

SUPPLY CHAIN SUSTAINABILITY – A RELATIONSHIP MANAGEMENT APPROACH MODERATED BY CULTURE AND COMMITMENT

STEVE ROWLINSON

Department of Real Estate & Construction, Hong Kong University
China

steverowlinson@hku.hk

FIONA CHEUNG YAN KI

School of Urban Development, Queensland University of Technology
Australia

Fiona.cheung@qut.edu.au

Abstract

This research explores the nature of relationship management on construction projects in Australia and examines the effects of culture, by means of Schwarz's value survey, on relationships under different contract strategies. The research was based on the view that the development of a sustainable supply chain depends on the transfer of knowledge and capabilities from the larger players in the supply chain through collaboration brought about by relationship management. The research adopted a triangulated approach in which quantitative data were collected by questionnaire, interviews were conducted to explore and enrich the quantitative data and case studies were undertaken in order to illustrate and validate the findings. The aim was to investigate how values and attitudes enhance or reduce the incorporation of the supply chain into the project. From the research it was found that the degree of match and mismatch between values and contract strategy impacts commitment and the engagement and empowerment of the supply chain.

Keywords: supply chain sustainability, relationship management, Queensland, culture, convergence.

INTRODUCTION

Relationship management is a system that provides a collaborative environment and a framework for all participants to adapt their behaviour to project (and longer term) objectives. It is about open communication which needs to be facilitated and nurtured. The, a 'sustainable supply chain' requires a clear relational strategy that takes into account individual values within the organisation structure (contract strategy in this case) and so empowers decision making, free communication and encourages relationship building.

Effective supply chain management enhances organisation performance and competitiveness through the management of operations across organisational boundaries (Giannakis, Croom, & Slack, 2004). Relational contracting approaches facilitate the exchange of information and knowledge and builds capacity in the supply chain, thus enhancing its sustainability. Relationship management also provides the conditions necessary for the development of collaborative and cooperative relationships. It is about open communication, sharing resources and experiences, exposing the 'hidden' risks in the project. However, subcontractors and suppliers are not empowered to attend project meetings or to have direct communication with project based staff (Dainty, Briscoe, & Millett, 2001). With this being a common phenomenon in the Australian construction industry, one might ask: what are the

barriers to implementation of relationship management through the supply chain? In other words, the problem addressed in this research is the engagement of supply chain through relationship management.

Relationship management is a business strategy. It is a system that provides a collaborative environment and a framework for all participants to adapt their behaviour to project objectives and allows for engagement with the supply chain. On the other hand, relational contracting is an approach. A relational contract tends to be of a fixed duration, with exchange of relations in light of opportunities for future cooperation among the contracting parties. After all, companies do not collaborate for the sake of collaboration. They would only engage in relational exchanges when the perceived benefits derived from these activities outweigh the cost incurred.

A contractual arrangement with strong relationship management, such as committed joint-venture or alliance, allows collaborative and cooperative attitude to develop between project participants. Project parties focus on the organisations' business future and aim for long-term success. The reason for this is a paradigm shift. Relational approaches assist and develop a collaborative and cooperative working environment where trust can be developed and this leads to community benefit and a sustainable supply chain.

Research Aim and Objectives

The aim of the research is to explore the association between relational contracting structures and processes and supply chain sustainability in the construction industry. The underlying principles which frame this research are relationship management, motivation values, culture and contract strategy. The objective of this research is to investigate perception of relationship management from a contractor's perspective and the impact of moving relational contracting down the value chain; thereby empowering and developing a sustainable supply chain.

Contract Strategy

Rowlinson defines contract strategy as being a subset of procurement systems (Walker & rowlinson, 2009; Rowlinson & McDermott 1998) and uses a typology consisting of seven key variables to uniquely define any particular contract strategy. One of the more important variables is organisation form and it is this dimension that is applied here in this research. Motivation values are context dependent and in construction the organisation form clearly distinguishes one project from another and, in some senses, demands more or less focus on relationship management as a consequence. For example, the degree of integration inherently present in an organisation form can be represented in Figure 1 below. The common organisation strategies adopted in Australia in this research were:

Minor Works Contract (design then construct); Roadworks Performance Contract (RPC, design then construct); Road Construction Contract (RCC, design then construct); Road Construction Contract with Relationship Management (RCC(RM) design then construct); Design and Construct (design and construct); Early Contractor Involvement (ECI design and construct); Alliance (design, construct and maintain).

The number of such contract types in the research sample is shown below.

D&C (4)	Minor Works (8 ^a)	RPC (10)	RCC (10)	RCC (RM) (26)	ECI (10)	Alliance (30 ^a)
------------	----------------------------------	-------------	-------------	------------------	-------------	--------------------------------

Contract strategy

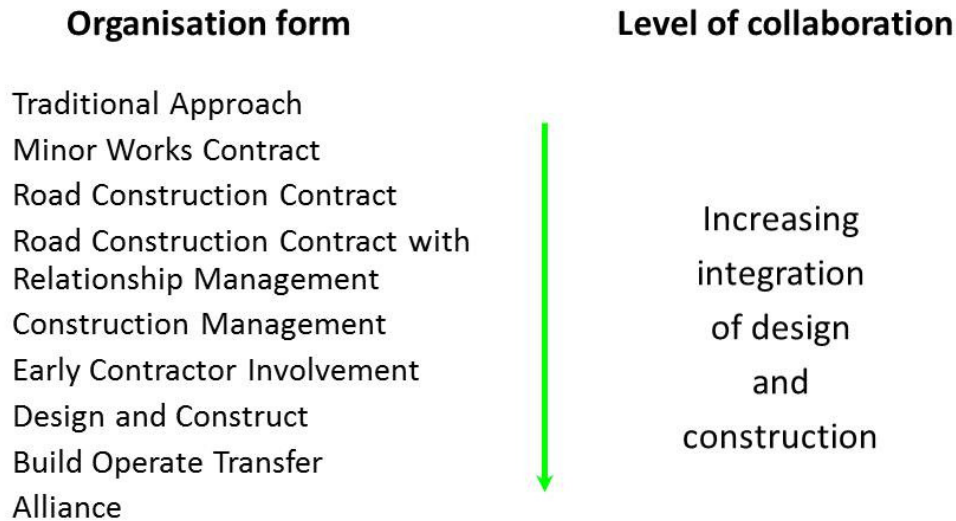


Figure 1: Contract strategy and collaboration potential

Relationship Management

There are many definitions of relationship management (RM). One of the most widely adopted definitions is Berry's description of RM as 'attracting, maintaining and – in multi-service organisations – enhancing customer relationships' (Berry, 1983, p.25). Grönroos (1996) describes RM as a process of managing the organisation's market relationships by which allows organisations to identify and establish, maintain and enhance and, when necessary, terminate relationships with customers and other stakeholders, at a profit so that the objectives of all parties involved are met through mutual exchange and fulfilment of promises (Grönroos, 2007) i.e. interactions and continuous improvement. Sheth's definition of RM reflects similar theme. Sheth (1994, p.2) describes RM as 'the understanding, explanation and management of the on-going collaborative business relationship between suppliers and customers' and companies must align their business processes to achieve higher level of efficiency and effectiveness when operating under a RM regime (Sheth & Sisodia, 2002). One common message is relationships are built on past behaviour and future promises.

In construction, the traditional hard-dollar procurement system can be seen to less suitable for today's complex construction environment, where rapid change and unanticipated decision situations are constantly encountered (Shirazi, Langford, & Rowlinson, 1996). One cause of this is that the construction industry is not unitary but comprises temporary multi-organisations (Murray, Langford, Hardcastle, & Tookey, 1999). While a pure mechanistic organisation form was appropriate for a completely stable environment (Winch, 2000a); for flexible and changing environments, an organic organisation form is much more suitable. The

project team changes its structure and organisation style in different phases of the project life cycle and hence is described as a 'living organism' (Sidwell, 1990). The project organisation is made up of members drawn from parent organisations. Sidwell also points out that all projects have a distinct life-cycle, the organisational forms change over time from chaotic to mechanistic to bureaucratic, depending on the project stage and the project team. For example, the consultant team tends to have a chaotic structure at the concept stage. Design and documentation is a more mechanistic process which then leads to the construction stage which involves heavy monitoring and a lot of bureaucracy. On the other hand, the contractor is likely to operate in an organic mode at the construction stage.

Relationship contracts are usually long-term, develop and change over time (Cheung & Rowlinson, 2007). Relationship management is a system that provides collaborative environments and frameworks for all project participants to adapt their behaviour to project objectives and allows for engagement of the supply chain. Relational approaches are particularly suited to the Australian culture, where open communications and direct confrontation are accepted and indeed preferred (Cheung, 2006a); such attitudes form a sound basis for relational approaches to be successful. This research seeks to explore the impact of values and attitudes on the success of the relationship management approach.

Key concepts for a successful relational contracting approach have been reported in recent studies (e.g. Cheung, 2006b; Dainty, *et al.*, 2001; Price, Bryman, & Dainty, 2004; Walker & Hampson, 2003). These studies identified empowerment, motivation, commitment, organisation structuring and culture as being significant in the implementation of a sound relational contracting approach to projects. Relational contracting approaches have received strong interest in the construction industry and the efficacy of relationship management in the client and contractor groups has been well documented. However, little research has been done in the supply chain context.

Studies suggest that relational approaches, such as partnering, alliances, framework agreements and relationship management, provide positive contributions to social, environmental and economic sustainability and help to satisfy client and stakeholder interests (Blau, 1963; MacNeil, 1978, 1985; Rousseau & Parks, 1993). In other words, relational contracts provide the means to achieve sustainable, on-going relationships in long and complex contracts by an adjustment process of a more thoroughly transaction specific, on-going, administrative kind (Kumaraswamy & Matthews, 2000). The essence of relationship management is also found in collaborative procurement. Collaborative procurement aims at engaging parties at all project stages; competitive bidding is no longer the only selection criterion for contractors and design consultants, as well as suppliers (Hughes, *et al.*, 2006). Also, some reliance is placed on the deliberate development of long-term working relationships which requires trust building. Another characteristic of collaborative procurement is the number of partners is limited. This is particularly crucial in countries such as the UK and Hong Kong, where multi-level subcontracting is a common practice.

The common aim of all relational contracts is to recognise and for strive mutual benefits and win-win scenarios between project parties in a long-term basis (Rowlinson & Cheung, 2003). Thus, relationship management places strong emphasises on collaborative relationships in the supply chain, proactive problem solving and open and honest communication between project parties; in other words, more collaborative working arrangements and sustainable practices. It is clear that relational contracting is predicated on a broader view of the procurement approach and requires clearly focussed contract strategies and strategic management; it implicitly incorporates supply chain engagement, essential if the performance indicators of

best value, community benefit and innovation are to be achieved. One of the main differences between relational contracts and traditional hard-dollar contracts is the problem solving mode where performance problems in relational contracts are solved in a more collaborative manner amongst project team members and senior management, without recourse to claims and litigation (Bresnen & Marshall, 2000a; Cheung, 2006b). In some cases, contractors would absorb extra costs in order to maintain good relationships with the client and increase the chances of gaining future business (Bresnen & Marshall, 2000a). After all, a partnering relationship between organisations is based on trust, dedication to common goals and an understanding of each other's expectations and values (Construction Industry Institute, 1991).

Commitment

Walker, Bourne and Rowlinson (2008) describe the connections between commitment and motivation using Allen and Meyer's theory (1990) and Maslow's theory (1970), as shown in 2. According to Maslow, human behaviour is controlled by both external and internal environments. Also, individuals have certain needs; these needs do not change in origin and are hierarchal in nature. One must satisfy lower level basic needs before recognises or pursues the next level in the hierarchy. As suggested by Walker *et al.* (2008), the strongest form of commitment is affective because it is 'want-to commitment' based on a motivation of self-actualisation and/or ego needs, and can move people to contribute beyond expectations.

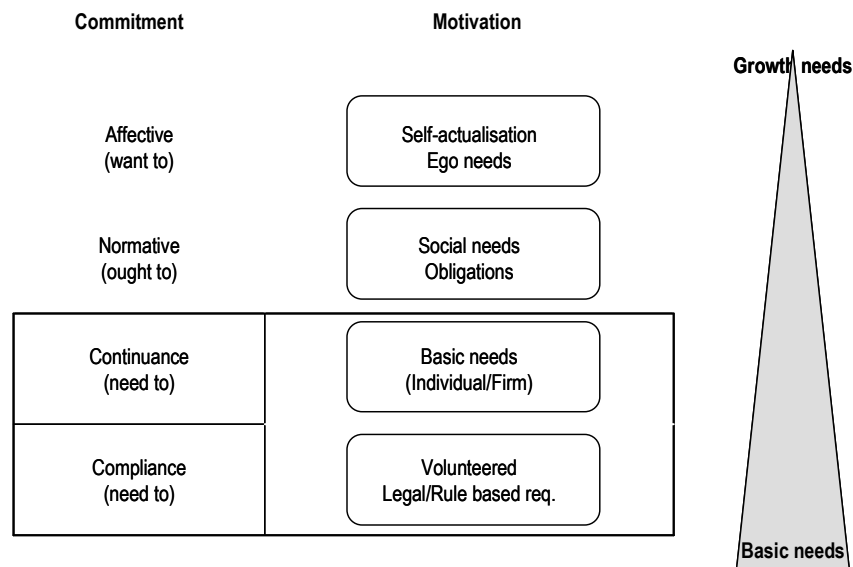


Figure 2: Commitment and Motivation
Source: Allen and Meyer (1996) and Maslow (1970) in Walker & Rowlinson, 2009

A relationship management approach cannot succeed if the collaborating organisations do not accept its ethos. Commitment is an important component of motivation (Meyer, Becker, & Vandenberghe, 2004). Hence, sharing values and being committed to the goals and objectives of the organisation is crucial in client, contractor and supply chain integration.

Values and Motivation

Cultures vary in their underlying values and attitudes (Wood, Wallace, & Zeffane, 2001). The way people think about such matters as achievement and work, wealth and material gain,

risk and change may influence how they view work and their experiences in organisations. Schwartz developed a value survey which examines individual motivational types of values and their goals. According to Schwartz (1992b), the meaning of a value can be inferred from its pattern of positive and negative associations with other values. Values '(1) are concepts or beliefs, (2) pertain to desirable end states or behaviours, (3) transcend specific situations, (4) guide selection or evaluation of behaviour and events, and (5) are ordered by relative importance' (Schwartz, 1992a, p.4). Thus, the meaning of a value is best captured by examining the structure of its relations with a comprehensive set of values thus providing insight into the development and consequences of a diverse range of behavioural attitudes and orientations, such as religious belief, political orientation and voting, social group relations, consumer behaviour, as well as the conceptualisation of human values across cultures. By comparing cultural value dimensions between different countries and regions/groups and, indeed working teams and temporary multiorganisations, one can begin to understand the intercultural meanings in the project environment and so to establish effective relationships in project teams.

Relationship management is about a shared culture between organisations, where the motivation and attitude of the project participants is critical to success. Van de Ven and Ferry (1980) measure a whole series of organisational parameters including individual motivation, work processes and organisational structure. Winch *et al.* (1997) found autonomy at work, work coordination and work control along with job satisfaction, instrumental motivation and feedback as essential for enabling teamwork and individual motivation in construction projects. On the other hand, innovation, organisational commitment and motivation are strongly related (Khalfan & McDermott, 2006). Referring back to Figure , motivation is controlled by both internal and external environmental factors (Maslow, 1970) and is strongly associated with levels of commitment. It is important for construction organisations to be involved in the innovative procurement practices, such as relationship management, in order to take advantage of changes in markets. Financial reward might be a motivator for a client to build long-term relationships with other participants within the supply chain (Khalfan & McDermott, 2006). On the other hand, although money might be client's drive for relationship management, the supply chain might find further job opportunities and organisational competitiveness as attractive motivators for the initial buy-in

Motivation typology of Values

The motivation typology of values was measured with Schwartz Value Survey (SVS) (Schwartz, 1992b; Schwartz, 1994). Schwartz [Schwartz, 1992, 2005a] details the derivations of the ten basic values. For example, a conformity value was derived from the prerequisites of interaction and of group survival. For interaction to proceed smoothly and for groups to maintain themselves, individuals must restrain impulses and inhibit actions that might hurt others. A self-direction value was derived from organismic needs for mastery and from the interaction requirements of autonomy and independence. Each of the ten basic values can be characterized by describing its central motivational goal. The SVS measures values at both individual and cultural levels, using a 9-point Likert scale ranging from 1 to 7. Fifty-seven value items were clustered into 10 types of values using the statistical technique smallest-space analysis. The 10 values and their definitions are presented in 1 below.

Table 1: Definition of motivation values (adapted from Schwartz, 1994, p.22)

Motivational Types	Definitions
Power	Social status and prestige, control or dominance over people and resources
Achievement	Personal success through demonstrating competence according to social standards
Hedonism	Pleasure and sensuous gratification for oneself
Stimulation	Excitement, novelty and challenge in life
Self-direction	Independent thought and action – choosing, creating, exploring
Universalism	Understanding, appreciation, tolerance and protection for the welfare of all people and for nature
Benevolence	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact
Tradition	Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide
Conformity	Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations of norms
Security	Safety, harmony and stability of society, of relations, and of self

The 10 values are further grouped into four higher order value types: Self-Transcendence, Conservation, Self-Enhancement and Openness to Change, each containing two or three of the 10 values (3). Values under the same higher order value types are theorized to share similar meaning (Schwartz, 1994). For example, the value of benevolence is interrelated with universalism, conformity and tradition, constituting the higher-order value of self-transcendence. This value is considered to be opposed to and in tension with the value of self-enhancement; likewise openness to change and conservation.

Research approach

This research builds on the proposition that the values held by individuals will interact with their context, the type of contract strategy that they are working within, and thus affect motivation and performance and thereby supporting or interfering with the relationship management process by inducing either collaboration or conflict. Hence, the interaction of motivation values and contract strategy are investigated through statistical analysis of responses from individuals on 98 projects and the findings explained by reference to case studies and interviews undertaken during the study. Thus, the study has been triangulated but the data cannot be fully presented here due to space constraints.

The first step in the analysis was to check the scale reliability and validity, although Schwartz has argued (*op cit*) that his scale is universally applicable. The relationship between motivation values and contract strategy was then empirically investigated and the results discussed with reference to the interviews and case studies.

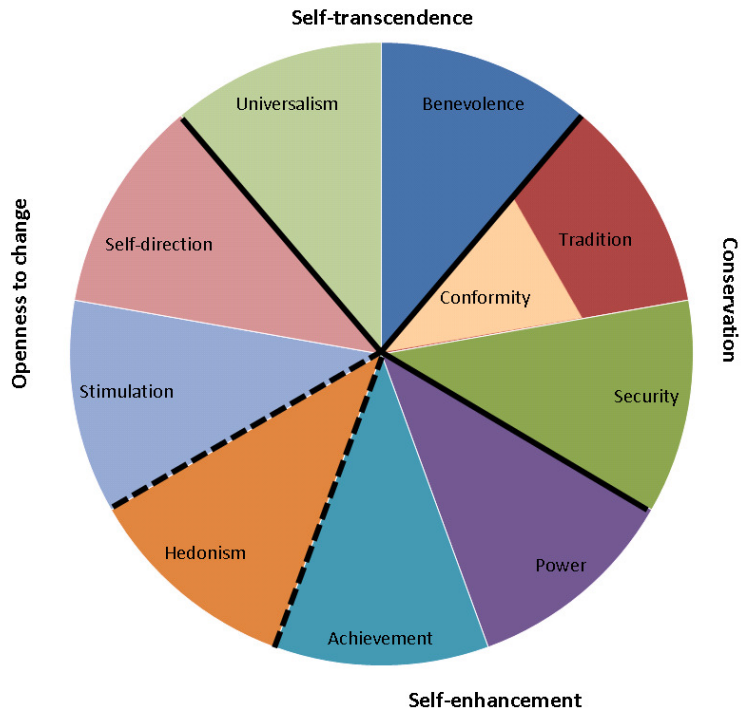


Figure 3: Value Types and Motivation Values (Schwartz, 1994)

Scale Reliability and Validity

Reliability analysis for the 10 motivation values was carried out. Out of the ten motivation values, *stimulation*, *tradition* and *security* have Cronbach's alpha less than 0.70, suggesting the items measured in these three values are not highly correlated and the value dimensions do not have high internal consistency.

Table 2: Scale Reliability and Validity - Motivation Values

Motivation Values	Cronbach's alpha	Motivation Values	Cronbach's alpha
Power	0.781	Universalism	0.786
Achievement	0.735	Benevolence	0.728
Hedonism	0.788	Tradition	0.597
Stimulation	0.627	Conformity	0.748
Self-direction	0.741	Security	0.619

Tables 2 & 3 and Figure 3 show the survey results of value dimensions of Australian construction professionals. The most important value for Australian construction professionals is *benevolence* (goodwill for work colleagues), followed by *self-direction* (independent thought and action), *achievement* (personal success) and *conformity* (self-restraint). Schwarz (2005a) states "Benevolence and conformity values both promote

cooperative and supportive social relations. However, benevolence values provide an internalised motivational base for such behavior. In contrast, conformity values promote cooperation in order to avoid negative outcomes for self.” Hence, one might draw the conclusion that benevolence is an appropriate trait to display in promoting both relationship management and supply chain sustainability and that this appears to be a dominant value in the Australian construction profession sample. However, further analysis in relation to contract strategy is revealing.

Table 3: Mean, Median and Standard Deviation of Australian Professionals on the Subdimensions of the Schwartz Value Survey

	Mean	Median	Standard Deviation
Power	3.227	3.250	1.307
Achievement	4.791	5.000	.935
Hedonism	4.367	4.333	1.307
Stimulation	4.483	4.333	1.075
Self-direction	4.822	4.333	1.075
Universalism	4.434	4.375	.834
Benevolence	5.147	5.200	.723
Tradition	3.545	3.400	1.066
Conformity	4.739	4.750	1.020
Security	4.639	4.700	.866

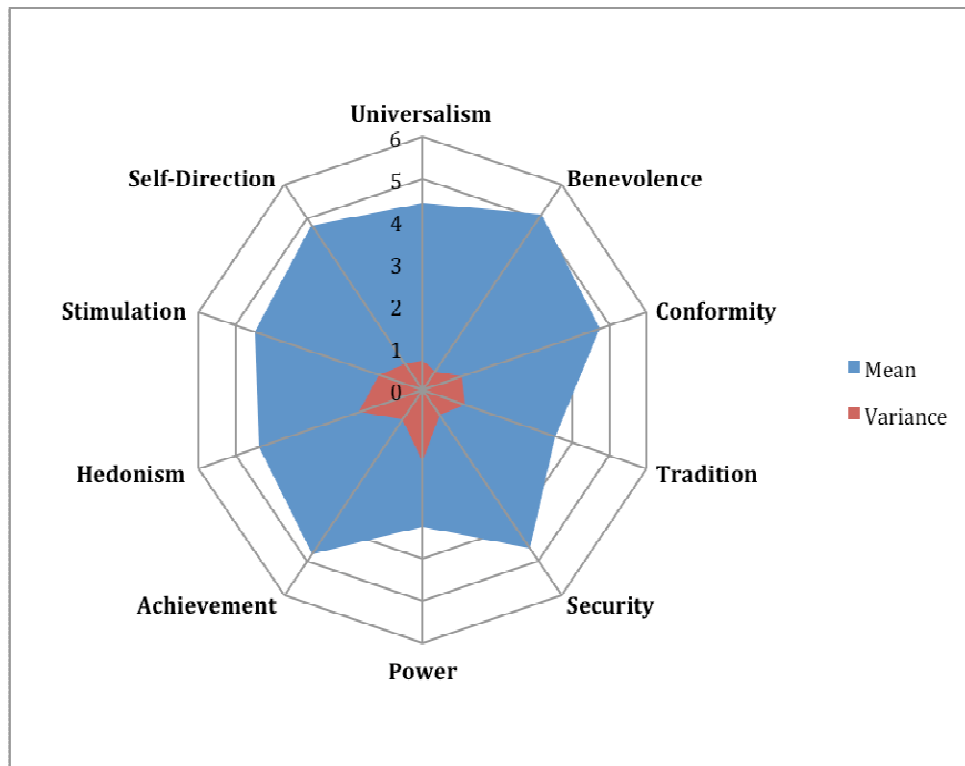


Figure 1: Australian Professionals' Value Dimensions

Motivation Values by Contract Strategy

Table 4 indicates that there is no significant variance difference in the mean motivation values, except *Self-Direction*, between each group.

Table 4: Test of Homogeneity of Variance - Motivation Values between Contract strategies

	Levene Statistic	df1	df2	Sig.
Security	.804	6	91	.569
Conformity	.482	6	91	.820
Tradition	1.336	6	91	.249
Benevolence	.178	6	91	.982
Universalism	.669	6	91	.675
Self-Direction	2.495	6	91	.028
Stimulation	.788	6	91	.582
Hedonism	.298	6	91	.937
Achievement	1.059	6	91	.393
Power	.604	6	91	.726

Results of ANOVA show how each of the motivation values varies with contract strategy as shown in Table 5. These result suggest that there is a significant difference in *Conformity* between different contract strategies ($p<0.05$). However, when sample sizes and variances are unequal, the Welch statistic is more powerful than the standard *F* or Brown-Forsythe statistics. The robust tests of equality of means suggest there is no significant difference in *Conformity*, but significant difference in *Self-direction* ($p<0.05$) between different contract strategies (Table 6). A post-hoc test was carried out to identify which groups are different. The test shows that RPC form is significantly different from ECI form, with a mean difference of -.980 and a *p* value of .037, with an *ES* of -.841. Self direction reflects independent thought and action and is exhibited in decisive actions such as choosing, creating and exploring

Table 5: Motivation Values by Contract strategies - ANOVA

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Conformity	Between Groups	13.580	6	2.263	2.357	.037
	Within Groups	87.374	91	.960		
	Total	100.953	97			
Self-Direction	Between Groups	8.254	6	1.376	1.921	.086
	Within Groups	65.181	91	.716		
	Total	73.435	97			

Table 6: Motivation Values by Contract strategies – Robust Test of Equality of Means

		Statistic ^a	df1	df2	Sig.
Conformity	Welch	2.353	6	22.049	.066
	Brown-Forsythe	2.399	6	40.095	.045
Self-Direction	Welch	2.851	6	22.179	.033
	Brown-Forsythe	2.060	6	43.773	.078

^a Asymptotically F distributed.

Results on how *Self-Direction* may vary with contract strategy are shown in Table 7. Findings suggested there are significant differences in the degree of *Self-Direction* with different contract strategies ($p<0.05$). the post hoc test using Games-Howell reveals that professionals who work on RPC projects have significantly lower levels of self-direction than professionals who work on ECI projects. On the other hand, professionals from D&C, Minor Works, RCC, RCC (RM) and Alliance projects do not statistically differ in their level of self-direction.

Table 7: Motivation Values (Self-Direction) by Contract strategy

Motivation Value	Contract strategy (# of cases)							ANOVA (Welch)	
	D&C (4)	Minor Works (8 ^a)	RPC (10)	RCC (10)	RCC (RM) (26)	ECI (10)	Alliance (30 ^a)	df1, df2	F
Self Direction									
Mean	5.45	4.95	4.34	4.88	4.58	5.32	4.89	6, 22.179	2.85 [#]
S.D.	.37	.40	.59	.76	.79	.25	.49		

DISCUSSION AND CONCLUSIONS

The finding that the motivation value of self-direction is strongly correlated with ECI projects is interesting and fits in with the notion that ECI involves both high degrees of collaboration and exploration of alternatives at a stage in the project process where ideas can be “tossed around” and solutions developed. When this is combined with the motivational value of benevolence this provides an ideal context for collaborative working and inclusion of the supply chain. This proposition is backed up from the case study and interview data. That the converse relationship exists for RCP (hard dollar contracts) is then no surprise with the focus being on delivering a set product for a fixed price with no scope for exploration nor any perceived need to include the supply chain. This was again backed up from evidence in the interviews.

From the questionnaire survey it was found, but not reported in detail here, that project teams with strong inter-organisational influences, easy access to information, strong personal acquaintance and frequent group communication are found to have good understanding of organisational structuring and communication. Principal Contractors and project stakeholder groups generally exhibited medium to high levels of consensus. When disagreements arose, the most frequently used resolution method was by directly confronting the issues. As expected, the more often professionals directly confronted issues, the less likely professionals were to avoid or smooth over issues.

Professionals communicated by telephone conversation mostly, followed by face-to-face discussions. Quality of communication between Principal Contractors and project stakeholder groups was found to be highly satisfactory. Findings suggest that good communication quality and strong personal acquaintance result in high levels of agreement. There was an fair degree of agreement between Principal Contractor and project stakeholder groups.

Findings indicate that alliance and Early Contractor Involvement (ECI) projects achieve higher performance effectiveness at short-term as well as long-term levels than projects with either no or partial relationship management adopted as a management strategy. The motivation values of self direction and benevolence were to be found in such project teams and, taking a context dependent view, were instrumental in bringing about supply chain inclusion and, hence, the prospect of sustainability.

Out of the four most important values indicated by Australian construction professionals, no significant relationship was found between *benevolence* and any organisation variables. On

the other hand, *self-direction* related significantly with level performance effectiveness, particularly the longer term view of the company's strategic direction.

ACKNOWLEDGEMENTS

The authors acknowledge funding provided by the Research Grants Council of Hong Kong (grants 716606 & 715807) in enabling this research.

LITERATURE

- Akintoye, A., McIntosh, G., and Fitzgerald, E. (2000). "A survey of supply chain collaboration and management in the UK construction industry." *European Journal of Purchasing & Supply Management*, 6, 159-168.
- Allen, N. J., and Meyer, J. P. (1990). "The measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organisation." *Journal of Occupational Psychology*, 63, 1-18.
- Barney, J. B. (2001). "Resource based theories of competitive advantage: a ten-year retrospective on the resource based view." *Journal of Management*, 27, 643-650.
- Blau, P. M. (1963). *The Dynamics of Bureaucracy*, University of Chicago Press, Chicago.
- Berry, L. L. (1983). Relationship marketing. In L. L., G. Berry, L. Shostack & G. Upah (Eds.), *Emerging Perspectives on Services Marketing* (pp. 25-28). Chicago, IL: American Marketing Association.
- Bresnen, M. (2007). "Deconstruction partnering in project-based organisation: seven pillars, seven paradoxes and seven deadly sins." *International Journal of Project Management*, 25, 365-374.
- Bresnen, M., and Marshall, N. (2000). "Motivation, commitment and the use of incentives in partnerships and alliances." *Construction Management and Economics*, 18(5), 587-598.
- Cheung, Y. K. F., Rowlinson, S., Jefferies, M., and Lau, E. (2005). "Relationship contracting in Australia." *Journal of Construction Procurement*, 11(2), 123-135.
- Cheung, Y. K. F. (2006a). *Relationship management in the Australian construction industry - a grounded study*. Paper presented at the Symposium on CIB W92: Sustainability and value through construction procurement, Digital World Centre, Salford, UK.
- Cheung, Y. K. F. (2006b). *A study of determinants of effectiveness in relational contracting*. Master by Research, Queensland University of Technology, Brisbane.
- Cheung, Y. K. F. (2009). *Joint venture behaviour in construction industry - an Australia case study*. Paper presented at the Fifth International Conference on Multi-National Joint Ventures for Construction Works, Kuala-Lumpur.
- Cheung, Y. K. F., & Rowlinson, S. (2007, September 23-26). *Supply chain engagement through relationship management?* Paper presented at the Symposium on CIB W92: Building Across Borders, Hunter Valley Gardens, Newcastle, New South Wales, Australia.
- Construction Industry Institute. (1991). In Search of Partnering Excellence (Vol. Special Publication, pp. 17-21). Austin, TX: Construction Industry Institute.
- Dainty, A. R. J., Briscoe, G. H., & Millett, S. J. (2001). New perspectives on construction supply chain integration. *Supply Chain Management: An International Journal*, 6(4), 163-173.

- Dainty, A. R. J., Bryman, A., & Price, A. D. F. (2002). Empowerment within the UK construction sector. *Leadership and Organization Development Journal*, 23(6), 333-342.
- Giannakis, M., Croom, S., & Slack, N. (2004). Supply chain paradigms. In S. New & R. Westbrook (Eds.), *Understanding supply chains* (pp. 1-22). Oxford: Oxford University Press.
- Grönroos, C. (1996). Relationship market: strategic and tactical implications. *Management Decisions*, 34(3), 5-14.
- Khalfan, M. M. A., & McDermott, P. (2006). Innovating for supply chain integration within construction. *Construction Innovation*, 6, 143-157.
- Kumaraswamy, M. M., and Matthews, J. (2000). "Improved subcontractor selection employing partnering principles." *ASCE Journal of Management in Engineering*, 16, 47-57.
- MacNeil, I. R. (1978). "Contracts: adjustment of long-term economic relations under classical, neoclassical and relation contract law." *Northwestern University Law Review*, 854-905.
- Maslow, A. H. (1970). *Motivation and Personality* (2nd ed.). New York: Harper and Row
- Murray, M., Langford, D., Hardcastle, C., & Tookey, j. (1999). Organisational Design. In S. Rowlinson & P. McDermott (Eds.), *Procurement Systems: A Guide to Best Practice in Construction*. London: E & FN Spon
- Rousseau, D. M., and Parks, J. M. (1993). "The contracts of individuals and organizations." *Research in Organizations' Behaviour*, 55, 1-43.
- Rowlinson, S., and Cheung, F. (2002). "Review of the concepts and definitions of the various forms of relational contracting (2002-022-A)." CRC for Construction Innovation, Brisbane, Australia.
- Rowlinson, S., and Cheung, Y. K. F. (2005). "Culture Project - Final Report." Cooperative Research Centre for Construction Innovation, Brisbane, Australia.
- Rowlinson & P. McDermott (Eds.) (1999) *Procurement Systems: A Guide to Best Practice in Construction*. London: E & FN Spon
- Schwartz, S. H. (1992a). Strategic leadership competencies: an introduction. In R. L. Philips & J. G. Hunt (Eds.), *Strategic Leadership: A Multiorganizational-level Perspective*. Westport, CT: Quorum.
- Schwartz, S. H. (1992b). Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries *Advances in Experimental Social Psychology* (Vol. 25, pp. 1-66). United Kingdom: Academic Press Limited.
- Schwartz, S. H. (1994). Are the universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(4), 19-45.
- Sheth, J. N. (1994). *The domain of relationship marketing*. Paper presented at the Second Research Conference on Relationship Marketing, Centre for Relationship Marketing, Emory University, Atlanta, G.
- Sheth, J. N., & Sisodia, R. (2002). Marketing productivity: issues and analysis. *Journal of Business Research*, 55(5), 349-362.
- Shirazi, B., Langford, D. A., & Rowlinson, S. M. (1996). Organizational structures in the construction industry. *Construction Management and Economics*, 14, 199-212.
- Sidwell, A. C. (1990). Project management: dynamics and performance. *Construction Management and Economics*, 8, 159-178.
- Van de Ven, A. H., and Ferry, D. H. (1980). *Measuring and Assessing Organizations*, Wiley, New York.

- Walker, D., & Hampson, K. (2003). Enterprise Networks, Partnering and Alliancing. In D. Walker & K. Hampson (Eds.), *Procurement strategies: a relationship-based approach* (pp. 30-70). UK: Blackwell Science Ltd
- Walker, D. H. T., and Rowlinson, S. (2009). *Procurement Systems - A Cross Industry Project Management Perspective*, Taylor & Francis, London.
- Winch, G. M. (2000a). Innovativeness in British and French construction: the evidence from Transmache-Link. *Construction Management and Economics*, 18(7), 807-817.
- Winch, G. M. (2000b). Institutional reform in British construction: partnering and private finance. *Building Research & Information*, 28(1), 141-155.
- Winch, G., Millar, C., and Clifton, N. (1997). "Culture and Organisation: The Case of Transmanche-Link." *British Journal of Management*, 8, 237-249.
- Wood, J., Wallace, J., & Zeffane, R. M. (2001). *Organisational Behaviour: A Global Perspective*. Australia: John Wiley & Sons Australia Ltd