



## Engineering, Construction and Architectural Management

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Peter Davis, Peter Love,

### Article information:

To cite this document:

Peter Davis, Peter Love, (2011) "Alliance contracting: adding value through relationship development", Engineering, Construction and Architectural Management, Vol. 18 Issue: 5, pp.444-461, <https://doi.org/10.1108/09699981111165167>

Permanent link to this document:

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# Alliance contracting: adding value through relationship development

Peter Davis and Peter Love

*Department of Construction Management, Curtin University of Technology,  
Perth, Australia*

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Received 17 February 2010  
Revised 28 September 2010  
Accepted 19 October 2010

## Abstract

**Purpose** – Alliancing and partnering have been extensively used to stimulate collaborative relations between supply chain members as well as to address the need to improve the performance of projects. Recognising the need to build and sustain relationships in alliances, the paper aims to present a model that is developed and tested by industry practitioners who are regularly involved with alliance contracting. The developed model can be used to encourage a culture of reflective learning and mutual trust, beyond merely project-specific performance outcomes.

**Design/methodology/approach** – To examine the applicability of the conceptual model to alliance contracting in construction an exploratory approach was adopted. A total of 49 in-depth interviews were conducted over a six-month period with a variety of industry practitioners (clients, contractors, design consultants, construction lawyers, and alliance facilitators) who had extensive experience with working in alliance contracts. Interviews were used as the mechanism to examine the themes and constructs identified from the literature.

**Findings** – The relationship development process represents a major contributor to successful alliance contracting and can add considerable value throughout the supply chain. There is a recognisable structure to relationship development that is underpinned by specific themes that should be considered when managing the alliance relationship. Trust and commitment are explicit elements that should be continually maintained in an alliance contract, and can significantly contribute to joint learning from joint problem-solving activities. From the respondents' perspectives it appears that the entire process of relationship development hinged around individual relationships, trust and organizational development.

**Practical implications** – A three-phase model for building alliances is developed and can be used by practitioners to improve the performance of projects.

**Social implications** – It is suggested that the developed model can be used to promote a culture of reflective learning and mutual trust, beyond merely project-specific performance outcomes.

**Originality/value** – The research develops a model for relationship development and maintenance in construction projects so that sustainable relationships can be established. The proposed model includes three phases: assessment, commitment and endurance. Being able to manage each of these phases effectively is critical for successful project delivery and stimulating innovation.

**Keywords** Contracting out, Partnership, Strategic alliances, Supply chain management, Supplier relations

**Paper type** Research paper

## Introduction

The Australian construction industry has been going through an intense period of introspection since the publication of various reports identifying the industry's poor performance and productivity (e.g. NPWC and NBCC, 1990; Gyles, 1991; CIDA, 1993; APCC, 1998; DIST, 1998, 1999; Cole, 2002). Extensive criticisms of the construction industry have followed from these initiatives together with the general consensus that reforms, and in particular improvements in quality, productivity and performance, and



the way in which projects are delivered are required. In particular, it has been acknowledged that an integrated and seamless supply chain is required in construction to deliver “value money” and encourage innovation (Cox and Ireland, 2002). At the heart of an integrated supply chain is the formation of collaborative relationships (Ellram, 1990; Araujo *et al.*, 1999).

Alliancing and partnering have been extensively used to stimulate collaborative relations between supply chain members as well as address the need to improve the performance of projects (e.g. Abudayyeh, 1994; Larson, 1995; Black *et al.*, 2000; Holt *et al.*, 2000; Li *et al.*, 2001; Anvuur and Kumaraswamy, 2007; Wong *et al.*, 2008). While parties that have formed an alliance or entered into a partnering agreement have every intention to operate in a collaborative manner there is always a danger that a party may attempt to exploit the other, especially if used as an “add on” to pre-existing construction contract forms where the fundamental transactional nature of the contract remains the same (Howell *et al.*, 1996; Uher, 1999; Love *et al.*, 2002).

When entering into an alliance it is essential that the mindsets of parties break away from the traditional “adversarial” approach inherent within construction and attempt to work cooperatively (focussing on building and perpetuating relationships) to enhance communication and create value throughout the supply chain (Holt *et al.*, 2000). Alliancing is now recognised as a formal contracting arrangement. Two types tend to dominate the Australian marketplace: cost competitive and pure alliances (Love *et al.*, 2010). In particular, alliance relationship development process is pivotal to value creation as it enables trust to be nurtured, knowledge transfer, continual goal alignment, and network maintenance within the supply chain (Araujo *et al.*, 1999; Ariño *et al.*, 2005). There is, however, a propensity for parties to eschew developing and maintaining the “collaborative” nature of their alliance once it has been established by parties (Love *et al.*, 2010, 2011).

Since the subprime crisis and collapse of the capital markets, the viability of PPPs has increasingly come into question (Regan *et al.*, 2011). According to Regan *et al.* (2011) the funding methods previously used are not applicable in the prevailing economic climate and as a result, alternative procurement and finance arrangements for procuring infrastructure projects (including alliances) should be considered. Alliances have proven to be effective in delivering infrastructure projects in Australia (e.g. Jefferies *et al.*, 2000; Love *et al.*, 2010, 2011), as they engender collaboration and integration between client/owner organizations (e.g. state or authority) and non-owner participants (NOPs) (e.g. design consultant, construction contractor, supplier) (Love *et al.*, 2002). Essentially, the alliance procurement arrangement aims to share both risk and reward amongst the project team via the use of a risk reward model (Love *et al.*, 2011). A challenge for clients and NOPs is to maintain and sustain their relationship throughout a project’s life cycle (Ariño *et al.*, 2005; Love *et al.*, 2011). Recognising the need to build and sustain relationships in alliances, a model is developed from the normative literature and tested by industry practitioners who are regularly involved with alliance contracting. It is proffered that the developed model can be used to encourage a culture of reflective learning and mutual trust, beyond merely project-specific performance outcomes.

### Relationship development

Relationship development is an inherent feature of relationship marketing. A plethora of definitions of relationship marketing can be found in the normative literature. For

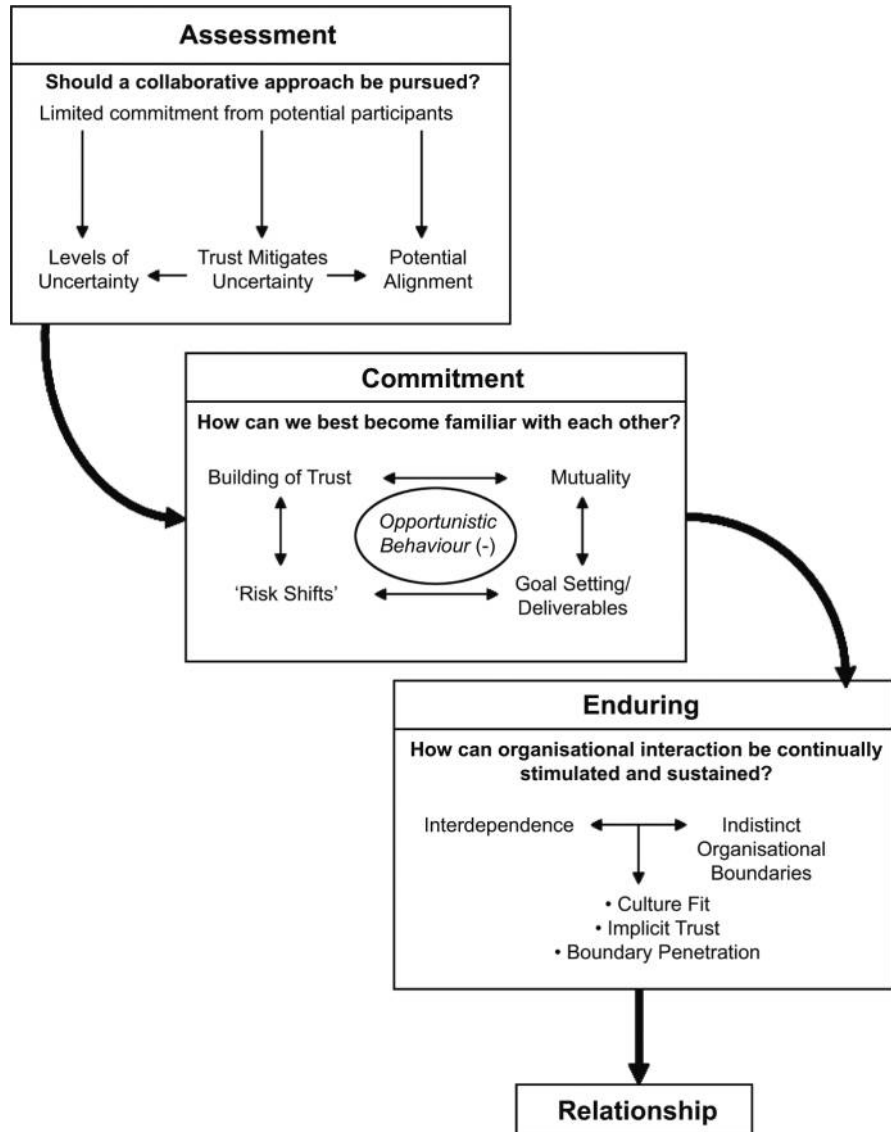
example, Berry (1983, p. 143, cited in Ferguson and Brown, 1991) defines relationship marketing as the “process of establishing and maintaining mutually beneficial long term relationships among organization and their customers, employees and other stakeholders” (p. 143). Grönroos (1996, p. 7) states that the underlying aim of relationship marketing is “to identify and establish, maintain, and enhance relationships with customers and other stakeholders, at a profit, so that the objectives of all parties involved are met; and this is done by mutual exchange and the fulfilment of promises”. Contrastingly, Morris *et al.* (1998, p. 239) bring the aspect of strategy in to play and suggest that relationship marketing is “a strategic orientation adopted by both the buyer and seller organizations, which represents a commitment to long term mutually beneficial collaboration”. While there is a lack of consensus on a definition for relationship marketing, concepts of trust building/maintenance, long-term commitment, and generation/ evaluation of mutual goals can be seen to be underlying themes. Moreover, these themes marry with those central to the alliance and partnering literature in construction (e.g. Anvuur and Kumaraswamy, 2007).

Relationship development, as a central component of exchange management, has been recognised as a series of iterative phases (Table I). Wilson (1995) identifies partner selection, purpose definition, boundary setting, value creation and relationship maintenance as stages when commitment, trust, cooperation and mutual goal development become either active or latent primary components. Active components require significant management time and energy, whilst latent components require limited time or attention (Wilson, 1995). Likewise, Pascale (1997) refers to five phases of relationship development appropriate for outsourcing services as internal alignment, partner selection, partner relationship alignment, project alignment and work process alignment. A phased continuum is offered by Thompson and Sanders (1998) encompassing the stages of cooperation, collaboration and coalescence. Donaldson *et al.* (2001) refer to initial contact, lock-in, institutionalisation, and dissolution as relationship development phases. Ford (1998) uses awareness, exploration, expansion and commitment as terms to describe business interdependencies. Conversely, Boddy *et al.* (2000) conceptualise relationship development in terms of emerge, evolve, grow and dissolve. Dwyer *et al.* (1987) define relationship development in marketing exchange relationships as an iterative process comprising several stages of awareness, exploration, expansion, commitment and dissolution.

In any exchange there are contractual issues that should be addressed such as discrete and relational transactions (Dwyer *et al.*, 2000). A discrete transaction is the foundation of a relationship whereby money is exchanged for a simple specified commodity. Discrete transactions entail limited communication and narrow content. However, prolonged relational exchange founded through dependence personal characteristics, benefit from deeper communication, cooperative planning and higher expectations of trustworthiness (Anvuur and Kumaraswamy, 2007; Wong *et al.*, 2008). Drawing on the work of several authors that have examined relationship development/maintenance (Table I), a conceptual model is proposed in Figure 1 (e.g. Ford *et al.*, 1985; Wilson, 1995; Araujo *et al.*, 1999; Thompson and Sanders, 1998; Dwyer *et al.*, 2000; Anvuur and Kumaraswamy, 2007). There exists a morass of research that has examined alliances since the calls of the Latham Report (1994) to ameliorate integration and engender trust in projects. However, there have only been a limited number of studies that have examined the relationship development process

Author	Sector	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Wilson (1995)	Business markets	Partner selection	Purpose definition	Boundary setting	Value creation	Relationship maintenance
Pascale (1997)	Outsourcing services	Internal alignment	Partner selection	Relationship alignment	Project alignment	Work process alignment
Thompson and Sanders (1998)	Construction industry	Cooperation	Collaboration	Coalescence		
Donaldson <i>et al.</i> (2001)	Strategic business perspective	Initial contact	Lock-in	Institutionalisation	Dissolution	
Ford (1998)	Business interdependencies	Awareness	Exploration	Expansion	Commitment	
Boddy <i>et al.</i> (2000)	Manufacturing supply chains	Emerge	Evolve	Grow	Dissolve	
Dwyer <i>et al.</i> (1987)	Marketing exchange	Awareness	Exploration	Expansion	Commitment	Dissolution

**Table I.**  
Foundation of relationship development/maintenance



**Figure 1.**  
A conceptual model for  
relationship development  
in construction

throughout a construction project's life-cycle (e.g. Thompson and Sanders, 1998; Anvuur and Kumaraswamy, 2007; Wong *et al.*, 2008).

The relationship development/maintenance process typically encompasses a series of phases as noted in Table I. The terminology and number of phases used by authors varies. In fact, the models that have proposed in Figure 1 are not grounded in practice. Essentially, however, they can be categorised into three key phases, as denoted in Figure 1: assessment, commitment and enduring. Each of these phases is discussed hereinafter.

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*Assessment phase*

Choosing the right partner and strategically positioning an organization in an alliance is a challenging mission for all parties concerned (Donaldson and O'Toole, 2001; Love *et al.*, 2002). More often than not it is clients who initiate the use of alliance contract in construction and project team members cast themselves into a project without adequately surveying the implications of the relationships they have entered into. Initial questions that should be considered are: should a collaborative approach be pursued? Which relationship warrants development? And how should an organization's structure be developed to manage the collaborative relationship (Donaldson and O'Toole, 2001)? Boddy *et al.* (2000) suggest that organizations need to be cognisant of three factors when embarking on a collaborative strategy:

- (1) The intra-organizational context and its affect on initiating behaviour in a relationship – for example, historical actions of staff hindering collaborative relations.
- (2) Development of intra-organizational frameworks that encourage cooperative behaviour with the firms involved in the collaborative relationship.
- (3) The development of a formal institution providing support to further cooperation. This is likened to “norming” behaviour where early encounters within relationship development create project-specific objectives and attempt to improve interpersonal relationships and team membership (Thompson and Sanders, 1998).

Initially the relationship development process relies on one party identifying or becoming aware of a need that they are capable of fulfilling (Ford *et al.*, 1985). In essence this first phase is one of strategy where potential partners look for organizational alignment and strategic fit (Johnson and Scholes, 1999). Above all the organization should attempt to determine goals and objectives at an institutional or project level depending on their strategy (Thompson and Sanders, 1998). To participate effectively an organization should be able to analyse and describe itself in terms that prospective partners can relate to and comprehend (Ford *et al.*, 1985).

While the scope of the relationship at this stage lacks definition in terms of requirements and benefits, consideration may be given to finance, plant and equipment, technology and managerial expertise that is required (Ford, 1982). This is a critical phase in relationship development process, which will become evident with little real or perceived commitment. Commitment is difficult to assess and partners may choose to proceed with the relationship slowly or enact limited exchanges to minimise commitment (Ford, 1998).

To move away from competing objectives stakeholders should improve communication and increase trust (Thompson and Sanders, 1998). Because of difficulties in analysing partners, uncertainty remains high and any judgements will be made on reputation as a substitute for experience (Ford, 1982). Discussion with multiple partners is a typical risk reduction strategy (Wilson, 1995). Mutual trust may begin to develop as cultural distance decreases and partners become familiar with the organizational norms and behaviours that have been established (Wong *et al.*, 2008). Trust development mitigates high levels of uncertainty more quickly with some potential partners than others. Consequently, certain parties will not be considered appropriate for forming a relationship with. A relationship may fail if one party

believes that the other has no intention of building and sustaining a relationship. Selection disqualification can also occur if displayed behaviours or competencies appear to be less than expected (Boddy *et al.*, 2000).

During this phase individual parties are not exclusively committed to one another and there is a limited degree of trust present, as guarded exchanges of information take place. However, trust will increase as a consequence of perceived investments of an economic or social nature become identified. They may be product or person related, designed to add project value. Comparison with alternative potential relationships may take place, but eventually a decision based on limited information available will allow continuation to the commitment phase.

#### *Commitment phase*

The commitment phase is intensive and is often referred to as definition (Wilson, 1995), lock-in (Donaldson and O'Toole, 2001) or exploratory (Dwyer *et al.*, 1985). Serious discussion and negotiation takes place and information is exchanged juxtaposed with mutual learning. The negotiation process will invariably entail bilateral communication of wants, issues, inputs and priorities (Dwyer *et al.*, 1987). Ford *et al.* (1985) use the term "mutuality", as this phase rests on the importance of determining common goals. Mutuality is a measure of how much a company is prepared to give up its own individual goals or intentions, in order to increase positive outcomes of others; it is a trade off between opportunism and long-term gain.

In this phase trust is not principally in play and there are mutual concerns about commitment. However, the parties to the potential relationship must display serious interest and consider relationship obligations to overcome a propensity to depart (Dwyer *et al.*, 1987). Additional commitment has proclivity with trust, which is fundamental to relationship interaction (Dwyer *et al.*, 1987; Love *et al.*, 2002; Wong *et al.*, 2008). Trust affects buyers' behaviour and attitude; it impacts on negotiation and bargaining. Social bonding and trust development underpin relationship development (Wong *et al.*, 2008). If they are not in place, then invariably a lack of personal trust or incompatible personal chemistry are blamed for failure (Wilson, 1995). At this stage the relationship needs to reach a business friendship level. Due to the seeming absence of a shared culture and understanding, the project's scope and goal definition become critical decisions for the relationship partners which are obtained through technical, knowledge and social bonds (Figure 1).

Norms that dictate standards of conduct are adopted. In effect regulations of exchange are created and become ground rules for future exchanges (Ford, 1982). Generalised expectations guide perceptions of social exchange and may exert powerful influences upon behaviour. This is supported by Boddy *et al.* (2000), who indicate that dealings become more direct as relationships develop. In the formative phases of relation development, risk is prevalent because partners are assessing their strategic, operational and tactical positioning in the project. As trust and the desire to work together increases the potential partners' risk-shifts are augmented. Examples of risk-shifts include: a large concession that requires reciprocation, a proposal for a compromise, a unilateral action of tension reduction, or a candid statement concerning motives and priorities (Dwyer *et al.*, 1987).

In the context of risk-shifts, Ford (1998) refers to adaptations that may be either formal or informal. Formal adaptations are contractual agreements that may take the



form of special products. Informal adaptations are more *ad hoc* and arise to cope with particular instances as the relationship develops, for example flexibility of resources to cope with sudden demand. Boddy *et al.* (2000) have demonstrated that informal cooperation or working together translates into new roles as the relationship development progresses. This development happens at several levels and creates a new context of working together, with cooperative behaviour embedding new values in the wider context of both organizations. A counter point to this positive change is the potential danger of unintentional behaviours developing as the relationship begins to settle and parties become comfortable with one another. In support of these arguments Ford (1982) states that commitment is built and displayed by the way in which a firm organizes patterns of contact with its partner; the level of personnel involved and the frequency of contact.

A relationship will remain fragile with limited commitment and can end relatively easily; however, dissonance will not dissolve the relationship development. It is common for partners to have overall mutual interest, whilst simultaneously being in conflict over what they should be doing for mutual achievement (Ford *et al.*, 1985). The parties to the relationship will still make comparisons and measurement against predetermined benchmarks, though performance satisfaction should reduce this trait (Wilson, 1995). According to Thompson and Sanders (1998) several characteristics of a committed environment include:

- longer term focus on the strategic goals of the stakeholders;
- relationship agreements without guarantees in terms of workload and resource transfer;
- reduced duplication and process improvements; and
- shared authority with open and honest risk sharing.

#### *Enduring phase*

As the actors within the relationship development process become conscious of the project's definition and scope, their roles and responsibilities and the emergent culture (norms and values), then the degree of organizational interaction that takes place increases at all levels (Ford, 1982). Wilson (1995) refers to a "hybrid team" to describe the actors in the relationship development process that commence to acquire communal assets. The team begin to become more interdependent (Dwyer *et al.*, 2000) and organizational lines disappear (Thompson and Sanders, 1998) during this phase. Dwyer *et al.* (2000) suggest that when exemplary exchange takes place surpassing expectations, attractiveness increases thereby enhancing goal congruence and cooperativeness. Informal rules created by the team establish governance within the structure of the relationship (Wilson, 1995). Both organizations tend to alter their procedures and make informal adaptations (Holt *et al.*, 2000). Reciprocal adaptation involves cost, as asset specific resources are difficult to transfer to other uses; these actions bind the actors together. Thompson and Sanders (1998) highlight several characteristics of a coalesced environment in an enduring phase that includes: a single common performance measuring system; cooperative relationships supported by collaborative experiences and activities; cultures that fit the project and processes; indistinct boundaries are penetrated by parties to the relationship and there is an environment of implicit trust and shared risk.

### Research approach

To examine the applicability of the conceptual model to alliance contracting in construction an exploratory approach was adopted. A total of 49 in-depth interviews were conducted over a six-month period with a variety of industry practitioners (clients, contractors, design consultants, construction lawyers, and alliance facilitators) who had extensive experience with working in alliance contracts (Table II). Interviews were used as the mechanism to examine the themes and constructs identified in Figure 1. Interviews were chosen as the primary data collection mechanism because they are an effective tool for learning about matters that cannot be observed and for gaining an insight to people's experiences in particular scenarios. According to Taylor and Bogdan (1984, p. 79), no other method "can provide the detailed understanding that comes from directly observing people and listening to what they have to say at the scene".

Industry practitioners were purposefully sampled from various states in Australia and invited to participate in the research. Interviews were conducted at the offices of interviewees. Interviews were digitally recorded and transcribed verbatim to allow for the nuances in the interview to be apparent in the text. The interviewees' details were coded to allow for anonymity, although all interviewees were aware that it might be possible to identify them from the content of the text. The format of the interviews was kept as consistent as possible following the themes associated with developed conceptual model. Interviews were kept open using phrases such as "tell me about it" or "can you give me an example". The open nature of the questions allowed for avenues of interest to be pursued as they arose without introducing bias in the response. Notes were taken during the interview to support the tapes to maintain validity. Each of the interviews varied in length from one to two hours. Interviews were open to stimulate conversation and break down any barriers that may have existed between the interviewer and interviewee.

### Data analysis

The text derived from the interviews was analysed using QSR N6 (which is a version of NUD\*IST and combines the efficient management of Non-numerical Unstructured Data with powerful processes of Indexing and Theorising) and enabled the development of themes to be identified. One advantage of such software is that it enables additional data sources and journal notes to be incorporated into the analysis. The development and re-assessment of themes as analysis progresses accords with the calls for avoiding confining data to pre-determined sets of categories (Silverman, 2001). Kvale (1996, p. 204) suggests that *ad hoc* methods for generating meaning enable the researcher access to "a variety of common-sense approaches to interview text using an interplay of techniques such as noting patterns, seeing plausibility, making comparisons etc."

Using NUD\*IST enabled the researchers to develop an organic approach to coding as it enabled triggers or categories of interest in the text to be coded and used to keep track of emerging and developing ideas (Kvale, 1996). These codings can be modified, integrated or migrated as the analysis progresses and the generation of reports, using Boolean search, facilitates the recognition of conflicts and contradictions. This process enabled key themes identified in the conceptual model to be explored, which led to the model being amended based upon the practitioners' experiences and viewpoints.

Type of respondent	Experience in years (Mean)	No of alliance projects (Median)	No of respondents		Geographic location					
			<i>n</i>	(%) ( <i>n</i> = 49)	WA ( <i>n</i> = 30)	NSW ( <i>n</i> = 2)	VIC ( <i>n</i> = 1)	QLD ( <i>n</i> = 13)	SA ( <i>n</i> = 3)	
Contractor	27.76	4.5	18	37	11	-	-	-	5	2
Client	29.75	2	20	41	14	1	-	-	4	1
Design consultant	24.00	3	5	10	3	-	-	-	2	-
Construction lawyer	20.50	25	2	4	1	1	-	-	-	-
Alliance facilitator	30.00	17	4	8	1	-	1	-	2	-

**Table II.**  
Sample demographics

### **Alliance relationship building**

From the analysis three interdependent themes, in the context of the conceptual model that was presented, were identified. These were the ability of parties to establish and maintain individual relationships, engendering of trust, and organizational development. While every effort was made by the researchers to steer participants toward issues identified in the conceptual model, there were instances when this did not happen and other serendipitous issues emerged. As a result the conceptual model was amended accordingly.

#### *Individual relationships*

A detailed analysis of the data indicated that participants deemed the alliance development as a process that was subjected to considerable risks as parties jockeyed to determine their strategic position and define the project's scope. On another level, the relationship development process was deemed to be novel and thus required a considerable amount planning and investigation, which could be used to identify and manage the risks. It was something that participants were not use too, albeit in such a formalised way. Needless to say, participants had a preference for working and forming relationships with individuals and organizations with which they had favourable experience. Previous experience would reduce risk and provide a more tangible assessment of their development strategies. Despite the fact that the alliance development in the conceptual model was somewhat staged, the use of management games and selection themes could facilitate parties to fast track development; enabling them to assess associates within a reduced time frame.

The interviews showed the relationship that alliance partners strove to attain were equivalent to the establishment of respectable personal relationships. For example, the contractors sampled had an objective of maintaining a position of high regard from their client. A "relationship test" could determine if parties are able to behave as expected or whether they would be likely to persist with adversarial or "business as usual" positions. Participants revealed that they were uncomfortable with the notion of undertaking a "relationship test" as it was subjective and that familiar tangible criteria, under the auspices of prequalification, were more appropriate. Because of the novelty of the process and unfamiliarity with issues formalising trust, participants were particularly hesitant about adopting this part of the process. It was also perceived that during this intensive period of relationship building there was a possibility that parent organization could be neglected. However, to address this issue individual, inter and intra organizational relationships were addressed simultaneously to ensure both strategic and goal alignment.

*Alliance initiators.* Clients identified themselves as the initiators of an alliance and were particularly interested to unearth individuals that had people skills and the ability to judge, intervene and build on strengths; identify weaknesses and understand behaviours. With regard to individuals the clients endeavoured to identify people who appeared to be willing to share and display characteristics of openness. These traits were deemed to provide clients with evidence that individuals are apposite for an alliance environment. It was suggested that openness during the initial assessment phase could instil feelings of integration between parties, and thus enable parties to talk candidly in an environment that potentially overcame disagreement and dispute. Individual commitment and personal investment were identified as being a prerequisite for the development of shared objectives and ultimately alliance success. Openness, honesty, and a willingness to share were perceived a necessity in alliance development. The discourse on openness occurred

simultaneously with that of trust by all respondents. Seemingly by acting in an open and candid way participants felt that trust could be engendered.

The client respondents indicated that during a typical alliance development program the group commenced with an open mind to address possible integration issues. For example, how the non-owner participants were going to overcome technical, community and environmental issues; or how the alliance was going to deal with safety? Other issues concerned the on-going management of relationships within the project team, between the governing body and the project lead team or within the project team itself. Some respondents used rational checks to supplement less subjective measures of credibility. Examples of rational checks included calling for Curriculum Vitae, financial statements or references from previous clients. A preparedness to provide open books was described as an act of credibility.

Non-owner participants indicated that individual relationship developed over time. The alliance development period enabled the participants to enter the alliance implement phase as committed partners. This could enable the project to operate effectively from the earliest opportunity. There was recognition that individuals within the alliance would be at different levels of development and strategies could be put in place to intervene and consequently redress any imbalance, if it existed. The goals developed in a relationship development workshop can be directed to further develop teams to challenge their own norms and values.

### *Engendering of trust*

Trust was an important concept raised by respondents. Trust enabled contractors to differentiate themselves or be selected in a different way from the more traditional, business as usual price-alone selection. Early development of trust was considered to engender harmony and respect within a project team. The conceptual model in Figure 1 implicitly aims to deconstruct formality of the relationship development process by using a mixture of activities and scenarios to assess participants' reactions. For example, the extent to which empathetic behaviours is displayed in a particular circumstance. Contextualising this, several respondents suggested that it was easy for them to respond from the "heart" in the alliance development environment as mutual understanding was often a consequence of their past experience. Invariably respondents entered an alliance development with "open minds" and often proceeded with the underlying assumption that their trust would be reciprocated.

It was indicated that trust was often assessed in parallel with commitment. For example, commitment to others through resource allocation, generated attitudes that reduced risk for all parties. It enabled a client to have a more detailed understanding of the process of the project they were generating than would ordinarily happen. Because a NOP team is assessed as a collective entity it is important that they are able to demonstrate a bond that can translate into a team that is prepared to integrate with other participants. Testing bonds, in this instance, with technical scenarios would form part of the relationship development workshop. From the respondent's perspective an integrated team should be the goal of the relationship development workshop. In effect become a team working together as if part of the same organization, solving problems and being prepared to confront hard to solve issues.

All respondents indicated that they perceived increasing levels of trust throughout the alliance development duration. When asked if they had any special way of

measuring or determining evidence of trust, several clients indicated that they often use performance measurement systems. The performance measurement systems successfully measured such things as communication. Effective communication was said to be symptomatic of relationships and relationship building and accordingly proposed as an appropriate determinant, closely aligned with trust development.

Interestingly some of the client groups had formalised documentation that provided policy and guidance, setting out procedures for identifying attributes of trust and trust building behaviours. Increasing levels of trust and commitment had a dual purpose. It tested the ability of participants to work in a cooperative and collaborative environment. In addition it built relationships; these relationships established rapport between participants before the start of the implementation phase of the project, in effect by the time the actual contract was awarded there would be an effective relationship. In this context an important link was made between experience and trust. Respondents were conscious that only through experience were they able to generate the requisite levels of trust for the continuance of the alliance project. Trust and commitment were said to be a test of collaboration. The sentiment was expressed that only when trust and commitment were evident would positive decision-making be aligned to mutual goals.

#### *Organizational development*

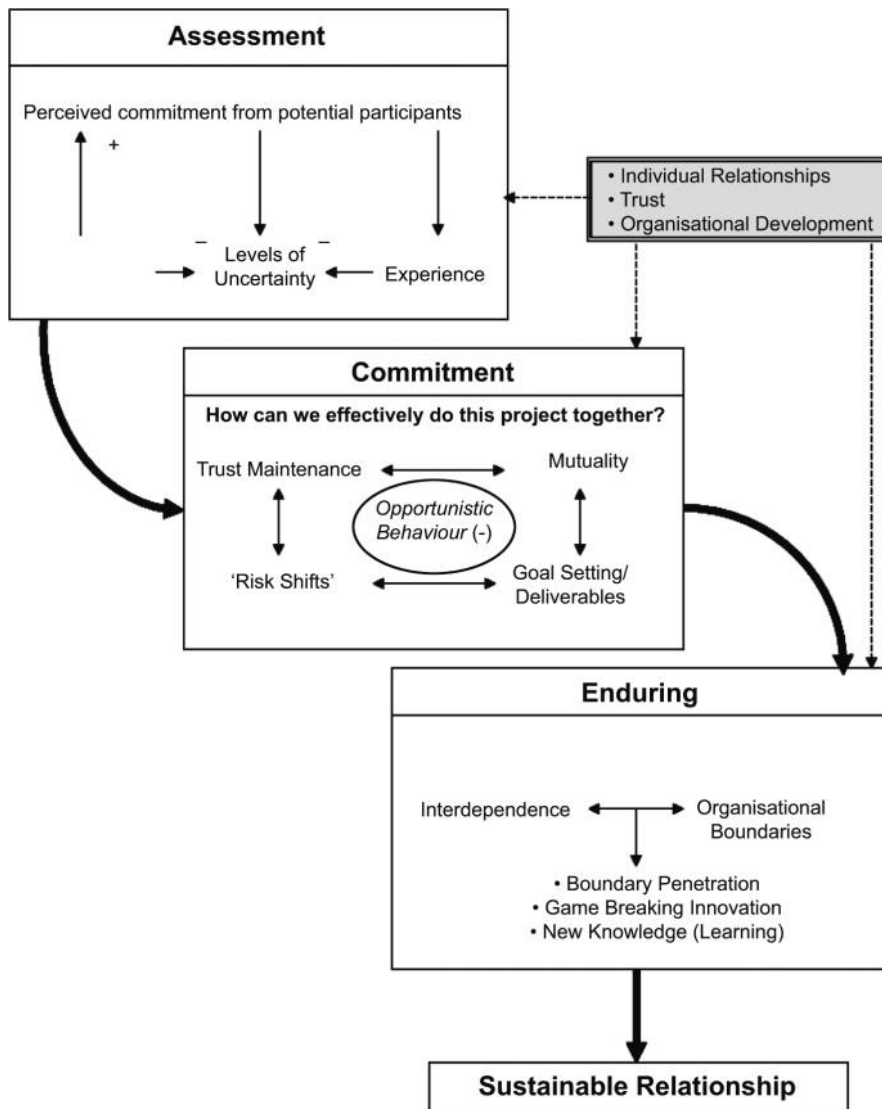
It was emphasised that failing to honour commitments in a project can result in a poor rapport being experienced and a grim report that could affect an organization's future work. For one particular interviewed client this sanction would be a sufficient penalty. Proven effective experience and competence are strong indicators of organizational credibility. Often these are based on experience of past projects; whether accrued from alliance or more traditional type construction projects. There was consensus from the respondents that reaching agreement prior to establishing a contractual relationship was a definitive test of commitment. For example, one respondent noted a list of commercial outcomes that established an organizational commitment to life skills including training and community relations to individuals outside the recognised boundaries of alliance personnel.

All relationship building activities that take place should target strategies and processes that can benefit their project. Mutual goals are described as a common understanding or focused alignment of expectations in a communicative way. Several clients used the term "progressive engagement" to describe goal development that took place in the formative stages of an alliance project. Collaboration provided focus and alignment to the team that was to influence the project outcome. It was suggested there was a level of maturity developing in construction/engineering as incrementally more alliance/relationship style projects become procured. It was proffered by participants that trust and openness encouraged participants to focus problem solving and thus stimulate innovation. In turn this would generate new knowledge in the alliance project organization. Of concern were respondent's thoughts about inter- and intra-organizational interaction, particularly the selection and introduction of personnel to the alliance. It was evident from responses that intra-organizational alliance relations significantly impacted upon inter-organizational relationships. This was described as a consequence of the relationship building and selection exercises that were carried out in the alliance developments.

*Revised three-stage alliance relationship model*

Considering the above findings the conceptual model was contextualised to construction through the viewpoints and experiences of the participants sampled (Figure 2).

As noted previously the three phases of relationship development are not mutually exclusive and each represents a collection of iterative macro processes. The boundaries referred to in the phases of relationship development are indistinct and dependent on supply chain activities; each phase interacts with subsequent phases through seamless boundaries that are punctuated with incremental investments. Noteworthy, boundaries



**Figure 2.** Three-stage alliance relationship model

may change with individual relationships (Araujo *et al.*, 1999). For example, increased interaction between parties can lead to inter-organizational boundary spanning and penetration that consequently leads to the dismantling of organizational silos that often prevail in construction (Heide and John, 1990; Holt *et al.*, 2000).

In the assessment phase, it was found that clients aim to reduce their risk and undertake numerous assessments of multiple partners. Several strategies were identified by the respondents, for example, a client would be asking the question: "Can you do this for me?" This question would seek information concerning resources and technology together with managerial expertise. The thrust of questioning in the first instance would be directed toward a potential partner organization. Analysis of individuals would follow in subsequent stages. In the first stage, it was revealed that this would limit commitment; despite the fact that commitment would be difficult to recognise.

As the relationship evolves and intersects with the commitment phase, trust should be developed with the use of relationship development exercises that have been shown to fast track commitment (Davis, 2005). The commitment itself would lead toward trust and enhance trust maintenance, albeit relatively limited initially. At the conclusion of the first stage, there would be an option for either party to end the relationship. It is noteworthy to recognise that a predisposition toward upstream relationship variables of trust has been identified as stronger than downstream and this fact should be accounted for in the interactions between parties (Love *et al.*, 2002). At this stage the parties tend to safeguard their degree of information transfer and exhibit limited levels of trust. Trust may take many forms; for example an offer to reconfigure capital items of plant or information technology to meet the immediate needs of the client. It is suggested that workshops should take place in the second stage of the relationship development model.

In the commitment phase, questions that the parties to the workshop should be endeavouring to answer would include: "What are our common goals?" and "How can we do this project together?" Moreover, parties should be looking to establish ground rules. The ground rules would not only be required for workshop meetings but also for the project process. The parties should think about risk and open discussion should revolve around adaptations required to deliver innovations that can deliver the project's expected outcomes. These preceding points lead to establishing deeper trust between the parties and embed commitments based on predisposition toward partner future actions. Trust should grow through this stage with commitments being increased. The process of the relationship development workshop, its underlying attributes, the measured goal and commitment outcomes, together with organizational interrelationship issues are fundamental to success. Effective communication and information sharing were shown to increase trust and trust development. Goal setting and outlining deliverables were identified as indicators of commitment. Aligning these commitments with commercial objectives was also provided as examples where trust development will enhance the relationship. Trust during this phase can also be established through knowledge sharing and transfer, particularly the sharing of experiences regarding issues that the parties are confronted with (Nahapiet and Ghoshal, 1998; Wenger, 1999; Wenger and Snyder, 2000).

During the enduring phase the relationship would be becoming close to fruition. Indistinct organizational and social boundaries would become less evident as boundary penetration of actors creates an informal hybrid team that is to be in place for the duration of the project. Cohen and Levinthal (1990) use the term absorptive



capacity to describe the acceptance of new knowledge, which includes a propensity toward openness and tolerance of mistakes. In this context having a history of gamebreaking ideas suggest absorptive capacity is important to this stage of the alliance. People that have an ability to take advantage of an opportunity that has been transferred from one discipline to another are useful to the relationship. For example in one of the projects identified by a respondent they were able to cite an example of technology transfer of a significant nature that was considered to be gamebreaking (Hutchinson and Gallagher, 2003). Such a competency is typically not readily within the marketplace and thus should be given the recognition it deserves. The enduring strong ties that encompass technical, social and knowledge areas are also forged in this phase. Regular evaluations need to be undertaken so as to ensure the quality of the relationship that has been established remains in place.

### Conclusion

The relationship development process represents a major contributor to successful alliance contracting and can add considerable value throughout the supply chain. There is a recognisable structure to relationship development that is underpinned by specific themes that should be considered when managing alliance relationship development and maintenance. Trust and commitment are explicit elements that should be continually maintained in alliance procurement, and can significantly contribute to joint learning from collaborative problem-solving activities.

A total of 49 respondents were generally positive about the relationship development process and suggested that workshops, management games and selection themes added significant benefits to relationship development process. The benefits were not solely limited to process benefits but flowed into product benefits; for example the whole life project value benefit of innovation cited by several respondents. The alliance development provides a context for relationships to develop and a scaffold from which relationships can be fostered and maintained. It has been suggested that transaction cost reductions will accrue from long-term relationships. From the respondents' perspectives it appears that the entire process of relationship development hinged around individual relationships, trust and inter-organizational development. The relationships were all embracing and entirely reciprocal, regardless of upstream or downstream engagement. Connections that would evolve in the team could drive the process and enhance the outcome of the project. Finally, it is suggested that the developed model can be used to promote a culture of reflective learning and mutual trust, beyond merely project-specific performance outcomes. Maintaining relationships after a project has finished is necessary for improving the construction industry's long-term performance.

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### Corresponding author

Peter Love can be contacted at: [plove@iinet.net.au](mailto:plove@iinet.net.au)

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