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Master's Thesis in Civil Engineering

SARA ÅKERSTRÖM

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Building Economics and Management
CHALMERS UNIVERSITY OF TECHNOLOGY
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ABSTRACT

Partnering arrangements have become more common in the Swedish construction sector over the last years. However, studies show that some issues are not yet established in partnering projects, e.g., the evaluation of “soft parameters” in recruitment processes of staff in project. Accordingly, there is a need of further investigation of the process of evaluating key persons’ attitudes and cooperation capabilities. Based on a study of three cases, partnering projects, this paper aims at improving the methods that has been used for evaluation of companies’ representatives in partnering projects. Focus is on the relationships between actors, individual characteristics, i.e., soft parameters that may have effect on project outcomes. . Results are mainly based on findings from interviews but also related prior studies of partnering projects are considered. The finding indicates fundamental problems in evaluation process of key persons required characteristics and also deficiencies in the methods, used for evaluation purpose. To develop a satisfactory relationship between actors in a partnering project, key persons should fulfil four criteria of competence, integrity, benevolence and attitudes to teamwork. Each of these criteria contains large number of characteristics and attitudes that should be discussed by actors at an early stage of a partnering project.

Key words: Partnering, Key Person, Evaluation Method, Characteristic, Soft Parameters

Utvärdering av individuella karaktäristika i partneringprojekt
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SAMMANFATTNING

Ett partneringprojekt ställer höga krav på fackkompetens och ledningsförmåga. Upphandling av konsulter och entreprenörer måste därför ske med beaktande av faktorer som personlighet och samarbetsförmåga hos de nyckelpersoner som skall engageras. Många problem som uppstår i ett partneringprojekt kan härledas till dåliga relationer mellan aktörerna och att nyckelpersonerna i projektet saknar nödvändiga färdigheter och förmågor. Denna situation leder till ett behov av att förbättra och utveckla de metoder som används för utvärdering av så kallade mjuka parametrar i ett partneringprojekt.

Denna studie fokuserar på relationer mellan olika aktörer, de faktorer som skapar ett lyckat partneringprojekt och de olika egenskaper och färdigheter hos nyckelpersoner, som är nödvändiga för att skapa goda relationer mellan aktörer i ett partneringprojekt. Syftet är att kartlägga problem och brister i de metoder som används för utvärdering av nyckelpersoner samt att förbättra och utveckla dessa metoder med utgångspunkt från betydelsen av mjuka parametrars i ett partneringprojekt.

Bland de viktigaste aspekterna av ett partneringprojekt nämns i litteraturen; (1) Relationsbyggandet, (2) Gemensamma mål, (3) Ett system för problem- och konfliktlösning, (4) Ett system för uppföljning av målen och mätning av förbättringar. Den första aspekten är direkt relaterad till egenskaper hos de engagerade och så kallade mjuka parametrar. Teorier som används i denna studie fokuserar därför på relationsbyggandet i partnering, de mjuka parametrar som enligt tidigare studier kan bidra till ett framgångsrikt partneringprojekt och samarbete mellan aktörer.

Resultatet i den här studien är baserat på information från tre pågående partneringprojekt som samlades in genom nio öppna och delstrukturerade intervjuer. Intervjupersoner valdes bland personer som antingen var inblandade i urvalsprocessen av nyckelpersoner eller representerade en nyckelperson. Studien är begränsad till metoder för att välja nyckelpersoner som används i entreprenörorganisationer, beställarorganisationer och projektledningsorganisationer.

Studien visade att det inte är vanligt med intern utvärdering av nyckelpersonerna inom de organisationer som studerats. Dock försöker beställaren eller projektledningsföretaget att utvärdera entreprenörens nyckelpersonal. Att utvärdera personlighet och samarbetsförmåga hos nyckelpersoner är ett komplext uppdrag för en extern organisation. Med tanke på att alla inblandade aktörer i ett partneringprojekt måste medverka för att uppnå en ”win-win” situation, ligger det i alla dessa aktörers ansvar att välja rätt person med rätta färdigheter och egenskaper som representant eller nyckelperson.

Studien identifierar ett antal exempel på grundläggande problem i utvärderingsprocessen av nyckelpersoner;

- Partnering är ett sätt att jobba tillsammans för att uppnå bättre resultat för alla aktörer. Det innebär att grupparbete är en viktig aspekt och nyckelpersonerna måste därför ha god samarbetsförmåga. Det är i de flesta fall idag, bara kompetensen hos enstaka nyckelpersoner som efterfrågades och värderades. Någon värdering av mjuka parametrar och samverkansförmåga görs inte på hela organisationer.

- Olika aktörer i ett partneringprojekt har olika uppfattning när det gäller vilka faktorer som bidrar till ett framgångsrikt partneringprojekt och de färdigheter som behövs hos nyckelpersoner.

- Vissa aktörer har bristande information om vad som behövs för ett lyckat partneringprojekt och vad som krävs av nyckelpersoner och detta kan leda till bristande investering i projektet, till exempel, för utveckling av sina relationer med andra aktörer och mätning av detta som är resurskrävande.

Studien visar även på brist i metoder och material som används för utvärdering av entreprenörens nyckelpersonal. I de flesta fall utvärderades nyckelpersonerna med hjälp av CV, referenser och genom bedömning av tidigare erfarenhet av liknande projekt vilka kan vara bristfälliga vid utvärdering av mjuka parametrar.

- De flesta CV tas fram av individer eller organisationer, exempelvis entreprenören, och har som syfte att presentera individer på ett positivt sätt. Dessa bör dock kompletteras med en beskrivning av samarbetsförmåga, social kompetens och liknande.

- För att kunna lita på en referenspersons- eller referensorganisationsbedömning måste man känna till deras kunskapsnivå och vara säkert på deras objektivitet. Här finns ett behov av validering av referenspersoner.

- Erfarenhet av liknande projekt är mest lämpligt för utvärdering av kompetens och behöver inte betyda att nyckelpersonerna i projektet har nödvändiga karaktärsdrag för partnering och vice versa.

Teorier och resultat av den här studien illustrerar fyra kriterier som måste uppfylls av en nyckelperson för att kunna bedömas ha god förmåga avseende ”mjuka parametrar”, dessa är; kompetens, integritet, välvilja och samarbetsvilja samt ”teamwork” förmåga. Var och en av dessa kriterier innehåller många egenskaper och attityder som måste diskuteras och bestämmas av de inblandade aktörerna i ett tidigt skede av projektet när bedömningsgrunder för utvärdering av projektdeltagare skall fastställas.

För att skapa en grund för utvärdering av nyckelpersoner, kan projektledningsföretaget eller beställaren använda CV, referenser och bedömning av erfarenhet från tidigare liknande projekt. Detta måste kompletteras med ett skriftligt material i form av en blankett som fylls i av nyckelpersonerna själva. Tanken med det skriftliga materialet är att undersöka nyckelpersonernas kunskap om mjuka parametrars betydelse för att etablera goda relationer mellan aktörer. Sedan diskuteras, innehåll, frågor och tankar i det skriftliga materialet i ett intervjumöte med nyckelpersonerna eller under en eventuell presentation av nyckelpersonerna för att

ytterligare tydliggöra nyckelpersonernas förmåga och förståelse för ett partneringsprojekt och undvika missförstånd. Med tanke på att under intervjun eller presentationen finns en direkt kontakt med personen då personen har en chans för att uttrycka sig fritt, är intervjun eller presentationen en avgörande del av metoden.

Det främsta syftet med ovanstående metod är att utveckla nyckelpersoners förståelse för partneringskonceptet och även förtydliga för dem vad som krävs av dem och vad som behövs för ett lyckat partneringsprojekt. Dessutom, för att stödja samverkan i projektet och säkerställa nyckelpersonernas agerande under projektets gång kan följande åtgärder vidtas;

– Nyckelpersonerna i ett partneringsprojekt kan få hjälp av en rådgivare, vilken förenar de olika aktörernas idéer och förståelse om värderingar i projektet och önskemål angående relationer i projektet.

– Det är också viktigt att med jämna mellanrum upprepa vad som skall åstadkommas med sådana åtgärder som incitamentavtalet, gemensamma mål, utvärdering av mjuka parametrar hos nyckelpersoner och andra specifika åtgärder i projektet. Detta är speciellt viktigt för att undvika återgåendet till traditionella beteende i byggbranchen.

Studien visar på att det finns en möjlighet till ett bättre samarbete mellan aktörer när utvärdering av nyckelpersoner har genomförts enligt en planerad process och med avseende på mjuka parametrar. För att uppnå bättre samarbete och tillfredsställelse, krävs ett genomtänkt arbete med mjuka parametrar i partneringsprojektet. Detta bör vara projektledningsföretagets ansvar.

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Preface

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Sara Åkerström

1 Introduction

1.1 Background

Traditionally construction projects are characterized by high costs and low productivity. The most common problems with these kinds of projects is claimed to be ineffective use of contributory competences, defective relationship between actors, inflexibility, ineffective use of timing, higher costs, lower productivity for entrepreneur and dissatisfactions (Kadefors, 2002). To overcome these problems new contract forms and more advanced collaborative arrangement are discussed. It becomes appear that not only economical aspects are important for success in a project but also entrepreneurs' demands on cooperation in very early stages of a project can make other opportunities for reducing future problems and present better solutions in many cases.

Partnering arrangements aim to reduce conflicts, improve performance and minimize risks by creating guidelines for project participants to focus on common project objectives (Latham 1994, Egan 1998). One of the effects partnering construction projects have on Swedish commissioner of a building project is lowering their functions in a way that in these projects more services have been purchased of project managements and technical consultancies (Björkman, Kadefors and Ranhem 1999). However, despite all advantages the partnering arrangements have, these projects don't create certain successful results.

The expression "soft parameters" is used in this master thesis instead of required characteristics and attitudes to improve and support the relationships between actors. And the expression "key person" is used instead of the involved organisations' representative in the managerial body of a partnering project.

1.2 Soft parameters

Despite numerous studies, aimed to explore benefits and success factors in a partnering project, highlight the importance of relationship between actors (Egan, 1998; Bennett et al., 1998; Black et al., 1999), and despite the emphasises on attitudes to team working and trustworthiness as an essential characteristic to a successful partnering arrangement (Harback et al., 1995; Egan, 1998; Bennett et al., 1998; Black et al., 1999), researches on these issues are at the early stages of their analysis (Bresnen et al., 2003). Bresnen et al. describe in continue that studies on partnering are not convincing and have not reached a sufficient depth or have not observed partnering from different points of view. They are limited to studies of successful partnering projects, while there are fundamental problems, which are not simply recognisable and demand challenges to develop a partnering relationship (see Bresnen, et al. 2003 *The Seven Paradoxes of Partnering*).

Partnering requires professional competence and management abilities, which draw attention to the need of observing organisations and key persons' attitudes and cooperation capacity (Kadefors, 2002). To decrease risks regarding deficiencies in competence or cooperation capabilities it should be in every involved organisation's

interest to evaluate proposed consultancies, contractors and even clients. It is also vital to evaluate capabilities and attitudes of the companies' representatives to ensure that the managerial body in the partnering project will work well. In this case it is important to know the essential characteristics and to have accurate methods for evaluating them. There are several studies of required characteristics for considering a person capable as a representative in a partnering project (Mayer et al., 1995; Bennet et al., 1998). However, there are relatively few studies of the methods actually used in evaluation of these characteristics.

1.3 Purpose and limitations

This master thesis is based on a study of three partnering projects and includes views of contractors, project management consultants and clients on their perception of success factors and essential characteristics for key persons. The purpose is to understand the problems and deficiencies in methods used for choosing the involved companies' representatives and to improve these methods considering "soft parameters" for use of project management consultancies in evaluation of key persons. Earlier defined "soft parameters" and previous studies about relationships and cooperation in partnering will be considered in analysis. Recommendations will be drawn in order to enhance reliability of evaluation methods regarding required characteristics among key persons to achieve a successful partnering project.

The thesis is limited to individuals' influences on relationship between participants in a partnering project. Also the individual characteristics, which contribute to achieve successful partnering. Success factors in a partnering project, however is only considered for additional explanations in some cases and is not included as a part of study.

2 Theoretical framework

“Partnering is a structured management approach to facilitate team working across contractual boundaries. Its fundamental components are formalised mutual objectives, agreed problem resolution methods and an active search for continuous measurable improvements.” (Construction Industry Board, 1997)

According to Kadefors (2002) the main purpose of a partnering project is to create a win-win situation for all participators. There is a common view among researchers that the main elements during the process of implementation of a partnering project are; the foundation of the relationship between the participants, mutual goals, a system to solve the problems and conflicts, and a system to follow up the goals and to measure the improvements (Kadefors, 2002).

This master thesis focuses on theories regarding relationships between participants, cooperation and soft parameters. Establishment of a relationship between participants is one of the essential factors to achieve cooperation in partnering (Loraine et al., 2000). Partnering is all about cooperation based on mutual respect, openness and trust (Kadefors, 2002). “Soft parameters” and individual characteristics are among those factors, which affect on a partnering project and the relationships between participants in the project (Black et al. 1999). Evidently there are other aspects, which affect the relationships between participants, and several of these aspects are discussed in this master thesis but focus in this master thesis is on the “soft parameters”.

Furthermore researches about factors, which contribute to a successful partnering project, are studied and used in analysing the findings and describing insufficiencies in the studied projects. Theories regarding two more critical success factors are gathered to describe revealed problems in the studied projects.

2.1 Hindrance to relationship

To accomplish cooperation in a partnering project mutual goals are required but also the establishment of a relationship between participants (Loraine *et al.*, 2000). According to Loraine *et al.* (2000) the most important obstacles for creating a relationship between participants are cultural problems which involve three kinds of factors; organisational related factors, attitude related factors and traditional related factors.

Examples of organisational related factors are exaggerated hierarchies and limited delegation for problem-solving. Examples for attitude related factors are lack of real commitment and fundamental distrust. The traditional related factors are exemplified as people who have invested in knowledge and skills which are not valuable or even are unsuitable in a partnering project and inflexible roles and procedures.

2.2 Partner characteristics

Egan (1998) in his report 'Rethinking Construction' identifies the UK construction industry's need to break down barriers in relationships among parties. He recommends that long-term relationships or partnering arrangements are needed for further development of the construction industry. Furthermore he identifies three principles for selection of partners in partnering projects; attitude to teamwork, ability to innovate and to offer efficient solutions.

It is necessary to know that selection of clients is not less important than selection of other participators, as contractors are assumed to be more willing to keep their relationship with a client. Furthermore, it is considered more difficult for contractors to criticise clients' mistakes than for clients to criticise contractors' mistakes (Kadefors, 2002).

2.3 Success factors

Black *et al.* (1999) analyse factors which contribute to success in partnering projects and investigate benefits of partnering in construction industry. One of these benefits includes fewer adversarial relationships in the industry. They emphasise the importance of all participants' effort and willingness to create changes and improvements for accomplishing benefits.

They identified certain requirements which must be met for achieving success in a partnering project. The identified requirements contain: mutual trust, effective communication, senior management commitment, actions consistent with stated objectives, a dedicated team, flexibility with regard to change and a commitment to continuous improvement. Result of this study emphasises on importance of relationships in a successful partnering project and proves that soft parameters and characteristics affect the relationships between participators in a partnering project.

There are other researches which aimed to identify essential factors for improvement and success in a partnering project however they do not discuss "soft parameters" directly. "The Seven Pillars of Partnering" by Bennett *et al.* (1998), is one of these studies which introduces essential elements to support a partnering project. Among the elements, they introduce is strategy, which is used to discuss problems regarding relationships in this study.

2.4 Trust

Partnering is considered as an attitude, which relates participants in a spirit of mutual trust (Kadefors, 2002). According to Harback *et al.* (1995) mutual trust is essential for success in cooperation, which may be achieved if the participants act consistently with their joint objectives. In other words, the participants must trust each other and not reveal information to their respective competitors. According to Kadefors (2002) insecurities regarding defective specifications about changes and compensations in contracts and difficulties to control if requirements are fulfilled prevent a cooperation

based on mutual trust in building sector. On the other hand, practically the relationship between contractor and client is more about negotiations than specifications or control (Kadefors, 2002). Based on these findings, Kadefors recommends several work procedures in a partnering project. One of these work procedures is, guarantee competence and attitudes among organisations and individuals.

According to Mayer *et al.* (1995), to be a trustee, one has to have three characteristics; ability, benevolence and integrity. They describe ability as trustee's competence and capabilities, benevolence as "the extent to which a trustee is believed to want to do good to the trustor" and integrity as trustor's perception of trustee's loyalty to accepted principles by the trustor. The benevolence and integrity characteristics consist of a wide range of attitudes, which involve feelings of openness, trustworthiness and fairness. Considering the criteria benevolence and integrity emphasised by Mayer *et al.* (1995), Elangovan *et al.* (1998) explain the motivation of betrayal. Their represented model reveals that an unsatisfactory assessment of the current situation by the trustee will negatively affect the trustee's benevolence and integrity and increases the trustee's motivation to betray. Elangovan *et al.* (1998) recommend proper selection of individuals and creating favourable situations in partnering projects such as positive relational experiences with co-workers and superiors, to minimize betrayal behaviours. To create a favourable situation in partnering a common way is using reward system and economical incitements. But to appreciate individuals, soft parameters as goodwill, social appreciation and respect can be greater than economical rewards (Kadefors 2002).

2.5 Communication

Communication is a central element for trust in relationships as it helps to better understand each other's needs and to improve the common goals and values (Kadefors, 2002). According Kadefors (2002) one way to ensure that communication is working in a partnering project is to create carefully planned workshops, which can be considered as a shortcut to create trust in relationships. These workshops can even replace client's control obligation, which facilitate for other actors to react against the client's actions and avoid relapsing to the traditional attitudes and work methods in construction industry. Although the control item has negative influences on relationship and engagement, it helps the client to create general reference frames for contractors that in fact can be achieved by more discussions between them in early stages of a project. It is not necessary for the client to find the required competence for controlling the performances within own organisation while purchasing these services from a consultancy would be experienced less evident.

3 Method

This master thesis is based on a qualitative study of three cases of ongoing partnering projects which differ regarding characteristic and complexity.

Table 3.1 Main information about the projects and interviewees.

	Case A	Case B	Case C
Main Character	Labs & Offices	Broadcasting Building	Office Building
Complexity	High Complexity	High Complexity	Low Complexity
Location	Göteborg region	Göteborg city	Göteborg region
Interviewees	Client A Contractor A PM Consult. A	Client B Contractor B PM Consult. B	Contractor C1 Contractor C2 PM Consult. B PM Consult. C

Information has been gathered by nine qualitative interviews, which were carried out individually at the interviewees' work place. The interviewees were chosen among project management consultancies, contractors and client organisations involved in studied projects. Large numbers of the interviewees were experienced and active within partnering form projects in their companies. Choice of interviewees covers personnel responsible for recruitment of companies' representatives and companies' representatives themselves. The purpose was to cover various information sources of used evaluation methods and study the situation of the projects from different perspectives.

3.1 Interviews

The interviews were conducted based on a combination strategy. This strategy involved standardized open-ended questions during the initial part, and a free discussion about ideas and experiences in the latter part. Standardized open-ended interviews are conducted to reduce time consumption for systematic data collection. Another reason for using the standardized approach is to facilitate analysis by easily finding and comparing responses (Patton, 2002).

There have been two different assortments of questions. In both assortments, interviewees were asked initially to describe a successful partnering project. They were also asked to define how well their project works concerning their expectations

and cooperation between actors. The second part of the question assortment for companies' representatives contained questions about their awareness of required personal characteristics in partnering projects. While, for the personnel responsible for recruitment of companies' representatives and persons from client organisations, questions continued about the evaluation methods they used in respective project. Fully worded and focused questions limit interviewees to pursue just anticipated topics. On the other hand focused questions help to control the interview and the quality of given responses (Patton, 2002). The reason to have discussion about ideas and experiences in the latter part was to get the spontaneous ideas of the interviewee. Data was primarily recorded on tape while notes were also taken during each interview. Qualitative interviews guide the interview towards interviewer's implication and data represent the original answers to questions. Hence the tape-recorded data and notes were written in a document as same as original statement afterwards.

3.2 Analyse of findings

A qualitative method is used to evaluate the interviews. Qualitative analysis does not represent any formula for transforming data into finding. The challenge of qualitative analysis lies in making sense of data and constructing a framework for communicating, what data reveals (Patton, 2002). Based on the cases, the findings illustrate problems in each project and how personalities and attitudes that were requested for the chosen representatives in partnering projects were evaluated.

For drawing conclusions, gathered data from each interview was primarily compared to the theoretical framework. Interviewees mentioned a lot of required attitudes and capabilities that were sorted according to the studied theories. To make sense of differences between considered characteristics and applied methods in each project and to understand influences of these differences, gathered data were analysed at the next stages.

At the second stage interviewees' images of present situation in the project was compared with their descriptions of successful partnering project. By present situation in a project is meant, how cooperation between actors worked, if there were any problems in cooperation, what were the reasons, and how well the interviewees descriptions of a successful partnering project was fulfilled in respective project up to the interview date. These findings helped to identify the problems in the studied projects.

At the third stage the used methods for choosing key persons were evaluated concerning the problems in each project, studied theories and the relationships between actors. The influences expected by responsible persons who evaluated key persons and the results were compared, for discussing deficiencies in the used methods. And also discussing possibilities in improving these methods by applying methods for evaluation of required soft parameters, which contribute to successful partnering projects.

4 Findings

Cases in this study contained two reconstruction and rebuilding projects of inner spaces plus one office building. All began in 2005 and were very similar concerning contract forms, the use of incitements and open books. Participants in all projects used workshops, continual follow-up meetings and information meetings to facilitate and ensure information exchange. On the other hand the partnering contents and the way these contents were communicated between actors in practice were very different.

4.1 Case A

This case is a reconstruction and rebuilding project of inner spaces for about 220 MSEK. Three persons were interviewed in this project. The findings illustrated that the project had not began as partnering but because of the complexity of the project the client and project management consultancy decided to change the contract to a partnering contract afterwards, which resulted in changing the planning manager. The project was passing the production phase while planning documents were not completed, so the project schedule had been changed and the costs had been increased.

4.1.1 Contractor A

The interviewee mentioned the importance of agreeing on the partnering concept among members of a contractor's group during running-in time in a partnering project. He explained that they had different understandings and ideas about the concept of partnering in their group. The manager checked the members' understandings of the partnering concept in order to clear possible misunderstandings and support coordination of the group. The interviewee argued that the differences were occurred because they had people with different backgrounds in their group.

4.1.2 Client A

The interviewee mentioned benevolence attitudes as a way of creating trust among participants. But his emphasis, when he chose key persons was on competences in steering time and economical aspects. The interviewee claimed that he had mainly chosen organisations with which his organisation had worked before and he relied on references from other organisations when he did not have any earlier cooperation experiences with the organisation. The same procedure was used for choosing key persons. The contractor had submitted CVs of supposed key persons. However these were not evaluated by the client. The interviewee related problems with planning the project to previous complexity problems, which resulted in changing the contract, and also to the consultants who were acting within design process. He explained that these consultants had not the required capabilities for cooperation and coordination. He claimed that it had cost them lots of time and money to coordinate all actors.

4.1.3 Project management consultant A

The interviewee had not been involved in this project from the beginning. He had been the Project management consultancies' representative and had not been taken part in the tendering procedure or the evaluation of other key persons. His senior manager argued that they changed their representative due the required attitudes for the new contract form of the project, after the change of the contract form.

4.2 Case B

In this case the client had bought a building, which the previous owner company (client B) already had signed a partnering contract for renovation with a contractor and had chosen the consultancies in the field of design. The project is a reconstruction and rebuilding of the inner spaces for about 170 MSEK. Three persons were interviewed in this project. The planning manager had been changed, after the building was bought by another company, and the project had problems regarding cooperation between design consultants and the contractor. The partnering contract in this project was based on a Swedish standard contract, which demanded a completed design before running the tendering procedure.

4.2.1 Contractor B

The interviewee argued the importance of group attitudes in creating trust and development of relationships with other participants. He explained the group attitudes as the importance of all member of group to help solving problems instead of creating them. He also mentioned that key persons are limited in their decisions because of policies of their organisations. He explained his statement that "the reaction, a key person shows to a certain situation in a partnering project, mainly came up at an internal meeting in the key person's organisation". He selected technical competences and capabilities as his emphasis for choosing key persons in this project. The interviewee explained that the problems they had with consultancies, were due to lack of resources and knowledge among consultants for a complex project and that they did not respect the contractor's necessity for the required information.

4.2.2 Client B

The interviewee emphasised the importance of the competence and capabilities of the contractor's organisation for steering time and economical aspects when choosing key persons of this organisation. He explained the model he used for evaluating the bids, assigned 60% to the recommended organisation, 5% to each one of recommended total price and added amount for subcontractors and 15% to each one of added amount and steering of costs. He evaluated the contractor's key persons (suggested organisation) by; CVs, earlier experiences, which were not in partnering projects and the interviewee, trusted his feelings.

CVs mainly were evaluated based on references from working in similar projects regarding size and construction methods. The chosen contractor had an informal presentation for the (previous) client's organisation afterwards. The interviewee

explained that the model he used to evaluate the bids helped him to have argument for his choice but the model felt risky to him.

4.2.3 Project management consultant B

The interviewee had not been involved in this project from the beginning. He had been the current client's representative and had not been taken part in tendering procedure or evaluation of other key persons. He mentioned that the problems between consultants who worked in design process and the contractors' key persons are about not having required attitudes for cooperation. He explained the reason for the use of partnering in a complex project is principally the expectations for help from contractors' competence and solutions. He stated that the contractor did not really care about problems regarding to design and expected respective consultants to solve their problem themselves.

4.3 Case C

This case is an office building for about 70 MSEK. Four persons were interviewed in this project. The project appeared to be the most successful case and had not found any problems at that time. The client's organisation in this project was only represented by MD.

4.3.1 Contractor C1

The interviewee argued that his way for creating trust in this project was employing persons who could ensure achieving success in the project due to their competence and the interviewee's experiences. He continued that the good reputation of a person involved in the project motivated him to do his best for the project. He explained that his criteria for choosing his people were based on these people's responsibilities plus their functions.

His criteria for choosing site manager was: documented skilful site manager, good reputation within the branch, tidy, clean site, practiced to run projects towards economical goals, used to large organisations both internal and external, good cooperation capabilities.

He stated that he considered different criteria for choosing a project management because they had to work with several projects at the same time in addition to differences in tasks and responsibilities between a site manager and a project management. His criteria for choosing a project management was: Willingness to cooperate, humble, respectfully meet others in the project, competent technique, economist, practiced to manage several works together at the same time, good in delegation.

4.3.2 Contractor C2

The interviewee was one of the members in the project management group of this project. He stated; "it is important that key persons do fit with each other" in answer to what required success factors in partnering, he would suggest. He mentioned to the

satisfactory relationships between key persons and reasoned that the successful performance in the project was depended on that all members paid attention to each others problems.

4.3.3 Project management consultant B

The interviewee was one of the responsible persons for evaluation of represented key persons by contractors' organisation during the tendering procedure. He explained that, the presentation of key persons from companies, which had submitted bid and the discussion they had, motivated him in his choice among submitted bids. For example in some cases, MD presented the key persons instead of the key persons themselves that was not acceptable for the interviewee.

4.3.4 Project management consultant C

The interviewee argued one of the factors, which contribute to a successful performance in this project, was engagement among key persons. He exampled the members of the project management group who were responsible and followed the tasks according to the project schedule. He reasoned, coordinating all participators in a partnering project, is the project management group's responsibility which had worked well in this project up to interview time.

4.4 The used evaluation methods

The processes for recruitment of key persons within the organisations varied in the studied projects due to size and kind of the organisations. In the studied cases, clients' organisations in the private sector were very small. For example, in the smallest project in this study, client's organisation was represented by MD. Key persons in the studied project management consultancy were assigned depended on their capabilities and experiences and depended on the tasks. Experienced key persons, in this consultancy, had been considered as professional within the branch in the studied region and key persons' capabilities were evaluated during a long period by the organisation. Furthermore the project management consultancy had limited number of personnel. In such cases evaluating these people seemed to be impossible or even pointless. In a contractor's organisation, it was usual to place non occupied people in new projects, but the responsible person considered several aspects mentioned in Table 4.1 for choosing key persons.

Table 4.1 The aspects considered in contractor's organisation for choosing key person.

Contractor A	Contractor B	Contractor C
Satisfactory experiences	Satisfactory experiences	Satisfactory experiences
Clients desire for having specific people		References

On the other hand, mainly clients' organisation and their representative project management consultancy tried to evaluate contractors' key persons in the studied projects. Table 4.2 illustrate the methods is used for evaluation of contractors' key persons or the aspects is considered for this purpose in each case.

Table 4.2 The used method and considered aspects in evaluation of contractor's key persons by clients or their respective project management consultancy.

Client A	Client B	PM consultant B
References	CVs	CVs
Satisfactory experiences	References	References
	Satisfactory experiences	Presentations

5 Discussion

During the interviews, the interviewees mentioned a large number of required attitudes which they considered essential among key persons if a partnering project is to succeed. The standardized open-ended questions do not lead interviewees to the specific answer and the idea is to get the actual perception of the interviewee. On the other hand, even if received answers contained different attitudes, these attitudes could give the same characteristics. In other words the attitudes were very similar in meaning or were synonyms.

To illustrate the received answers during interviews, there has been a need of classifying and summarising the attitudes mentioned by interviewees. This has been done in accordance with three defined characteristics by Mayer *et al.* (1995), ability, benevolence and integrity. The classification has been done considering the definitions Mayer *et al.* (1995) proposed for these characteristics, which are mentioned under Chapter 2 Theoretical framework Section 2.4. Because of analysing and evaluating which has been done on this information, the information could not be placed as findings of the study.

Furthermore the interviewees mentioned other aspects than attitudes and characteristics among key persons which are illustrated as same as the original in the tables. Table 5.1 summarises interviewees' ideas about essential characteristics for key persons in a successful partnering project. Same procedure because of the same reason has been done in the Table 5.2 for interviewees' mentioned success factors in a partnering project.

Table 5.1 The essential characteristics for key persons, which can contribute to a successful partnering project in view of client, contractor and project management consultant.

	Case A	Case B	Case C
Client	Competence Capabilities to steer time and economy	Benevolence Competence Capabilities to steer time and economy	Not interviewed
PM Consult.	Competence	Integrity Benevolence	Integrity Benevolence Competence
Contractor	Competence Integrity Benevolence	Competence	Competence Benevolence

Table 5.2 The success factors in partnering in view of client, contractor and project management consultant

	Case A	Case B	Case C
Client	Good economy	Innovation Benevolence	Not interviewed
PM Consult.	Clients commitment Realistic project schedules	Cooperation capabilities Competence	Cooperation capabilities Competence Clients competence
Contractor	Clients engagement	Integrity Trust	Integrity Benevolence Working dialog

The overall findings in the study indicate that key persons of a client's organisation and even project management companies' representatives are not evaluated in general. During the interviews it is revealed that contractors' organisation mainly employ people, who have no occupations in other running projects, for new projects. This is valid even in partnering projects. On the other hand, more usual, commissioners or clients' representative project management consultants try to evaluate the contractors' key persons. The interviews emphasise on clients' role in partnering projects (case A, B, C table 5.2). Evidently it is the client or its representative project management consultant's main responsibility to evaluate if the engaged personnel in the project have the required characteristics for partnering. However this study indicates clients' confidence in contractors' experiences and recommendations for suggested key persons (case A, case B).

Although it is often in client's interest and obligation to evaluate purposed organisation and represented personnel, all involved organisations are responsible to choose an appropriate representative. It is not very easy for a client to recognise if represented persons actually have the required attitudes. The organisations and people who have worked together during a longer time and in other projects can have better knowledge about their colleagues' capabilities and personalities. Partnering demands engagement of all participants for achieving success in the project (Egan, 1998; Kadefors, 2002; Black et al., 1999) and the represented theories also illustrate the importance of choosing appropriate partner for achieving success in partnering (Egan, 1998; Bennett et al., 1998; Black et al., 1999). The participants will act and influence the performance of the project and the relationships by their representatives, so they are connected together. Consequently evaluation of clients' representative is as important as other actors' personnel (Kadefors 2002); however this seems always more difficult.

It is very important that all participants' representative have a bright understanding of the partnering concept. In the same time these persons should support the relationships among the actors. This requires characteristics, which create trust among other actors also benevolence attitudes and integrity (Harback et al., 1995; Mayer et al., 1995; Kadefors, 2002). On the other hand it is vital for clients to have good knowledge about reference organisations' or reference peoples' capabilities and awareness for trusting in their judgments. Because these references consciousness about required attitudes and their perceptions of success factors in partnering projects can vary from clients' understandings (table 4 & 5). Also references can have deficient information.

The findings of this study illustrate several fundamental problems in the participants understanding of the partnering concept. The used measures for evaluation of key persons are also inadequate according to the findings and considering problems in the studied projects. There is a need for additional improvement of the actors' knowledge about partnering and correcting the evaluation methods if partnering is to succeed.

One of these problems is differences in the perception of the participants regarding required key persons' capabilities and success factors in partnering project. These differences can result in misunderstandings and confuse the process for evaluation of key persons. For example while the client considers economical aspects as a determinant factor for success in a partnering project, the contractor and the consultant believe in client's role in a partnering project (see table 5.2 case B).

The other problem is, investing key persons on wrong capabilities or not considering required characteristics for them, which is one of the traditional related factors described by Loraine et al. (2000) that prevent creating a successful relationship between participants. Lack of required attitudes and cooperation capabilities among participants' representative prevent achieving a collaborative culture in partnering. Deficient cooperation capabilities even complicate coordination of involved actors that usually takes time and money to coordinate (see case A). This is while the senior managers only pay attention to competence and technical capabilities among key persons, and the attitudes to team-working which is presented as a factor for selection of partner by Egan (1998) often are not considered in evaluation methods. This fault can even be noticed in case B since the commissioner has not evaluated the contractor based on price, hoping to get better results. According to Egan (1998) competence, ability to innovate and to offer efficient solutions is not sufficient for selecting partners. The contractor in cases B has more experience due to partnering projects than other contractors. It is interesting to know because it proves that even a competent contractor is not sufficient for succeeding in a partnering project. If there is any problem considering relationships among actors, the actors' technical knowledge will not help the situation. Mostly interviewees related this kind of problems to the synergic effects due to personalities. They had no explanation or reason why in some projects personalities are fitted and in other projects personalities do not work.

Another problem is that the participants do not fully understanding the partnering concept. This kind of problems can be effects of lack of experience in partnering projects or defects in the communication among actors. Example of this problem can be seen in case B. One of the main elements in a partnering process is mutual goals in other words participants' desires and expectations (Kadefors, 2002). Partnering contracts are often used in more complex projects where client would like to make use

of contractor's experiences. The client assumes that the contractor's assistance in the partnering project would facilitate the performance. Now if the contractor expects that the consultancies should take care of their problems themselves, the common goals and the partnering concept are not really understood and accepted.

The methods used for evaluation of key persons in the studied cases are deficient. According to the interviews key persons were evaluated generally by CVs, references and successful performance in earlier similar projects.

Although successful previous performances or experiences can indicate key persons' competence, these criteria do not consider "soft parameters" in a partnering project. These criteria can not even ensure a successful performance of this person in future projects. Because each project has its unique conditions, which have come up by various aspects and will influence the relationships among actors.

The other used measure for evaluation purpose was references. Even if using references is a common way to assess attitudes and even competences of individuals, there are some problems in this procedure. It should be considered that statements of a reference person are a comparison with this person's competence and also this person's objectivity should be investigated.

Large number of the interviewees mentioned CVs as their main measure in evaluation and in two of three cases clients required CV for key persons. A common problem with CVs, mentioned by interviewees, is assessing "soft parameters" and attitudes of the supposed person on the basis of previous experiences. Often, in larger companies, there is a pattern for CVs and the company produces CV for the employees. These CVs are quite similar each others and do not naturally transfer any senses from the person presented in the CV.

In addition to the mentioned problems and deficiencies the findings point out that the relationships among actors are intensively affected by matters of economy, organisations' strategy, understanding of success factors in partnering and attitudes to teamwork. Even if these issues are not related to evaluation of key persons but they should be considered for creating a successful relationship among actors.

Many interviewees agreed on the importance of a suitable economic situation and realistic project schedules for creating a successful partnering project, however the economical aspects are of importance in all projects. Consequently contracts and incitements have significant roles for creating encouraging atmosphere in partnering project. Economical aspects can affect attitudes directly and abilities indirectly. Favourable economic circumstances make reason for cooperation and motivate people for finding the best solution, while unfavourable economical conditions depress people and tight project schedules make an arduous situation that helps to generate conflict. The result is a shift from the interest in making the best for the project to the interest in finding a way for gaining profit. Moreover these conditions develop distrust among actors, which work as an obstacle to cooperation (Kadefors, 2002). According to project management Consultant C, "it is not easy to care about cooperation and enhancing common goals when feeling deceived and if the project does not make profit". Even if unfavourable economical situation may not give good reason for betrayal (Elangovan et al., 1998), it creates a disappointing situation that decreases the trustee's motivation to cooperate.

Obviously not only individuals affect the items in a contract or incitements, but also the policies of the organisations have influences on these issues. It is also valid in other concerns as generating and supporting relationship with other participants (see case B). As a result the organisations, which take part in a partnering arrangement, should have adequate collaborative strategies that support cooperation attitudes (Bennett et al., 1998). These strategies should be constructed for reinforcing the relationships between the organisation and other participants.

The findings indicates that the client has noticed the necessity of using more secure methods for evaluating contractors and examine new methods in tendering procedures (see case B). The attempt was to consider values of human factors in partnering and prioritise the quality before the cost obtaining better results. Still only competence seems not sufficient for achieving success in partnering projects (Black et al. 1999).

Even if all key persons have the required personalities and capabilities, still one important thing is left, that is “the team function”. This study is limited to individuals and their required characteristics, but the importance of considering teamwork capabilities in the recruitment processes are not deniable. Another study is needed to investigate “the team function” and required attitudes to teamwork among key persons in a partnering project and how these aspects affect the relationships between participants. As the key persons will work in a team where the team functions are more important than individual functions, they have to have teamwork capabilities. For example, they have to have ability to take and give criticism and they also have to match each other’s abilities in processes of decision-making and problem-solving. To create a perfect team for partnering projects, focus should be on those synergy effects that come up when respective participant work together. The synergy effects of the team members and whether the personalities fitted or not, may be observed during the workshops period in the beginning of each project. To support a team and enhance teamwork capabilities, training programs and workshops should be erected. Workshops contribute to create trust among actors and control the performance of the participants in the project (Kadefors, 2002). Moreover workshops are used in some way for improving coordination among participants during the process of establishing the common goals (Case B). Other aspect to ensure if a team would work is a project manager with authority and management capabilities. These aspects are not discussed in this master thesis but are considered in gathering information during interviews.

6 Conclusions

To achieve better relationships among the participants of a partnering project, “soft parameters” have to be considered at an early stage of the project. The current evaluation methods need to be improved by moving the focus from competence as the only determinant for capability of a key person to a group of determinants, which contains competence, integrity, benevolence and collaborative capabilities, and attitudes to teamwork. The clients or their respective project management consultancies must be aware of the discussed fundamental problems and investigate the knowledge and understandings of the partnering concept among participants.

Evaluating soft parameters and the personality of a key person is not a simple matter for a client or its representative project management consultancy. There are many organisations that carry out processes as CV or interviews for this purpose, however there are problems of assessing gathered information. To facilitate evaluation of “soft parameters”, it may help, if the used method is combined with other measures. Personal reflections in form of written accounts about the partnering concept plus references, interviews and presentations will often make CVs more reliable. Thus it is important for clients to ensure if key persons themselves have written the accounts or performed the presentations. According to the findings of this study normally, represented key person (by an organisation), has references of earlier successful work experiences and CVs. This can be a base for clients’ information and also ensure the key person’s competence. In the next stage these persons can be asked to fill in a blanket, which lifts up criteria of; integrity, benevolence and collaborative capabilities and attitudes to teamwork. Each of these criteria covers a wide range of attitudes and characteristics that should be discussed between actors at rather early stages of a partnering project.

The questions can be formed to examine key person’s information about these certain criteria. For example it can be a direct question about which attitudes and capabilities the key person believes is required among key persons in a partnering project. It can be more convincing if the person motivates the answers. To make sure that certain attitudes and capabilities will be discussed by the key person, the questions can be formed as a request to fulfil certain attitudes. It means that the key person will be requested to describe how he/she will contribute to establish certain attitudes and capabilities, which are demanded by the client. In continue they will be also asked to present and motivate if there is any attitude or capability which they consider as essential among key persons for support the relationship among actors. The answers can be discussed more in detail during an interview meeting or the client can request going through these questions during presentation of the actual organisation. The answers can be compared with relevant theories, common established goals among partners for the project or other conditions in a specific partnering project. This kind of information can contribute to get an insight of the key person’s knowledge about the partnering concept and the required attitudes and capabilities among key persons. On the other hand the questions propound these issues for the key persons and their organisations. Thus key persons will be motivated to consider the problems, which may contribute if these requirements are absent, and to seek the solution.

The suggested method by itself is not sufficient for the judgment of gathered information via an evaluation process. It is necessary to have a good knowledge about

success factors and soft parameters that can contribute to a successful partnering project. To solve the mentioned problems in understanding the partnering concept and differences in the perceptions of participants, there is a need for improving participants' knowledge about partnering. According to this study, contractors, consultants and clients perspective of success factors and essential attitudes and characteristics for key persons are very different. This may even cause misunderstanding when they use references for evaluation purposes. Therefore it is essential to communicate these items at a rather early stage to coordinate all participants' perceptions. The participants' interpretation of these items can be argued during workshops, for example. The focus should be on setting up common success factors, in other words, directing all actors for achieving the common goals. At the same time the required characteristics for a partnering project should be discussed. To establish the achieved characteristics for a key person during workshops and ensure the key person's loyalty to these characteristics, several measures can be applied. The idea with the achieved characteristics and capabilities should be repeated in intervals during the performance of the project. This helps to the continuity and improvement of the announcement of the achieved characteristics and capabilities. In this way, at least, organisations will be responsive about required characteristics and how their key persons' capabilities and attitudes affect relationships between actors. It also is of great help if there is a responsible person to manage eventual problems in the relationship between key persons or actors and measure the functionality of the applied method. Consequently these communications may help to develop cooperation attitudes and get better insight about collaborative arrangements.

7 References

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