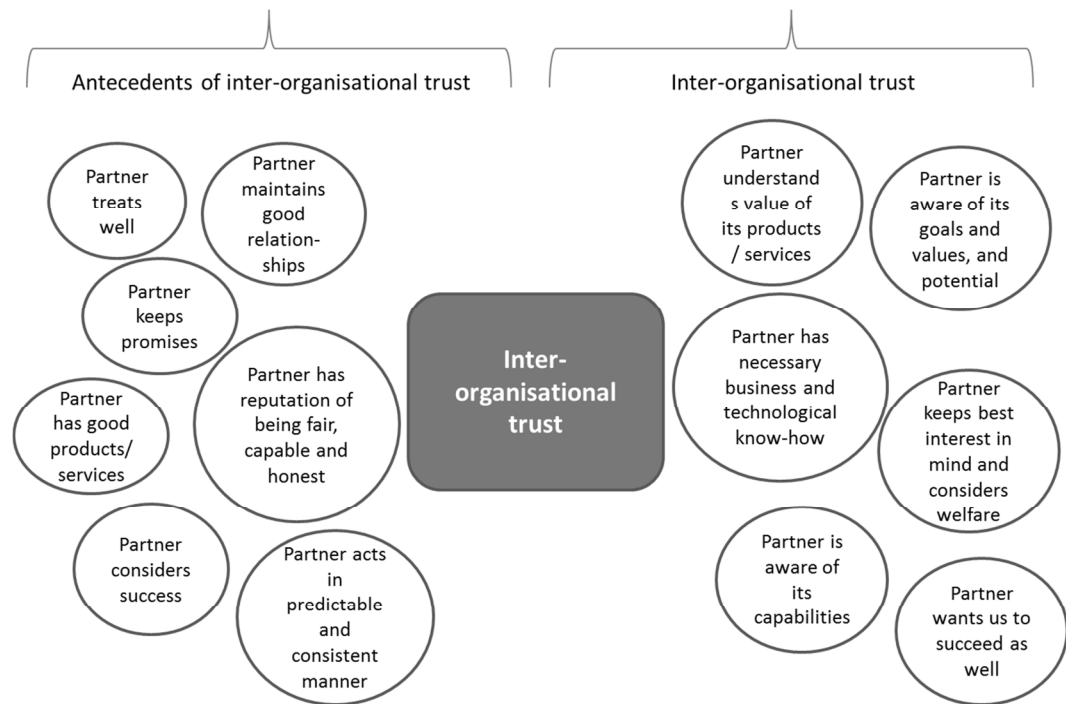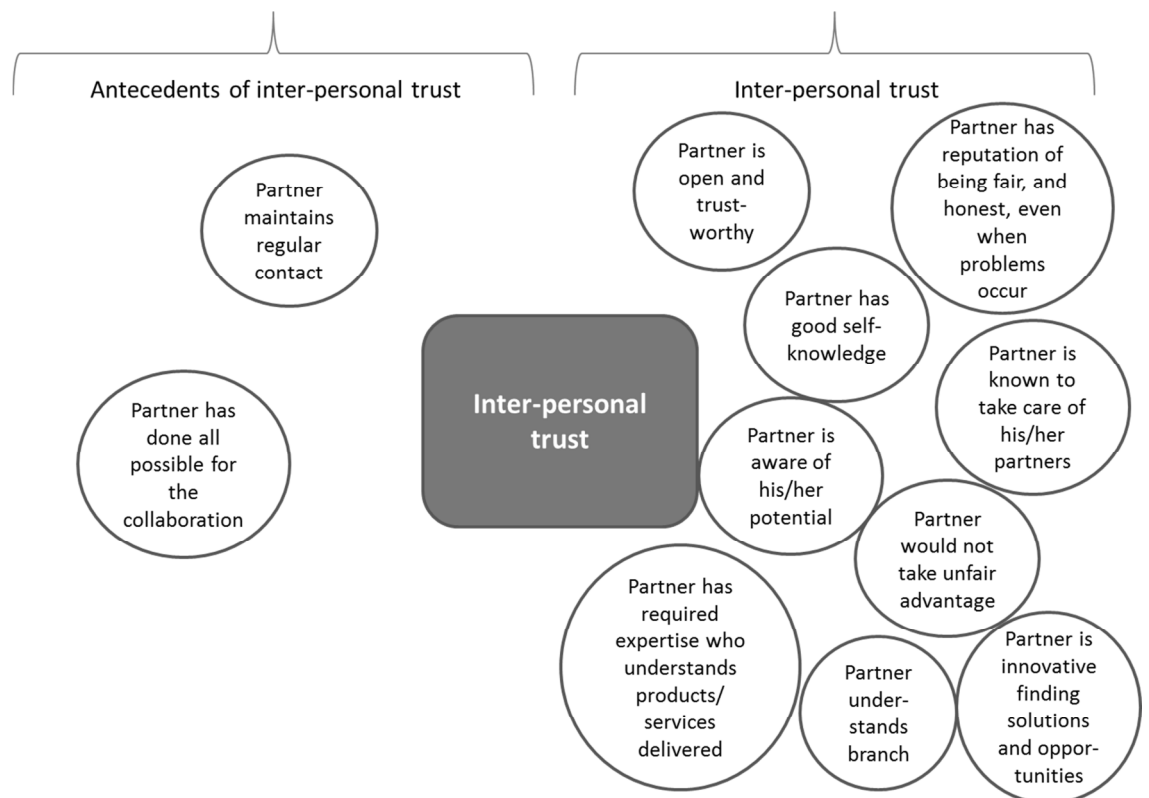Figure 10: Appearance of trust in inter-personal relationships

Respondents indicated that they expect the person at the partner company to maintain regular contacts and communication and to ensure all possible efforts are made in the collaboration. Expectation for partner is openness and trustworthiness and that person at the partner company has reputation of being fair and honest, including situations when problems have occurred. Indications that partner should be aware of their own potential with good self-knowledge were made by the respondents who don't take advantage even it that would benefit him or her. Partner was expected to

have required expertise and understanding of the products and services he or she represents, being a person who understands the branch partners work at and who can provide innovative approaches in finding new solutions or opportunities that would benefit his or her partner.

The second sub-question was:

> *How trust differs between the supplier and the client in dyadic relationships?*

The second sub-question was tested with the correlation analysis made for the third sub-question. No significant differences in trust were recognised between the supplier and customer, leaving to conclusion that H_0 hypothesis was considered to be valid.

Even so, some differences were recognised. In desire for partner's success and in being aware of company's values the customer respondents indicated that trust doesn't develop over time while supplier's considered that partner is considered. These were two most meaningful differences recognised. For the supplier company this may be an issue that should be validated in the operations.

The third sub-question was:

> *Will the length of relationship change the appearance of trust in a relationship?*

Variable EXPERC3 ("For how long has your company been in partnership with this company?") was chosen when the length of relationship was analysed in inter-organisational trust. Results showed that length of the relationship will change the appearance of the trust in a relationship correlating with the profitable pricing of the products and services and enhancing the business and technological know-how. As well, respondents consid-

ered that considering also other partner's welfare and best interests in a relationship may grow over the time in a relationship. Partners' awareness of the capability, potential and goals were seen also to grow when length during the time in a relationship.

Based on the results of this study it could be argued that uncommon and sporadic research on trust in dyadic relationship increased the viewpoint in trust research. The results were slightly surprising to some extent as relatively little variation in responses between the supplier and customers were recognised. This study was arranged in business environment where the supplier and its customers were examined. Generally speaking, the information services and outsourcing industry in target of this study is low-satisfaction business. Little variation in responses may mean that supplier personnel understand the position, for the reason or the other, and no drastic differences can be recognised when trust is evaluated by the customer. From earlier literature the growth in trust in consequence of experience and length of relationship was confirmed. Correlations in trust when actors learn from each other in longer duration of time were clearly recognised, following the scholars findings in the literature. Longer time partners work together in dyadic relationships more trust was recognised. In next chapter the theoretical contribution is explained more in detail.

6.2. Theoretical contribution

The frame in this research considering the dyadic nature of relationships in inter-organisational trust can be considered the main contribution to academia. As Lambe et al. (2002) state dyadic relationships require specific, certain and closed operating environment making gather and use of dyadic data difficult.

The operating environment mentioned by Lambe et al. (2002) was in question in this research. The researcher had an "insider" position with ac-

cess to supplier and customer data required for concluding a research of dyadic relationships. It could be argued that without such position getting the required data and permissions to use the data would be even more difficult. Theoretical contribution is seen the most in this atypical study of trust in dyadic relationship.

The results of this study followed the literature and earlier research on trust. Blois (1999) raised a question about what brings the value in trust relationship, and argued that trust relationship has a reciprocal nature that is impacted by the behaviour of partners in a relationship. The respondents indicated that value of trust is brought by treating well the partner, keeping the promises and with continuous actions in maintaining good relationships.

Morgan and Hunt (1994) conceptualised the trust to be confidence in reliability and integrity in dyadic relationship. Results of this study showed that trust can be seen to diminish when partner in dyadic relationship acts unpredictably or inconsistently or when partner is not acting in open means in a relationship.

Inter-personal trust in dyadic relationship is also accepting the chance of being in a vulnerable position (e.g. Schoorman et al., 2007; Blois, 1999). Vulnerability may mean trusting partner to manage a critical process or service or a situation where partner may take unfair advantage if possibility is available. Results of this study indicated the importance of honesty in case of delivery problems or delays and that taking advantage for the own benefit should not occur in trust relationship.

6.3. Managerial implications

Managerial contribution and implications can be considered from the relatively wide and important frame set in the questionnaire and the results that can be analysed from both party in a relationship, the supplier and the customers. This study would enable partners operating in information technology services and outsourcing industry to understand the requirements and needs for the successful partnership.

In this study the free field text responses were not widely utilised in analysis. Even so, the free text field responses were collated and distributed to the respondents along with the statistical data. Data was collated in anonymous means showing only if respondent was a supplier or customer.

To some extent the feedback considered more of the current issues partners were facing in their relationship than actually responding what respondent sees as important item in trust in inter-organisational or inter-

personal trust. Some comments were quite acerbic or sarcastic. One comment that could be considered to "hit the nail on the head" when asking what respondent feels to be most important in a personal trust relationship:

> *CustNN: Open, consistent and confidential interaction. Neither can choose the side but persons must work towards the common goal.*

As scholars state (e.g. Ganesan, 1994; Shemwell et al., 1994) orientation with long-term dyadic relationships can maximise the profits and reduce transaction costs invested for building an agreement satisfactory to both parties.

Based on the results of this study the supplier company could assess its mode of operation in considering more carefully customer's success in business. Customers also had more doubts when evaluating supplier in how they consider welfare of the customer and keep also customer's best interest in mind. The customer seems to agree that experience and length of relationship increases trust. As mentioned in the beginning of this study, outsourcing can be considered to be "*business of trust*". Effective actions to ensure that customer business is well-considered when technology or service is managed on behalf of them could ultimately result more equal relationship. Utilising the results of this study can bring substantial benefits to the supplier and its customers working in a relationship. Willingness to invest can grow when efforts to build trust are made. In addition to increased investments partners can reduce the transactions costs that can add supplier's profit and reduce customer's costs. Maintaining and developing the trust in dyadic relationship can provide benefits to both parties in a relationship.

6.4. Limitations

Sample size should cover at least 200 observations, even the factor analysis can be made for smaller samples if the observations has been collected with extreme care and research question has been formulated in a matter that factor analysis can give reasonable solution (Nummenmaa, 2009, 407). Factor analysis in this study has the mentioned limitations that should be highlighted; even the validity and reliability of data and usefulness for the factor analysis have been confirmed. The number of observations was limited to cover only the dyadic data during the analysis, in other words only observations where both the supplier and customer in a dyad had a response recognised were included. The responses were averaged in cases where more than one respondent in a single dyad was recognised. The number of unit of observations when comparing to number of variables and the responses may provide limitations in the results from the factor analysis in this study.

Generalising the results in other industries than the specific relationship between an IT service company and its customers may have limitation due to specific relationship. Particularly in this study the written contract between the supplier and the customer may direct the results of this study.

Result from business-to-business (B-2-B) relationship likely differs when research is done in business-to-consumer (B-2-C) environment. The results of this study may not be valid when business-to-consumer operating environment is considered.

Results may vary also if research would have been made in product-specific business. Observations in this research have been made in information technology services and outsourcing industry. Service delivery regardless the product is often a key element when such dyadic relationships are established; therefore results may have limitations if they are compared to product-specific industry.

6.5. Proposals for follow-up research

In the follow-up research the items of trust could be leveraged. Including the items of commitment and communications would provide researcher new aspects and additional information for how trust relationship in dyadic relationships reacts. More extensive study covering variables of commitment and communication could provide new and more penetrating approach and results for the research of trust in dyadic relationships.

In future research the results from the quantitative methods used in this research could be verified with qualitative methods. Interviewing respondents with the results could verify the empiric part of this study or provide additional perspectives to the study. Even further, the future research could utilise the mixed method research and triangulation to increase the validity and reliability of the research. Quantitative method used in this research, and results from the quantitative part of the research could be validated with the qualitative method by interviewing the respondents. Objective with the mixed method research method approach is to validate the results from quantitative part of this research.

Pragmatism is the primary philosophy of mixed method research (Johnson, et al., 2007, 113).

The synonym for 'triangulation' is "measuring from three different points" and term is practically used in geometry. In other words and as the synonym hints, triangulation can be seen as method to verify certain aspect by measuring from more than one point.

Denzin has recognised four basic types of triangulation, being 1) data, 2) investigator, 3) theory, and 4) methodological triangulation. The methodological triangulation is divided into two classes: a) within-method triangulation, and b) between method triangulation (Denzin, 1970, 301). Term

'mixed method research' is today most used to describe triangulation (Johnson et al., 2007, 118). Mixed method research is used when referring use of multiple methods in this research.

Using mixed method research methods is not unambiguous. In pragmatic empiric research the mixed method research is seen as a productive approach, but contradictions with the traditional philosophy of science apply (Johnson et al., 2007, 125; Eskola and Suoranta, 72, 1998). Despite suspected contradictions with traditional philosophy of science the mixed method research in this research should provide value. The topic of this research, the trust is intangible and immaterial subject. Researching the trust both with quantitative or qualitative methods should increase the validity and reliability of the research.

When mixed method research approach is used the dependency is found on the researcher and researcher's perspective, and of how the research has been set. Benefit is that mixed method approach can maximise the validity for empirical outcome of the research (Eskola and Suoranta, 1998, 73; Denzin, 1970, 310). Jick (1979, 603) defines that mixed method research can provide more complete, holistic and enriched view for the subject under study. Van Maanen (1979, 520) notes that "qualitative method and quantitative method are not mutually exclusive".

In suggestion for future research the fourth basic type as described by Denzin, the methodological triangulation could be utilised by mixing quantitative and qualitative research methods. Quantitative dominant mixed methods research is classified rely on quantitative results and adding the qualitative method for the benefit of the research (Johnson et al., 2007, 124). Mixed method research is utilised in this study by mixing quantitative and qualitative methods.

REFERENCES

Andersson, J. C., Håkansson, H. & Johansen, J. (1994). Dyadic business relationships within a business network context. *Journal of Marketing*, Vol. 58, Iss. 2, pp. 1-15.

Baum, J. A. C. & Korn, H. J. (1999). Dynamics of dyadic competitive interaction. *Strategic Management Journal*, Vol 20, Iss. 3, pp. 251-278.

Beugelsdijk, S., Koen, C. & Noorderhaven, N. (2009). A dyadic approach to the impact of differences in organizational culture o relationship performance. *Industrial Marketing Management*, Vol. 38, Iss. 3, pp. 312-323.

Blois, K. J. (1999). Trust in business to business relationships: An evaluation of its status. *Journal of Management Studies*, Vol. 36, Iss. 2, pp. 197-215.

Blomqvist, K. (2002). Partnering in the dynamic environment: The role of trust in asymmetric technology partnership formation. Doctoral Thesis. Lappeenranta University of Technology: School of Business.

Blomqvist, K. & Levy, J. (2006). Collaboration capability – a focal concept in knowledge creation and collaborative innovation in networks. *International Journal of Management Concepts and Philosophy*. Vol. 2, No. 1, pp. 31-48.

Bunduchi, R. (2005). Business relationships in internet-based electronic markets: the role of goodwill trust and transaction costs. *Information Systems Journal,* Vol. 15, Iss. 4, 321-341.

Butler, J. K. (1999). Trust expectations, information sharing, climate of trust, and negotiation effectiveness and efficiency. *Group & Organization Management*, Vol. 24, No. 2, pp. 217-238.

Denzin, N. K. (1970). The research act: a theoretical introduction to sociological methods [web document]. [Referred at 10.09.2011]. Available at http://books.google.com/books?id=UjcpxFE0T4cC&printsec=frontcover&source=gbs_atb#v=onepage&q&f=false.

Doney, P. M. & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, Vol. 62, No. 2, pp. 35-51.

Dyer, J. H. & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational competitive advantage. Academy of Management Review, Vol. 23, No. 4, pp. 660-679.

Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *Journal of Marketing*, Vol. 58, No. 2, pp. 1-19.

Eskola, J. & Suoranta, J. (1998). Johdatus laadulliseen tutkimukseen. Tampere: Vastapaino.

Halinen, A., Salmi, A. & Havila, V. (1999). From Dyadic Change to Changing Business Networks: An Analytical Framework. *Journal of Management Studies*, Vol. 36, Iss. 6, pp. 779-794.

Henttonen, K. & Blomqvist, K. (2005). Managing distance in a global virtual team: The evolution of trust through technology-mediated relational communication. *Strategic Change*, Vol. 14, Iss. 8., 107-119.

Johnson, R. B., Onwuegbuzie, A. J. & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, Vol. 1, No. 2, 112-133.

Gadel, M. S. (1964). Concentration by salesmen on congenial prospects. *Journal of Marketing*, Vol. 28. No. 2, pp. 64-66.

Geyskens, I., Steenkamp, J-B., Scheer, L. K. & Kumar, N. (1996). The effects of trust and interdependence on relationship commitment: A trans-Atlantic study. *International Journal of Research in Marketing*, Vol. 13, Iss. 4, pp. 303-317.

Helenius, H. & Vahlberg, T. (2008). Tilastomenetelmien soveltamis-esimerkkejä SAS® Enterprise Guide®:lla – versio 4.1. Numos: Espoo.

Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Sciences Quarterly*, Vol. 24, Iss. 4, pp. 602-611.

Johnsen, T. & Ford, D. (2000). Managing collaborative innovation in complex networks: Findings from exploratory interviews. *16th Industrial Marketing and Purchasing Group (IMP) Conference*, September 7 - 9, Bath, United Kingdom.

Lambe, C. J., Spekman R. E. & Hunt, S. D. (2002). Alliance competence, resources, and alliance success: Conceptualization, measurement and initial test. *Journal of the Academy of Marketing Science*, Vol. 30, Iss. 2, pp. 141-158.

Larsson, R., Bengtsson, L, Henriksson, K. & Sparks, J. (1998). The inter-organizational learning dilemma: Collective knowledge development in strategic alliances. *Organization Science*, Vol. 9, No. 3, pp. 285-305.

McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, Vol. 38, No. 1, pp. 24-59.

Metsämuuronen, J. (2003). Tutkimuksen tekemisen perusteet ihmistieteissä. Gummerus Kirjapaino: Jyväskylä.

Morgan, R. M & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, Vol. 58, Iss. 3, pp. 20-38.

Moorman C., Deshpandé, R. & Zaltman, G. (1993). Factors affecting trust in market research relationships. *Journal of Marketing*, Vol. 57, No. 1, pp. 81-101.

Moorman C., Zaltman, G. & Deshpandé, R. (1992). Relationships between providers and user of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, Vol. 29, Iss. 3, pp. 314-328.

Möllering, G. (2002). Perceived trustworthiness and inter-firm governance: empirical evidence from the UK printing industry. *Campbridge Journal of Economics*, Vol. 26, Iss. 2, pp. 139-160.

Nummenmaa, L. (2009). Käyttäytymistieteiden tilastolliset menetelmät. Kustannusyhtiö Tammi: Helsinki.

Panayides, P. M. (2007). The impact of organizational learning on relationship orientation, logistics service effectiveness and performance. *Industrial Marketing Management*, Vol. 36., Iss. 1, pp. 68-80.

Riordan, E. A., Oliver, R. L. & Donnelly, J. H. (1977). The unsold prospect: Dyadic and attitudinal determinants. *JMR – The Journal of Marketing Research*, Vol. 14, Iss. 4, pp. 530-537.

Sako, M. & Helper, S. (1998). Determinants of trust in supplier relations: Evidence from the automotive industry in Japan and the United States. *Journal of Economic Behaviour & Organization*, Vol. 34, Iss. 3, pp. 387-417.

Schoorman, F. D., Mayer, R. C. & Davis, J. H. (2007). An integrative model of organizational trust: Past, present and future. *Academy of Management Review*, Vol. 32, No. 2, pp. 344-354.

Schurr, P. H. & Ozanne, J. L. (1985). Influences on exchange processes: Buyer's preconceptions of a seller's trustworthiness and bargaining toughness. *The Journal of Consumer Research*, Vol. 11, Iss. 4, pp. 939-953.

Selnes, F. (1998). Antecedents and consequences of trust and satisfaction in buyer-seller relationships. *European Journal of Marketing*, Vol. 32, No. 3/4, pp. 205-322

Seppänen, R. (2008a). Trust in inter-organizational relationships. Doctoral thesis. Lappeenranta University of Technology: School of Business.

Seppänen, R. (2008b). The Building-Blocks of Trust in Inter-Firm Relationships. *Communications of the IBIMA*, Vol. 2, pp. 75-84.

Shemwell, D. J., Cronin, J. J. & Bullard, W. R. (1994). Relational exchange in services: An empirical investigation of ongoing customer service-provider relationships. *International Journal of Service Industry Management*, Vol. 5, No. 3, pp. 57-68.

Siguaw, J. A., Simpson, P. M. & Baker, T. L. (1998). Effects on supplier market orientation on distributor market orientation and the channel relationship: The distributor perspective. *Journal of Marketing*, Vol. 62, No.3, pp. 99-111.

Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Family & Marriage*, Vol. 38, Iss. 1, pp. 15-28.

Van Kleef, J. A. G. & Roome, N. J. (2007). Developing capabilities and competence for sustainable business management as innovation: a research agenda. *Journal of Cleaner Production*, Vol. 15, Iss. 6, 38-51.

Van Maanen, J. (1979). Reclaiming qualitative methods for organizational research: A preface. *Administrative Science Quarterly*, Vol. 24, Iss. 4, pp. 520-526.

Zaheer, A., Lofstrom, S. & George, V. P. (2002). Interpersonal and interorganizational trust in alliances. In: Contractor, F. J. & Lorange, P. (eds.). Cooperative strategies and alliances. Oxford: Elsevier Science.

Zaheer, A., McEvily, B. & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*, Vol. 9, No. 2, pp. 141-159.

APPENDICES

Appendix 1: Measurement frame

Identifier	CLASS:	SUB-CLASS	SOURCE:	MEASUREMENT/QUESTION IN THIS RESEARCH (FIN/ENG):	RESPONSE SCALES (Eng)	RESPONSE SCALES (Fin)	MEAS-UREMENT TYPE
BEHAPER1	Antecedents of inter-personal trust	Behaviour	Doney & Cannon (1997)	Yhteyshenkilö on meihin säännöllisesti yhteydessä? // The contact person maintains regular contact with us?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
BEHAPER4	Antecedents of inter-personal trust	Behaviour	Ganesan (1994)	Yhteyshenkilö EI ole avoin yhteistyössämme? // The contact person is NOT open in dealing with us? (R)	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
BEHAPER5	Antecedents of inter-personal trust	Behaviour	Ganesan (1994	Ongelmia kohdatessa (kuten toimitusviiveissä) yhteyshenkilö on niiden suhteen rehellinen? // If problems (such as delivery delays) arise, the contact person is honest about them?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
BEHAPER6	Antecedents of inter-personal trust	Behaviour	Plank et al. (1999)	Yhteyshenkilö on tehnyt kaiken voitavansa yhteistyömme eteen? // The contact person has done everything s/he can for our collaboration?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
REPUPER1	Antecedents of inter-personal trust	Reputation	Ganesan (1994)	Yhteyshenkilö on maineeltaan luotettava? // The contact person has a reputation for being honest?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale

REPUPER4	Antecedents of inter-personal trust	Reputation	Doney & Cannon (1997)	Yhteyshenkilö on tunnettu siitä, että hän pitää huolta kumppaneistaan? // The contact person is known to be a person who takes care of his/her partners?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
REPUPER5	Antecedents of inter-personal trust	Reputation	Ganesan (1994)	Yhteyshenkilö on maineeltaan reilu? // The contact person has a reputation for being fair?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
EXPERP1	Antecedents of inter-personal trust	Experience	Doney & Cannon (1997)	Kuinka kauan olet ollut tekemisissä yhteyshenkilösi kanssa? // How long has this contact person been dealing with you?	1 = Under 6 months, 2 = 6 months-under 1 year, 3 = 1 year-under 2 years, 4 = 2 years-under 5 years, 5 = 5 years-under 10 years, 6 = over 10 years	1 = Alle 6 kuukautta, 2 = 6 kuukautta-alle 1 vuosi, 3 = 1 vuosi-alle 2 vuotta, 4 = 2 vuotta-alle 5 vuotta, 5 = 5 vuotta-alle 10 vuotta, 6 = yli 10 vuotta	6-scale
EXPERP2	Antecedents of inter-personal trust	Experience	Doney & Cannon (1997)	Kuinka kauan yrityksenne on ollut tekemisissä yhteyshenkilön kanssa? // How long has this contact person been dealing with your company?	1 = Under 6 months, 2 = 6 months-under 1 year, 3 = 1 year-under 2 years, 4 = 2 years-under 5 years, 5 = 5 years-under 10 years, 6 = over 10 years	1 = Alle 6 kuukautta, 2 = 6 kuukautta-alle 1 vuosi, 3 = 1 vuosi-alle 2 vuotta, 4 = 2 vuotta-alle 5 vuotta, 5 = 5 vuotta-alle 10 vuotta, 6 = yli 10 vuotta	6-scale
BEHACOM1	Antecedents of inter-organizational trust	Behaviour	Möllering (2002)	Yhteistyöyritys kohtelee meitä hyvin? // The partner company treats us well?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
BEHACOM2	Antecedents of inter-organizational trust	Behaviour	Möllering (2002)	Yhteistyöyritys pyrkii jatkuvasti ylläpitämään hyvää suhdetta kanssamme? // The partner company continuously seeks to maintain a good relationship with us?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale

BEHACOM3	Antecedents of inter-organizational trust	Behaviour	Doney & Cannon (1997)	Yhteistyöyritys pitää tehdyt lupaukset? // The partner company keeps its promises?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
BEHACOM4	Antecedents of inter-organizational trust	Behaviour	Doney & Cannon (1997)	Yhteistyöyritys on aidosti kiinnostunut, että liiketoimintamme menestyy? // The partner company is genuinely concerned that our business succeeds?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
BEHACOM6	Antecedents of inter-organizational trust	Behaviour	Seppänen (2008)	Yhteistyöyritys toimii ajoittain ennakoimattomasti tai epäjohdonmukaisesti? // The partner company sometimes acts unpredictably or inconsistently? (R)	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
REPUCOM1	Antecedents of inter-organizational trust	Reputation	Seppänen (2008)	Yhteistyöyritys on maineeltaan kyvykäs? // The partner company has a reputation for being capable?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
REPUCOM2	Antecedents of inter-organizational trust	Reputation	Doney & Cannon (1997)	Yhteistyöyritys on maineeltaan rehellinen? // The partner company has a reputation for being honest?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
REPUCOM3	Antecedents of inter-organizational trust	Reputation	Ganesan (1994)	Yhteistyöyritys on maineeltaan reilu? // The partner company has a reputation for being fair?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale

EXPERC1	Antecedents of inter-organizational trust	Experience	Heimeriks (2004)	Kuinka monta kumppanuutta yrityksellänne on ollut viimeisen viiden vuoden aikana? // How many partnerships has your company had during last five years?	1 = 2-5, 2 = 6-10, 3 = 11-20, 4 = 21-50, 5 = over 50, 6 = don't know	1 = 2-5, 2 = 6-10, 3 = 11-20, 4 = 21-50, 5 = yli 50, 6 = en osaa sanoa	6-scale
EXPERC2	Antecedents of inter-organizational trust	Experience	Seppänen (2008)	Millaisia kokemuksia yrityksellänne on näistä kumppanuuksista? // What kind of experiences does your company have of these partnerships?	1 = mainly negative, 2 = somewhat negative, 3 = slightly negative, 4 = neither negative nor positive, 5 = slightly positive, 6 = somewhat positive, 7 = mainly positive	1 = pääsääntöisesti negatiivisia, 2 = jonkin verran negatiivisia, 3 = vähäisesti negatiivisia, 4 = ei negatiivisia eikä positiivisia, 5 = vähäisesti positiivisia, 6 = jonkin verran positiivisia, 7 = pääsääntöisesti positiivisia	Likert, 7-scale
EXPERC3	Antecedents of inter-organizational trust	Experience	Doney & Cannon (1997)	Kuinka kauan yrityksenne on ollut yhteistyössä tämän yrityksen kanssa? // For how long has your company been in partnership with this company?	1 = Under 6 months, 2 = 6 months-under 1 year, 3 = 1 year-under 2 years, 4 = 2 years-under 5 years, 5 = 5 years-under 10 years, 6 = over 10 years	1 = Alle 6 kuukautta, 2 = 6 kuukautta-alle 1 vuosi, 3 = 1 vuosi-alle 2 vuotta, 4 = 2 vuotta-alle 5 vuotta, 5 = 5 vuotta-alle 10 vuotta, 6 = yli 10 vuotta	6-scale
TPERCAP1	Inter-personal trust	Capability	Smith & Barclay (1997)	Yhteyshenkilö tuntee toimialan hyvin? // The contact person knows this branch well?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TPERCAP4	Inter-personal trust	Capability	Seppänen (2008)	Yhteyshenkilö omaa hyvän liiketoiminnan osaamisen? // The contact person has good business know-how?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TPERCAP9	Inter-personal trust	Capability	[new]	Yhteyshenkilö on kyvykäs löytämään ratkaisuja lisäarvon tuottamiseksi? // The contact person is capable in finding solutions to deliver added value?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale

TPERCAP7	Inter-personal trust	Capability	Plank et al. (1999)	Yhteyshenkilö EI ole oikea asiantuntija? // The contact person is NOT a real expert? (R)	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TREGW1	Inter-personal trust	Goodwill	Doney & Canon (1997)	Yhteyshenkilö on yhteistyössämme avoin? // The contact person is open when dealing with us?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TREGW5	Inter-personal trust	Goodwill	Doney & Cannon (1997)	Yhteyshenkilö EI ole luotettava? // The contact person is NOT-trustworthy? (R)	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TREGW6	Inter-personal trust	Goodwill	Smith & Barclay (1997)	Yhteyshenkilö pyrkisi käyttämään minua hyväkseen, jos se toisi hänelle hyötyä? // The contact person could take advantage of me if it would benefit him/her?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TPERIDE2	Inter-personal trust	Self-reference	Seppänen (2008)	Yhteyshenkilö on tietoinen omasta potentiaalistaan? // The contact person is aware of his/her own potential?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TPERIDE3	Inter-personal trust	Self-reference	Seppänen (2008)	Yhteyshenkilö on tietoinen omista tavoitteistaan? // The contact person is aware of his/her own goals?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale

TPERIDE4	Inter-personal trust	Self-reference	Seppänen (2008)	Yhteyshenkilö omaa hyvän itse-tuntemuksen? // The contact person has good self-knowledge?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimak-kaasti samaa mieltä	Likert, 7-scale
TPERIDE6	Inter-personal trust	Self-reference	Seppänen (2008)	Yhteyshenkilö tuntee edusta-mansa yrityksen tuottei-den/palvelujen vahvuudet? // The contact person is aware of the strengths of the prod-ucts/services of the company s/he represents?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimak-kaasti samaa mieltä	Likert, 7-scale
TPERIDE9	Inter-personal trust	Self-reference	[new]	Yhteyshenkilö innovatiivisesti tuo uusia mahdollisuuksia hyödyn aikaan saamiseksi yhteistyössämme? // The con-tact person innovatively provides new opportunities to deliver benefits in our collaboration?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimak-kaasti samaa mieltä	Likert, 7-scale
TCOMCAP2	Inter-organisational trust	Capability	Seppänen (2008)	Yhteistyöyrityksen tuot-teet/palvelut ovat hyvälaatuisia? // The products/services of our partner company are of good quality?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimak-kaasti samaa mieltä	Likert, 7-scale
TCOMCAP3	Inter-organisational trust	Capability	Seppänen (2008)	Yhteistyöyritys osaa hinnoitella tuotteet/palvelut kannattavaksi? // The partner company knows how to price its prod-ucts/services profitably?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimak-kaasti samaa mieltä	Likert, 7-scale
TCOMCAP5	Inter-organisational trust	Capability	Seppänen (2008)	Yhteistyöyritys omaa tarvittavan teknologisen osaamisen? // The partner company has the neces-sary technological know-how?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimak-kaasti samaa mieltä	Likert, 7-scale

TCOMCAP6	Inter-organisational trust	Capability	Seppänen (2008)	Yhteistyöyritys omaa tarvittavan liiketoimintaosaamisen? // The partner company has the necessary business know-how?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TCOMGW4	Inter-organisational trust	Goodwill	Doney & Cannon (1997)	Tärkeitä päätöksiä tehdessä yhteistyöyritys huomioi myös meidän hyvinvointimme? // When making important decisions, the partner company also considers our welfare?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TCOMGW5	Inter-organisational trust	Goodwill	Doney & Cannon (1997)	Yhteistyöyritys huolehtii meidän myös meidän eduistamme? // The partner company keeps our best interests in mind?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TCOMGW7	Inter-organisational trust	Goodwill	Doney & Cannon (1998)	Yhteistyöyritys haluaa myös meidän menestyvän? // The partner company also wants us to succeed?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TCOMIDE1	Inter-organisational trust	Self-reference	Seppänen (2008)	Yhteistyöyritys on tietoinen omaavistaan kyvykkyyksistä? // The partner company is aware of its own capabilities?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TCOMIDE2	Inter-organisational trust	Self-reference	Seppänen (2008)	Yhteistyöyrityksellä on selkeä ymmärrys potentiaalistaan? // The partner company has a clear understanding of its own potential?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale

TCOMIDE3	Inter-organisational trust	Self-reference	Seppänen (2008)	Yhteistyöyritys Yhteistyöyritys on tietoinen tavoitteistaan? // The partner company is aware of its goals?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
TCOMIDE4	Inter-organisational trust	Self-reference	Seppänen (2008)	Yhteistyöyritys on tietoinen omista arvoistaan? // The partner company is aware of its values?	1 = strongly disagree, 2 = disagree, 3 = tend to disagree, 4 = neither agree nor disagree, 5 = tend to agree, 6 = agree 7 = strongly agree	1 = voimakkaasti eri mieltä, 2 = eri mieltä, 3 = hieman eri mieltä, 4 = ei eri eikä samaa mieltä, 5 = hieman samaa mieltä, 6 = samaa mieltä, 7 = voimakkaasti samaa mieltä	Likert, 7-scale
FREEIPT1	Inter-personal trust		New	Mikä on mielestänne tärkeintä henkilökohtaisessa luottamussuhteessa Teidän ja yhteyshenkilönne välillä? // What is in your opinion considered most important in personal trust relationship between you and your contact person?	Free text field (not mandatory)	Vapaa tekstikenttä (ei pakollinen)	
FREEIOT1	Inter-organisational trust		New	Mikä on mielestänne tärkeintä luottamussuhteessa yrityksenne ja yhteistyöyrityksen välillä? // What is in your opinion considered most important in trust relationship between your company and partner company?	Free text field (not mandatory)	Vapaa tekstikenttä (ei pakollinen)	
FREEOPEN	General feedback		New	Halutessasi jätä kyselystä vapaamuotoista palautetta // Please provide any comments about this survey, if you wish	Free text field (not mandatory)	Vapaa tekstikenttä (ei pakollinen)	

Appendix 2. Full rotated factor pattern table

	Rotated Factor Pattern								
		Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Commu-nality	MSA
BEHACOM1	The partner company treats us well?	**0.77753**	0.25650	0.23855	0.16297	0.29152	0.20282	0.88	0.92
BEHACOM2	The partner company continuously seeks to maintain a good relationship with us?	**0.76784**	0.25310	0.13650	0.23717	0.27820	0.27445	0.88	0.90
BEHACOM3	The partner company keeps its promises?	**0.72545**	0.07470	0.31976	0.02629	0.28577	0.28800	0.80	0.91
REPUCOM3	The partner company has a reputation for being fair?	**0.69206**	0.34326	0.21952	0.27944	0.17404	0.19583	0.79	0.93
TCOMCAP2	The products/services of our partner company are of good quality?	**0.67423**	0.17222	0.02283	0.41588	0.36533	0.10023	0.80	0.91
BEHACOM4	The partner company is genuinely concerned that our business succeeds?	**0.64730**	0.22485	0.26803	0.23117	0.35575	0.26435	0.79	0.92
REPUCOM1	The partner company has a reputation for being capable?	**0.63404**	0.47991	0.12887	0.24121	0.07729	-0.14460	0.73	0.92
REPUCOM2	The partner company has a reputation for being honest?	**0.55119**	0.46358	0.22106	0.37360	0.17846	0.17060	0.77	0.90
BEHACOM6	The partner company sometimes acts unpredictably or inconsistently? (R)	**0.51362**	0.29102	0.47844	0.15510	0.09874	-0.21163	0.66	0.93

Rotated Factor Pattern								
		Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Commu- nality	MSA
TREGW1	The contact person is open when dealing with us?	0.33897	**0.68458**	0.38612	0.11486	0.24596	0.12084	0.82	0.88
TREGW5	The contact person is NOT trustworthy? (R)	0.31304	**0.63693**	0.29517	0.19541	0.17362	0.04491	0.66	0.90
BEHAPER4	The contact person is NOT open in dealing with us? (R)	0.07732	**0.63106**	0.45441	-0.07571	0.14413	0.16844	0.67	0.87
REPUPER5	The contact person has a reputation for being fair?	0.21745	**0.60997**	0.34085	0.21864	0.09734	0.40812	0.76	0.92
REPUPER1	The contact person has a reputation for being honest?	0.27814	**0.58032**	0.31756	0.36740	0.12865	0.33899	0.78	0.91
TPERIDE4	The contact person has good self-knowledge?	0.20730	**0.57539**	0.35487	0.41865	0.20383	0.10029	0.83	0.92
REPUPER4	The contact person is known to be a person who takes care of his/her partners?	0.20772	**0.56529**	0.35920	0.35082	-0.02220	0.32927	0.72	0.89
TPERIDE2	The contact person is aware of his/her own potential?	0.10829	**0.51477**	0.43627	0.37135	-0.00271	0.24222	0.66	0.92
BEHAPER5	If problems (such as delivery delays) arise, the contact person is honest about them?	0.02541	**0.50944**	0.25555	0.06775	0.47354	0.38835	0.71	0.88
TREGW6	The contact person could take advantage of me if it would benefit him/her?	-0.12536	**-0.67432**	-0.03314	-0.00964	-0.07059	0.02787	0.66	0.83
TPERCAP7	The contact person is NOT a real expert? (R)	0.26049	0.32688	**0.73762**	0.02773	0.05293	-0.10707	0.73	0.86
TPERCAP4	The contact person has good business know-how?	0.08080	0.26362	**0.73480**	0.26119	0.23800	0.19342	0.79	0.91
TPERCAP9	The contact person is capable in finding solutions to deliver added value?	0.22495	0.34138	**0.71137**	0.22045	0.36603	0.15854	0.88	0.93
TPERIDE6	The contact person is aware of the strengths of the products/services of the company s/he represents?	0.27807	0.24930	**0.69362**	0.27642	0.19760	0.30975	0.83	0.96

		Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Commu-nality	MSA
	Rotated Factor Pattern								
TPERIDE9	The contact person innovatively provides new opportunities to deliver benefits in our collaboration?	0.20707	0.29971	**0.68447**	0.30615	0.29340	0.14299	0.80	0.92
TPERCAP1	The contact person knows this branch well?	0.29774	0.17883	**0.63130**	0.22113	0.34040	0.31618	0.78	0.93
TCOMCAP3	The partner company knows how to price its products/services profitably?	0.07477	0.15440	-0.01717	**0.78433**	0.16173	0.08383	0.68	0.84
TCOMIDE4	The partner company is aware of its values?	0.29421	0.28987	0.21237	**0.71168**	0.17249	0.08014	0.76	0.89
TCOMIDE3	The partner company is aware of its goals?	0.47506	-0.09579	0.29523	**0.63956**	0.17952	0.05520	0.77	0.92
TCOMCAP6	The partner company has the necessary business know-how?	0.30559	-0.04298	0.38927	**0.62599**	0.48466	0.08781	0.88	0.90
TPERIDE3	The contact person is aware of his/her own goals?	0.18041	0.22237	0.29319	**0.60585**	0.00542	0.20651	0.58	0.88
TCOMIDE2	The partner company has a clear understanding of its own potential?	0.41905	0.19154	0.43361	**0.50932**	0.44897	-0.01328	0.86	0.92
TCOMGW5	The partner company keeps our best interests in mind?	0.36251	0.34711	0.13460	0.14233	**0.74087**	0.03447	0.84	0.89
TCOMGW4	When making important decisions, the partner company also considers our welfare?	0.34043	0.31119	0.29511	0.17157	**0.71839**	0.03841	0.85	0.89
TCOMCAP5	The partner company has the necessary technological know-how?	0.34954	-0.09912	0.28828	0.19103	**0.63366**	-0.04445	0.66	0.92
TCOMGW7	The partner company also wants us to succeed?	0.33617	0.53377	0.09039	0.29864	**0.57121**	0.08867	0.83	0.90
TCOMIDE1	The partner company is aware of its own capabilities?	0.47146	0.05995	0.37961	0.49284	**0.50810**	-0.00771	0.87	0.91

Rotated Factor Pattern									
		Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Commu-nality	MSA
BEHAPER1	The contact person maintains regular contact with us?	0.22728	0.13371	0.09750	0.15353	-0.01799	**0.81908**	0.74	0.76
BEHAPER6	The contact person has done everything s/he can for our collaboration?	0.41293	0.35417	0.38220	0.16982	0.15891	**0.49106**	0.74	0.95