

Trust in project relationships—inside the black box

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Abstract

Using the general theory of trust in inter-organisational relations, this paper discusses factors that influence development of trust and co-operation in client–contractor relationships in construction projects. Formal contractual rules are found to bring about and legitimise behaviours and strategies at odds with common-sense perceptions as to how trustworthy and co-operative exchange partners should act. Contractual incentives and close monitoring of contractor performance may induce opportunism and start vicious circles, and it is argued that a higher level of trust would improve project performance. Partnering practices are found to have considerable potential in influencing the antecedents of trust and creative teamwork.

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1. Introduction

Inter-organisational relationships in construction projects are often perceived as both adversarial and inefficient, and in many countries, a number of different partnering arrangements have become common in recent years. A core concept in the literature on partnering, as well as on co-operation in general, is trust. In the US, a CII survey of partnering projects found that project participants saw trust as a critical success factor in partnering projects [1,2], and an influential British partnering guide was entitled ‘Trusting the Team’ [3]. Trust and co-operation in inter-organisational relations have also attracted considerable interest in general management research since the late 1980s. However, as Lazar [4] and Bresnen and Marshall [5] have noted, surprisingly little research has explicitly related the general literature on trust to the specific context of construction projects.

One stream of research has focused on evaluating the benefits of partnering compared to traditional project management models. Several studies [6–8] have shown that partnering projects on the average are more successful than traditional ones. However, other authors have stressed that not all partnering projects do well

[5,9,10], and that there are no ‘quick fixes’ or methods that guarantee success. Thus, for inexperienced partnering candidates, the risk of ending up in quite traditional roles and relationships still seems to be substantial. These problems suggest that the mechanisms involved in establishing and maintaining trust and co-operative relations in construction projects are complex and that intuitively appealing strategies may have hidden drawbacks. To gain a better understanding of the effects of various project management measures, deeper analysis of what goes on inside the ‘black box’ of project relations is needed. Case studies of partnering projects often provide useful insights, but a theory may be helpful in order to discern the general factors that shape project relationships.

This paper takes as its point of departure theories concerning trust formation in business relations, using this theoretical literature to analyse the specific situation of one-off construction projects. Thus, the focus is on project partnering rather than strategic partnering. The paper is theoretical, but with an empirical background. The author has taken part in several studies of inter-organisational relations in Swedish construction. Most important are two deep, longitudinal case studies of client–contractor interaction in traditional projects [11,12], three interview surveys assessing client attitudes towards more co-operative contractual arrangements [13–15], and a study of four partnering projects [16].

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Consequently, the analysis is inspired by the Swedish situation.

Swedish contractual arrangements have much in common with those in the UK and the US, but an important difference is that contractual disputes are seldom resolved by any formal mechanism—by neither courts nor any kind of alternative dispute resolution mechanism [17]. Instead, the parties handle most conflicts themselves, often at a low organisational level and without the involvement of lawyers. Another difference is that architects and engineers are in a weaker position in Sweden than in other countries, being consultants without precise professional responsibilities [18]. The profession of quantity surveyors does not exist at all.

Purely traditional contractual arrangements, where the client specifies the design in detail and the contractor is only responsible for construction, are becoming less common in Sweden and are often replaced by a form of design-build arrangement with detailed specifications. Still, the traditional roles and working climate largely prevail. The industry is perceived as comparatively inefficient, and poor communication and conflict are seen as major causes of this. Interest in partnering arrangements, however, has been less pronounced in Sweden than in either Anglo-Saxon countries or other Nordic countries. Many clients are reluctant to open up to closer co-operation with contractors or to invest in team building and other partnering activities.

This paper discusses three questions: (a) Why are many clients still inclined to choose traditional contractual arrangements? (b) Why is it so difficult to establish and maintain a co-operative climate within such traditional project relations? and (c) How do partnering processes influence the conditions necessary for trust and co-operation to develop in client–contractor relations? The paper is organised as follows: first, general theories of trust are briefly outlined. Three aspects will be considered: definitions, bases and types of trust; behaviour that inspires relational trust, and the complex relation between trust and control. Then, the theory is applied to analyse client–contractor relations in construction projects. The final section of the paper discusses the role of partnering practices in this context.

2. Trust: definition and role

Trust is an ambiguous and complex phenomenon and, depending on their discipline and the problems they have been studying, researchers have concentrated on diverse aspects of trust and processes of trust development. In a recent effort to bring together the elements most frequently cited in works from various theoretical perspectives, Rousseau et al. formulated the following definition ([19], p. 395):

Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another.

Thus, trust is regarded as a psychological state, not a behaviour, and it is not equivalent to co-operation. Co-operation does not necessarily require trust; it may also be induced by coercion. However, trust is considered vital to bringing about farther-reaching co-operative processes (see [20–22]). If trust is present, people can spontaneously engage in constructive interaction without pondering what hidden motives exchange partners might have, who is formally responsible for problems, or the risks of disclosing information.

Trust also has its costs—direct costs for building trust, potential costs for breach of trust and costs of inefficiency related to excessive trust [22–24]. Wicks et al. [22] argue that there is an optimal level of trust in each situation, and that the more interdependency there is between exchange partners, the more trust is required so as to achieve efficiency and not miss opportunities for improvement.

3. Bases and types of trust

When researchers examine what people mean by trust and attempt to provide comprehensive descriptions of trust production, trust tends to dissolve into several phenomena, each having different bases and production processes. The trust literature review cited above [19] identified the following three basic forms:

- *Calculus-based trust* describes a rational choice perspective, where trust emerges when the trustor (the trusting party) perceives that the trustee (the trusted party) intends to perform an action that is beneficial to the trustor. In this perspective, individuals are regarded as motivated primarily by economic self-interest, and calculus-based trust is often based on the existence of economic incentives for co-operation or contractual sanctions for breach of trust. References, certificates and diplomas and other tangible information that communicate what performance and competence to expect from a potential exchange partner may also influence calculus-based trust.
- *Relational trust* arises between individuals who repeatedly interact over time. Through this relationship, the involved parties obtain direct, personal experience and information that forms the basis of trust, and emotions and personal attachments influence the relationship. Indeed, the frequent use of concepts such as ‘vulner-

ability' and 'betrayal' in relation to trust indicates that strong feelings are involved and that there are psychological and social risks apart from the financial ones.

- *Institution-based trust* refers to the role of institutions in shaping the conditions necessary for trust to arise. Important institutions in this regard are legal systems and societal norms pertaining to conflict management and co-operation, as well as systems regulating education and professional practice. Institutions in the form of cultural rules influence our preconceptions of the trustworthiness of various categories of people and organisations. Consequently, the propensity to trust differs between societies [25].

Obviously, the boundaries between the above forms are not clear-cut, and the intention here is mainly to illustrate the various mechanisms and sources of information involved. Trust theory emphasises that trust is not only tied to persons but also to circumstances. We trust a colleague or exchange partner in some situations but not in others, and decisions on whether or not to trust are continuously revised in light of new information [26].

People start a new relationship with a certain level of trust, either high or low depending on institutional factors and perceived incentives for co-operation. However, close co-operation is unlikely to take place or persist if relational trust does not develop between individuals who interact directly and intensely over a longer period of time. What kind of behaviour and attitudes are likely to inspire trust in an exchange partner? Also based on a review of trust literature, Mayer et al. [27] suggested that, apart from the trustor's propensity to trust, the most important antecedents of interpersonal trust could be grouped into three categories: the trustee's perceived *ability*, *benevolence* and *integrity*. *Ability* refers to skills, competencies and characteristics relevant to the specific situation, while *benevolence* is the extent to which a trustee is believed to want to do good to the trustor. This aspect encompasses factors such as loyalty, receptivity and caring, and suggests that the trustee has some specific attachment to the trustor, aside from an egocentric profit motive. *Integrity*, finally, involves a perception that the trustee adheres to a set of principles that the trustor finds acceptable. Such principles include consistency, fairness, reliability, openness and a general value congruence. All three qualities—ability, benevolence and integrity—are considered to be required for trust to arise.

Fairness is often considered fundamental to trust, and Ring and Van de Ven [28] maintain that co-operation is impossible if the parties do not consider their outcome as equitable in relation to that of their exchange partners. Perceptions of equity, however, are also strongly

influenced by the perceived fairness of decision processes as well as by sensitivity and respectfulness in personal relations, especially when outcomes are not transparent [29].

4. Trust, reciprocity and control

One aspect that further complicates our understanding of how trust develops is that different bases of trust do not seem to be complementary. From a rational, calculus-based perspective, detailed contractual specifications, monitoring of performance and severe sanctions for non-conformance should increase the trustee's motivation to co-operate and, thus, facilitate the development of trust. On the other hand, there is a preference for reciprocity in human interaction. Actions demonstrating trust—as well as distrust—tend to induce behaviours that are similar to or anticipated by the earlier action. Close monitoring, for example, communicates to a contract partner or an employee that he or she is not trusted and that opportunistic behaviour is expected. Similarly, economic rewards for co-operation hint that the target party will not take any action that is not motivated by self-interest. These measures, introduced with the intention to increase calculus-based trust, may be interpreted by the trustee as indications of distrust. Thereby, opportunistic strategies such as shirking and work-to-rule behaviour can be both induced and legitimised [24,30].

In addition, extensive organisational control systems may affect the trustor's perception of the trustee. If co-operative actions of an exchange partner are interpreted as responses to control rather than as evidence of intrinsic trustworthiness, the development of relational trust is hampered [27]. Also, studies of individuals responsible for monitoring the performance of other people have shown that once suspicion has been raised about another person's motives or competence, a supervisor tends to apply a more active and mindful mode of thinking, focusing on detecting signs of opportunism and bad performance [31]. Thus, it is likely that distrust will be vindicated, while co-operative behaviour will not be recognised. This state of mind further hinders a suspicious person from engaging fully in the kind of spontaneous interaction and information sharing that is considered a main benefit of trust-based relations [21]. Thus, several psychological mechanisms, affecting both parties in an exchange, contribute to a tendency that negative expectations become self-fulfilling prophecies [22,32].

However, the rule of reciprocity also works the other way around. Shown trust communicates to a partner that co-operation is anticipated and tends to be reciprocated with a behaviour that validates trust. That the trustor assumes such an initial risk thus allows the

trustee to demonstrate his or her trustworthiness [33], starting a positive, trust-enhancing process [34]. Consequently, many organisational researchers have argued that efficient strategies are characterised by a bias to trust (see e.g. [22]).

5. Trust in construction project relations

In construction, projects as well as the constellation of participants are unique. In the traditional model, the client appoints consultants to specify the building design in detail and contractors are then invited to tender. Lump-sum contracts are common and it is normal to appoint the lowest bidder. Still, many aspects of the building design cannot be specified in objectively verifiable terms, and work may be hidden and impossible to inspect after the completion of the building. To avoid that contractors exploit these openings opportunistically, clients employ their own engineers to oversee and inspect site work on an ongoing basis.

Another factor shaping the terms of exchange is that changes are frequently made in contract documents during the construction phase. Drawings and specifications always contain errors and omissions that need to be corrected, and changes in user needs or market demand often modify client preferences. Weather and soil conditions and failures in the supply of resources may also alter priorities. Thus, important aspects of construction contracts concern how changes are handled. Swedish standard contractual agreements stipulate that the contractor already appointed has the right to carry out the ‘extra’ work that follows from specification errors or changes. The pricing of this work is cost-based and not subject to competition. To improve their outcome, the contractor may therefore scrutinise the contractual documents for errors and ambiguities and exploit their monopolist position by excessive pricing. Consequently, clients are generally suspicious of contractor claims as well as of suggestions for improvements coming from contractors.

All these uncertainties make many clients feel vulnerable in relation to contractors and they then concentrate on defending their position should things go wrong rather than on establishing more proactive co-operative relations within the project organisation. The following section further discusses reasons why clients choose control-based strategies and why client–contractor relations easily deteriorate after problems appear.

5.1. Rational analysis points at traditional contracts

A framework that has gained much interest in construction management research is transaction cost analysis, TCA [35]. Transaction costs are costs for specifying, monitoring and enforcing contracts and,

according to TCA, the greater the transaction uncertainty and uniqueness and the lower the transaction frequency, the higher the transaction costs. The detailed specifications, close monitoring and frequent negotiations of contractual changes in traditional construction contracts are examples of transaction costs. Eccles [36], Reve and Levitt [37], Stinchcombe [38], Winch [39] and Bang [40] have applied transaction cost approaches to a construction context, and a general conclusion is that the high uncertainty and unique relations lead to high transaction cost for preventing contractor opportunism. TCA is a rational theory where economic self-interest is seen as the main human motivator, and in a TCA perspective, the only way of economising on transaction costs in construction would be to increase the contractor’s economic incentives to co-operate. This can be done by lengthening relations, sharing risks in alliance agreements, or increasing the importance of reputation and co-operative skills in relation to price in contractor procurement.

However, many scholars have argued that TCA is too pessimistic in assessing the potential for co-operation [32]. For example, it is known that people generally tend to overestimate the influence of extrinsic, economic incentives on other people’s behaviour, while underestimating the role of intrinsic motivation based on rewards such as social recognition and meaningful work [41,42]. Thus, an optimal level of trust should often be higher than TCA predicts, not least when there is strong interdependency between exchange partners [22].

The calculus-based reasoning characteristic of TCA has much in common with the arguments Swedish clients put forward when they explain their low confidence in contractors and preference for contractual arrangements with detailed specifications. For many clients, more open contracts and closer co-operation with contractors are associated with risks for opportunism more than with opportunities for improvements [13–15]. Also, it is difficult to justify spending money on measures to build trust and enhance co-operation when the costs of formal conflict resolution are low. Thus, the predominance of a rational perspective, emphasising economic self-interest as the driver for co-operation, may at least partly explain the preference for traditional relations and the limited interest in formal partnering in Swedish construction.

5.2. Contractual rules and monitoring counteract trust

A related question concerns the possibilities of developing and maintaining trust within a traditional contract where the client retains control of the detailed design of the building. Construction projects generally last for at least a year, and as interaction between client and contractor staff is often quite close, there should be a potential for relational trust to arise also within a sin-

gle project. To assess this potential, we may consider to what extent the individuals interacting in a client–contractor relationship are likely to act so as to inspire trust; i.e., will their behaviour be characterised by benevolence and integrity [27]?

Major sources of conflict in construction are contractors' claims for additional payments for work resulting from changes, errors and omissions in the contract documents. Contractors are considered to benefit financially from claims, and many contractors develop a critical stance towards the contractual documents. This negative attitude indirectly includes the client and the consultants, who are responsible for preparing the drawings and specifications. In some cases, contractors may even be seen as taking advantage of the client's mistakes, which is far from benevolent. A related aspect that may damage trust, also mentioned in client interviews, is that procurement practices encourage contractors not to disclose problems they find in the tendering documents while preparing their bid [13–15]. Instead, they may anticipate profitable change orders and reduce the tender to be more competitive. After the contract is signed, the contractor is entitled to claim both for the work and for disruptions and re-planning of construction work. In sum, the incentive system implicit in the contractual rules clearly disagrees with the requirements for benevolence as well as openness mentioned in trust theory. Accordingly, clients often complain that contractors need to show more tolerance. Interview responses suggest that it is difficult also for professional clients, who know the contractual rules and roles well, not to perceive contractors who adhere closely to their formal rights as disloyal and untrustworthy [14]. Obviously, it is dangerous for contractors to rely on construction law for behavioural guidance if they wish to inspire trust.

Clients as well tend to develop strategies and attitudes that are detrimental to trust. The client is entitled to issue change orders, to supervise contractor performance and to prescribe routines. Also, competitive tendering implies that clients evaluate consultants and contractors, while clients themselves are seldom assessed [43]. This implicit hierarchical relationship [38] counteracts the development of a relationship based on reciprocity and mutual respect, and their supervisory position may cause clients to adopt overly suspicious attitudes towards contractors which then become self-fulfilling prophecies.

Hence, a closer look at client–contractor interaction suggests that a major problem with construction contracts and procurement practices is that these tend to produce behaviours and attitudes that contradict intuitive human understanding of what a co-operative relationship implies and how a trustworthy exchange partner should behave. Therefore, spontaneous colla-

borative interaction is hindered and project relations may deteriorate rapidly when problems arise.

5.3. *Inefficient trust relations*

Still, informal co-operative relationships between individuals are not uncommon in construction, even in traditional projects. In particular, the contractor's site manager and the client's site representative often interact closely to jointly handle problems that arise, and spontaneously establish a relationship that is characterised by interpersonal trust, shared values and informal understandings [37,44,45]. However, their focus is often on finding compromises and exchanging services rather than on actively searching for improvements and more innovative solutions. Also, as other project actors such as design consultants, property managers and users are not present, decisions made on site reflect the needs of production rather than the overall goals of the project. That higher level Swedish client managers are aware of these risks may contribute to their reluctance to increase the scope for collaboration with contractors.

5.4. *Discussion summary and conclusions*

In this section, three factors have been suggested that may conflict with the development of efficient trust-based relations in construction projects. These are:

- A propensity to over-emphasise the influence of economic incentives and deterrents on behaviour makes clients feel vulnerable in their relations with contractors. To gain better control of project outcomes, clients tend to use detailed contractual specifications and close monitoring of contractor performance.
- Such traditional contractual arrangements comprise formal rules and monitoring roles which counteract the spontaneous development of trust between the parties. Instead, contractors are likely to be perceived as opportunistic and greedy, and clients tend to become distrustful and suspicious. As a consequence, vicious circles of distrust seem more likely to develop than positive spirals of increasing trust.
- Informal trust-based relations in construction projects often are characterised by conservative compromises and carry risks of sub-optimisation.

The first two factors suggest that the low level of trust in traditional construction projects is not optimal, and that more trust would lead to increased efficiency. Especially in projects with great uncertainty it may be wise to avoid detailed contractual specifications not only due to the transaction costs for renegotiation, but

also because a large portion of the time the parties interact will be spent on negotiations potentially threatening to the relationship. However, the third factor points to a risk that simply decreasing the level of specification and client control will not enhance overall project performance. The following section discusses what can be done to improve project relationships and ensure that these become creative and value adding. More specifically: What is the impact of partnering measures and tools on processes of trust building and co-operative interaction?

6. Partnering measures and trust

First, we briefly need to establish the main characteristics of partnering. According to the already mentioned guide provided by Reading Construction Forum [3], partnering is based on three factors: mutual objectives, an agreed method of problem resolution, and an active search for continuous measurable improvements. Partnering measures typically include workshops for structured team building, joint goal formulation, and formalised systems for conflict resolution and evaluation of goal achievement. Sometimes, formal alliances or other economic incentives are considered important in reinforcing common goals.

6.1. Economic incentives for co-operation

The trust research cited in this paper highlights both advantages and risks of economic rewards. First, economic incentives can be powerful motivators, especially on a company level. The prospect of high returns may push the companies involved to assign their best staff to the project and give it priority compared to other projects. Also, risk/reward schemes can facilitate the development of trust by encouraging open information sharing and perceptions of relative equity, particularly when the project economy is transparent to both parties ('open books').

Another aspect is that social and organisational norms are influential in shaping trust behaviour [46], and for individual decision makers, it is often more important that peers and superiors find the chosen strategy appropriate than that it produces optimal results [41]. In this perspective, economic incentives that promote co-operation between organisations clearly communicate that co-operation is legitimate and desired.

However, many Swedish clients tell of projects where incentive schemes have not worked as intended and where the parties have ended up in the same kinds of negotiations as in traditional projects, only about target cost adjustments instead [13–15]. As emphasised in trust theory, economic reward systems have hidden draw-

backs, as they may elicit work-to-rule behaviour rather than a more open-ended benevolent and co-operative state of mind (see also [47]). Also, if there is a strong focus on economic incentives, co-operation may be attributed to self-interest rather than to a benevolent attitude. In Swedish partnering projects, both companies and individuals are sometimes rewarded based on the client's appraisal of their performance and co-operation [11]). Such unilateral evaluations risk diminishing general perceptions of reciprocity and mutual respect. In sum, it should be important that not too much faith is put in economic incentives, and that these do not overshadow or replace means intended to stimulate intrinsic motivation and mutual trust. As discussed below, many partnering authors emphasise 'soft' goals and the process of joint goal setting rather than economic incentives for co-operation.

6.2. Formalised team building and joint goal formulation

Workshops are key partnering measures. Typically, an initial workshop is held in the beginning of a project to promote team building and agree on mutual objectives. During this workshop, processes of goal formulation and project planning are intertwined with team building processes. In particular, it is considered important that all participants express their own goals and the consequences these entail for the other parties [3,33,48]. This kind of communication provides a deeper understanding of the project's overall goals and of the difficulties and possibilities involved. In a trust perspective, this should mean that the integrity aspect is strengthened as common frames of reference are established. Also, the need for inspection routines and monitoring roles manifesting distrust is reduced.

Partnering literature often recommends that explicit objectives should be formulated not only for cost, time and quality aspects, but also for relations and work processes. Such 'soft' goals can be that participants will treat each other with respect, communicate promptly and openly, solve problems quickly, and in general try to help all project actors reach their goals. Hence, establishing relational goals may reduce the negative influence of formal contractual rules on people's behaviour and instead reinforce benevolence aspects. This observation is also made by Stephenson, who notes that partnering can be seen as "a guidebook to etiquette in any enterprise, particularly where formal rules may not provide a guide to courtesy, common sense, empathy, and responsible action" ([48], p. 114).

Further effects of formalising team building through workshops are that trust may develop quicker than it otherwise would and, maybe more importantly, that a wider range of participants have the opportunity to build relational trust. For example, users and design

consultants can communicate directly with the contractor staff.

6.3. *Systems for problem solving and continuous improvement*

Other central partnering elements are systems for achieving continuous improvement and conflict resolution. These systems all formalise, plan and structure the relations. Regular follow-up workshops, evaluations and cross-discipline teamwork are important elements. In relation to the discussion in this paper, at least three effects of such systems could be highlighted. First, if relations and not only overall project goals are regularly appraised, problems and conflicts can be detected early and relations are not allowed to deteriorate beyond rescue. Second, formal systems can make sure that all participants engage in evaluating and maintaining the relation. This should increase perceptions of equity and reciprocity and, thereby, facilitate trust. Third, planning project interaction can serve to ensure that trust relations are used to enable constructive teamwork that supports overall goals.

7. Conclusions

Using theories describing processes of trust development, this paper has analysed sources of conflicts in construction project relationships. Clients often feel vulnerable in relation to contractors, and traditional contractual arrangements are then perceived as less risky than more collaborative alternatives. However, detailed contractual specifications and close monitoring of contractor performance signal a climate of distrust that tends to induce opportunism and hinder co-operative interaction. This indicates that a higher level of trust should enhance project performance, especially if the relationship is made use of to improve cross-disciplinary teamwork.

As many partnering projects have been successful in bringing about constructive co-operation, different partnering practices were examined to analyse their influence on trust development and co-operation in construction projects. Team building processes and project-wide communication in the early phases of a project were found to influence the participants' behaviour and general project knowledge so that trust-based collaboration is more likely to arise and persist. Also, systems to monitor relations and manage conflicts may prevent that problems and misunderstandings initiate distrust. However, as processes of trust development are dynamic, complex and sometimes even contradictory, the effects of partnering can vary substantially. Trust theory improves our understanding of the broad range of factors that affect various dimensions of trust and

helps us to appreciate the function and purpose of different partnering practices. We can then design and apply them consciously, and also avoid processes and systems that may be detrimental to trust.

Partnering research discusses whether co-operative relations can be intentionally 'engineered' in single projects, or if success requires a process of cultural change that can only develop over a longer period of time [5,9,49]. The discussion in this paper emphasises that the development of trust and a propensity to collaborate may be strongly influenced by intuitive and emotional reactions and sensitive to behavioural aspects such as shown respect and concern. This supports the empirical observations that also single project partnering can be successful. The Swedish situation, where the level of formal conflict is low but the process is still perceived as fairly inefficient, points at the role of 'engineering', or explicit planning, in enhancing creativity. The focus on improving inter-organisational teamwork suggests that partnering could bring great benefits also to Swedish construction.

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