# **EXPERIENCES OF TRUST IN CONSTRUCTION PROJECT MANAGEMENT: THE INFLUENCE OF PROCUREMENT MECHANISMS**

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Trust is a key element in the project manager's toolkit, and fostering trust in a project team is often critical to the project's outcome. Literature suggests that relational procurement mechanisms underpinned by "pain-share/gain-share" principles ought to increase levels of trust between project participants as compared to traditionally procured projects, yet little related research exists. Using "trust as a phenomenon" as the philosophical point of departure the intricacies of trust formation and maintenance are explored in these contexts. A framework of trust-related personal attributes, attitudes and behaviours is used to analyse a series of 15 detailed interviews with multiple representatives from construction and client organisations. Preliminary findings identify: participants' desire for trust in projects; widespread absence of strategies for trust building, maintenance and repair; adversarial dispute resolution as the default; poor project team member selection. Widely valued traits in trading partners include open and honest communication; technical competence; fairness; integrity; honesty, and; benevolence. Where disputation has occurred trust repair skills appear to be rare. Positive pre-existing relationships are reported as the antidote for many project ills. Differences in the perception of trust variables associated with procurement context are identified: superficially surprising and counter-intuitive, they reveal pan-procurement principles for trust-based project success.

Keywords: relational procurement, transactional procurement, trust, trust repair.

## **INTRODUCTION**

Trust is considered to be a fundamental requirement for human interaction (Romahn and Hartman 1999), and there is widespread agreement on the value of trust in human behaviour (Bigley and Pearce 1998). When contextualised in a construction project setting issues of risk, vulnerability, and trustors' expectations (or not) of fair treatment by trustees are central to the application of the concept.

In this context trust is primarily a psychological state rather than a behaviour. Moreover it is different to a cooperative relationship, which can exist without the presence of trust: it follows that compliance as a behaviour does not imply the existence of trust (Brewer and Strahorn 2012).

This research illuminates the formation and maintenance of trust through the lived experiences of multiple practitioners across various projects procured using both transactional and relational methods.

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# LITERATURE REVIEW

## **Transactional based procurement**

Transactional based procurement has traditionally been utilised within the construction industry. Under this procurement method, traditional construction contracts aim to definitively allocate risk to stakeholders despite it being fundamentally impossible to foresee or quantify all potential risks and uncertainties (Macneil 1978). It is apparent that the construction industry operates within a challenging environment; consequently the capacity to contend with change appropriately manage and allocate risk is considered critical (Sakal 2005). In this regard transactional based frameworks are somewhat limited, particularly when dealing with high risk and complex construction projects (Campbell 2004). Effective risk management under transactional based procurement is therefore compromised.

The shortcomings of a transactional-based contract have been widely acknowledged. The respective parties are contractually encouraged to protect their own individual priorities, which often result in disputes, as well as outcomes inconsistent with the overall interests of a project (Chan *et al.* 2006). Adversarial relationships frequently develop (Chen and Chen 2007), and can be ascribed to the competitive fixed price context (Pesamaa, Eriksson, and Hair 2009). Responsible tendering can also be discouraged as a result of onerous contract conditions. To this end, there exists the potential for opportunistic parties to enter agreements with conniving intentions, particularly in relation to tender price, expected variations (Rahman and Kumaraswamy 2004), and exploitation of errors or omissions in the contract documentation (Mosey 2003).

In light of these shortcomings project outcomes under transactional-based procurement have been found to be negatively impacted, including: conflict and distrust (Sakal 2005), disputes (Pesamaa, Eriksson, and Hair 2009), reduced productivity (Ng *et al.* 2002), and cost overruns and project delays (Chan, Chan, and Ho 2003). A preference for litigation (Yiu and Cheung 2007) and disagreement rather than cooperation (Wood and McDermott 1999) are frequently the result.

The need for alternative procurement mechanisms has therefore been widely acknowledged by literature (Rahman and Kumaraswamy 2004). While the transactional-based approach aims to definitively identify uncertainties in a project, in doing so it fails to contractually acknowledge or facilitate the cooperative relationships which are vital to the success of a contractual arrangement in terms of responding to issues when they eventuate (McInnis 2003). The human element influencing the outcomes of a project procured under a traditional framework is therefore significant.

## **Relational contracting procurement**

Relational contracting (RC) was developed in response to the identified shortcomings of the conventional transactional based procurement approach, and the adversarial culture that was often common place within the construction industry (Goddard 1997). Rahman and Kumaraswamy (2004: 148) described RC as follows:

# "Relational contracting is based on recognition of mutual benefits and win-win scenarios through more cooperative relationships between the parties".

Essentially, and as applied within the construction industry, the principals of RC aim to encourage collaboration (Rahman and Kumaraswamy 2004), appropriately allocate

and manage risk (Jones 2000), and foster benevolent contractual relationships which negate the transactional barriers to team building (Macneil 1980). Through a recognition of mutual benefits, stakeholders within a relational contract move past a reliance on purely legal terms, and function instead dynamically within a contractual, economic and behavioural framework (Macaulay 1963). As complex construction projects inherently result in an ever evolving contractual landscape, the relationships between parties are critical, and RC provides the context within which said relationships can be developed and maintained in a manner typically difficult in traditional transaction based procurement (Rahman and Kumaraswamy 2004).

The concept of collaboration is particularly pertinent in terms of the fundamental principles of RC and the overarching desire to reduce conflicts (Rowlinson and Cheung 2005). In this regard the benefits of collaboration within the construction industry are widely recognised (Gajendran and Brewer 2012). Given the significance of collaboration within the RC context, the question of how to foster a collaborative environment is logically pertinent. To this end, precursor dimensions for collaboration identified by literature include mutual objectives and actions, individual competence, and distribution of authority. Communication and trust are also identified (Gajendran and Brewer 2012), and these dimensions are especially relevant to the scope of this research.

The ultimate benefits of RC have been extensively acknowledged (Jones 2000; Macneil 1980; Rahman and Kumaraswamy 2004) and with consideration to the fundamental principal of reducing conflict, the re-occurring themes pertaining to relationships, team work, collaboration, communication, culture, and risk management are considered particularly significant within the context of this research. Furthermore, the importance of trust between parties (Rahman, Kumaraswamy, and Ling 2007), trust and trust based relationships (Rahman and Kumaraswamy 2008), and mutual trust (Chan *et al.* 2006) are also significant.

It should be noted that there remains some criticism that literature professing the benefits of RC fails to adequately consider its limitations, nor the poor examples that have at times eventuated (Bresnen 2007). However, these criticisms have not attempted to contest the potential advantages. Similarly, when considering the definitive advantages of RC, the qualification is often given that they are conditional depending on application and context, and that there is never a universally applicable solution (Bresnen 2007).

Within the Australian construction industry, Alliancing is a form of RC that is becoming increasingly popular. An alliance arrangement is described as a long term strategy between client, contractor and supply chain (Rowlinson and Cheung 2004) whereby risks and rewards are shared, and common goals are established in the pursuit of a particular outcome or project (Peters, Walker, and Hampson 2001).

Factors considered pertinent for successful Alliancing align closely with RC fundamentals; trust, collaboration, open and honest communication, cooperation, relationships and relationship management, joint problem and conflict resolution, team selection, goal alignment, team work, a win-win philosophy, and total organisational buy in (Peters, Walker, and Hampson 2001; Rowlinson and Cheung 2004). The influence of trust and other dimensions of trust are widely acknowledged in this regard, and are categorised within the *"soft"* elements that are said to form one part of an alliance arrangement (Yeung, Chan, and Chan 2007). These *"soft"* elements are of particular significance within the context of this research.

The second part of an alliance arrangement concerns the "hard" contractual elements relating directly to legal positions (Yeung, Chan, and Chan 2007). So despite the collaborative approach that is fundamentally at the heart of any alliance and the identified "soft" elements, the rights and obligations of the contracting parties are nonetheless still spelt out in strictly legal terms. The hard contractual elements define the collective sharing of risk, through the pain-share, gain share agreement which adopts a best for project approach (Sakal 2005). A "no dispute" clause is also often included in which the contracting parties wave their rights to litigation (except in instances of wilful default), with this arrangement further fostering the fundamental themes of trust and goal alignment (Rowlinson et al. 2006). However, it should be noted that a no blame culture or contract cannot exist without a clear relational vision and a positive approach to relationship management (Rowlinson et al. 2006). This further highlights the importance of the softer elements in an Alliance arrangement. In this regard, the terms that define an alliance contract appear to exclude or certainly ignore the softer interpersonal aspects of relationships, of which trust – a response to risk exposure – is key.

## Trust

Trust is an essential requirement which makes initial human interaction possible (Romahn and Hartman 1999: 233), and there is a wide spread acknowledgement on the value of trust in human behaviour (Bigley and Pearce 1998). Within the context of the management discipline, literature has provided various characteristics of trust and its constructs which have general applicability to a project environment. In this regard, an applicable framework of trust themes can be considered along contextual, human and attribution variables, with factors of trust failure also significant (Brewer and Strahorn 2012; Strahorn, Thayaparan, and Brewer 2013).

With consideration to the risk management function of any procurement mechanism, the contextual variables of risk, vulnerability and uncertainty are significant in terms of trust and its influence. Risk is inexorably present in every project setting (Schwalbe 2004), and any attempt to prevail against issues in this regard are critically dependant on trust its dimensions. Trust facilitates an individual's positive motivation towards universal project objectives (Wong *et al.* 2007), and the benefits of trust cannot come to fruition without one party's willingness to accept some degree of risk (Romahn and Hartman 1999). Ultimately, trust helps to overcome risk and uncertainty.

As project outcomes are essentially reliant on people to get things done (Lechler 1998), it stands to reason that the human variables influencing any project are significant. In this regard, the ongoing interactions within stakeholder relationships are considered to be a key determinant of trust (Tomlinson and Mayer 2009). Consequently, attribution variables in which character traits are assigned amongst stakeholders are also a key determinant of stakeholder relationships and trust. To this end, dimensions of trustworthiness are notable (Good 1988), along with mutually related trust building mechanisms (Lander *et al.* 2004); reliable behaviour, communication (Karlsen, Graee, and Massaoud 2008), competence, benevolence, integrity, and honesty (McKnight and Chervany 1995).

## METHODOLOGY

With consideration to the identified relevance of trust in both transactional and relational procurement, and also the variables at play in the differing contexts each mechanism presents, the design of this research aims to consider theoretical trust

themes against the 'lived experience' of practitioners in both procurement environments.

In investigating the lived experiences of construction practitioners, the human, technical and socio-technical dimensions need to be considered.

The human dimension is logically significant in terms of trust and the dimensions of trust which are central to this research, while the technical dimension includes the respective legal frameworks which underpin the alternate procurement methods. The socio-technical dimension is essentially concerned with the interaction between the human and technical dimensions, and is influenced by the project context.

This research has therefore adopted a phenomenological investigation of both trustors and trustees within a construction industry context. The exploratory nature of the topic and phenomenological stance adopted dictates the suitability of a qualitative and descriptive investigation. This aims to accurately conceptualise and explain meaningful trust-related themes exposed through lived experiences of practitioners (Wertz 2006). This research has investigated the consciousness of project stakeholders and the observable phenomena regarding the influence of trust; specifically in terms of what and how it is experienced (Moustakas 1994). Ultimately, this research is intended to illuminate the ontology of trust and its influence within a construction management framework.

When considering implementing a phenomenological research approach, a number of methodological considerations must be taken into account: firstly, prior knowledge must be bracketed and judgement suspended, until confirmed by findings and founded on an objective basis respectively; secondly, consciousness is always directed towards an object, but reality is inevitably linked to an individual's consciousness of that object, therefore; lastly, reality of any object is only perceived within the context of the individual's experience (Stewart and Mickunas 1990).

Informed by the foregoing, the procedural approach proposed by Moustakas (1994) for phenomenological research has been adopted. An investigation by way of indepth interviews with multiple stakeholders within transactional and relational procurement contexts has been undertaken. Fifteen individual stakeholders from different sectors were interviewed, including five each of clients, project managers and contractors. Participant selection and recruitment was dictated by pragmatism: they were working on major projects within the Hunter region of NSW; each was experienced (5+ years of responsibility in their role); all had experience of both traditional and relational contracting.

Interviewees were asked about their background and the current context within which they were involved. Their familiarity with, and experiences of projects let under traditional and relational procurement mechanisms were then probed. Specifically the influence of trust (e.g. Bigley and Pearce 1998), trust failure, and its subsequent repair were explored in relation to: pre-existing relationships (Tomlinson and Mayer 2009); project initiation; supply chain relationships (Lander *et al.* 2004), project success/outcomes (Karlsen, Graee, and Massaoud 2008), and; strategic relationships (Tomlinson and Mayer 2009).

Analysis of the interview transcripts was then undertaken using an inductive thematic process. This allowed identification, abstraction and synthesis of context-specific trust-related concepts.

## **RESULTS AND IMPLICATIONS**

## Trust

In both procurement contexts, the interviewees demonstrated an understanding of trust related issues within their lived experiences. There was wide spread acknowledgement of many dimensions of trust and the subsequent influence on project outcomes, relationships and relationship interactions. "You have to be able to develop trust" (Int. # 2- Client), in order to build stakeholder relationships, and relationships are dependent on "the individuals involved and the trust that you have between them" (Int. # 5- Contractor). "Trust is obviously something that you need to develop and that's where interpersonal relationships become very important" (Int. # 7- Client). Both good and bad relationships were evident, and themes of trust were central in this regard. "When people cooperate, it generates a whole series of unrecorded benefits" (Int. # 10- Project Manager). "It is all about trust" (Int. # 13- Project Manager). Relationships founded on past experiences were also considered to be significant in terms of stakeholder interactions and project outcomes. "There is a relationship there. It plays a big part" (Int. # 8- Contractor).

Despite an understanding that strong relationships provided a significant disincentive for exploitive behaviour and help "overcome the pressures to be adversarial" (Int. # 13- Project Manager), there existed minimal evidence of any proactive strategies for developing and maintaining trust as part of standard project management practice. Furthermore, irrespective of the procurement mechanism, the default position in some instances remained founded on an adversarial approach to dispute resolution, despite an appreciation that alternative trust based approaches would likely result in improved project outcomes. Consequently, improved outcomes could be realised through dedicated strategies for trust building, and embracing a trust based response to dealing with negative events.

## Trust repair

In terms of trust repair, strong relationships were widely considered valuable when responding to negative events however there was little evidence of trust repair techniques, nor of the intricacies of trust repair itself. An understanding of how the trust repair process differs from initial trust development (Kim *et al.* 2004) would therefore be useful. The interviewees were also silent regarding the variable influences on trustworthiness of the apparent grounds for the negative outcome, in terms of the extent to which the cause is deemed internal, controllable or stable to the trustee (Tomlinson and Mayer 2009). A greater level of understanding in this regard would also be beneficial in both procurement environments.

## **Risk and trust**

The link between risk allocation and trust in stakeholder relationships was also significant in both procurement contexts, with divergent outcomes evident in this regard. To this end, the outcomes were not definitively driven by the underlying principles relating to the chosen procurement mechanism, but rather by the extent to which risk was identified and allocated amongst the project stakeholders at the commencement of the project. In both procurement contexts, poor risk apportionment was shown to lead to *"a level of resentment"* (Int. # 9- Project Manager), and an environment which was *"adversarial"* (Int. # 4- Client). Similarly, irrespective of the procurement mechanism, where a balanced approach to risk apportionment was adopted, positive outcomes were achieved. *"As long as we have identified the risk and* 

we have made allowances for it" we can avoid "adversarial", and "contractual head bashing" (Int. # 4- Client). It is therefore apparent that a greater understanding of the risk/trust nexus and the apportionment of risk in any procurement mechanism would be beneficial. To this end, the overall interests of the project need to be the driver for risk apportionment, as when risk is allocated to an individual with a limited ability to adequately manage it, adversarial interactions and reduced levels of trust can be the result.

The underlying principles of RC are also significant in terms of the risk/trust nexus. Through encouraging themes of collaboration, benevolence, communication, competence, and ultimately trust, these principals aim to facilitate the development and maintenance of strong relationships. However, while these principals do in deed nurture trusting relationships, the allocation of risk within relational procurement actually diminishes the need for trust. Trust cannot transpire without one party accepting a degree of risk, and given that the parties in RC are sharing risk collectively rather than accepting it individually, the requirement to embrace trust and its dimensions is to some degree negated. The full benefits of trust and trusting relationships may therefore be inadvertently hindered within a RC environment, despite fundamental principles to the contrary. The design and implementation of future RC mechanisms would subsequently benefit from a deeper level of understanding in this regard.

#### **Individual personalities**

Regardless of the procurement context, the individual stakeholders themselves were widely considered to be the most significant influence on project outcomes, with issues of trust fundamental in this regard. "*The attitude of people is key*" (Int. # 7-Client), and "*in any contract, it comes down to having the right people for the task more than anything*" (Int. # 12- Project Manager). "*It's all about people, individual people, and the relationships they build*" (Int. # 10- Project Manager), and "*things succeed or fail on the personalities involved*" (Int. # 6- Contractor). Hence a greater focus on stakeholder selection during the formation stages of any project would be valuable.

While the respective procurement mechanism was shown to drive behaviour to some degree, the personal traits of the individuals involved, and how they choose to behave and interact within the constructs of the contract were considered most critical. "People are always key, but the different styles of contract procurement can place certain pressures on the team that can put a lot more tension in relationships" (Int. # 7- Client). The human element influencing any project environment was also acknowledged. "If there is not a human connection, it will not work anyway" (Int. # 10- Project Manager). Ultimately, the respective procurement mechanism was considered to be secondary to the influence of individual personalities. "The formal contract does not build trust. The building of trust and relationships, etc. etc. It is all the informal process" (Int. # 13- Project Manager). To this end, personal characteristics of competence, honesty, benevolence and trustworthiness, were highlighted, along with willingness for open communication and a cooperative approach to resolving issues when they arise. While dimensions of trust within the context of this human element were recognised, a greater understanding regarding the activation of trust (Wong et al. 2007), excessive control and distrust (Pinto, Slevin, and English 2008), and the reduced need for control through trust (Aubert and Kelsey

2000), would likely prove beneficial irrespective of the chosen procurement mechanism.

# CONCLUSIONS

Stakeholder relationships operating within any construction environment are governed to a large degree by the chosen procurement mechanism. To this end, the transactional based approach of traditional procurement can be seemingly at odds with the facilitation of trust-based interactions. Similarly, the fundamental principles of relational contracting could be considered more conducive to, and reliant upon developing and maintaining high levels of trust. Hence varying and divergent influences of trust and its constructs would reasonably be expected within the management of projects operating under different contractual arrangements. However, this research has revealed that the chosen procurement mechanism is secondary to other more significant and influential factors.

The allocation of risk is instrumental in terms of driving stakeholder relationships and project outcomes, irrespective of the procurement mechanism. The respective risks on any project should therefore be a primary consideration in terms of the type of procurement mechanism, as well as contractual design. The fundamental principles of the selected procurement mechanism should also acknowledge the intricacies of the risk/trust nexus, and aim to find common ground between appropriate risk allocation and the development of trusting stakeholder relationships.

Given the reported importance of personal attitudes and subsequent trust-related behaviours to the subsequent conduct of project activities, it is perhaps an anomaly that attention is focussed on procurement as the primary determinant of project outcomes. Whilst the formalisation and mandating of trusting beliefs and behaviours is clearly impossible, more attention could be given to understanding the nature of a formalised environment conducive to allowing such behaviours to flourish.

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