# A CRITICAL REVIEW ON THE ORGANISATIONAL STRUCTURE, CULTURE AND COMMITMENT IN AUSTRALIA CONSTRUCTION INDUSTRY

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## ABSTRACT

This paper reports the findings of a survey undertaken with a government department in Queensland Australia.  It focuses on the perceptions of professional personnel and mismatch is found in both organisational structuring and organisational culture developed in the department.  The level of commitment was also found low in all three dimensions – normative, continuous and affective.   The findings in the survey are discussed and explored with reference to Hofstede's culture concepts.  Emerging lessons which come from the survey and subsequent interviews that are backed up by the case studies undertaken are also presented.

Keywords: structure, culture, commitment, public sector, Australia.

## BACKGROUND

The implicit link between organisational culture and organisational performance has long been recognised in both mainstream management literature (Handy, 1985; Hofstede, 1980) as well as in the construction management literature (Liu and Fellows, 2001; Rowlinson, 2001).  Within the construction research domain, the impact of culture and organisation on construction performance is becoming an increasingly important topic for the establishment of a sound partnering or alliancing approach to projects.  However, it sis generally accepted that the construction industry has a stronger preference for distrust rather than the full benefits of cooperation (Wood and McDermott, 1999) despite successful sustainable relationships rely on relational forms of exchange characterised by high level of trust, which triggers the urgency of culture change to bring about increased cooperation between parties on a long-term basis.

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Partnering, alliancing and relational contracting have been introduced to the construction industry in the 20 century. However, the efficacy of alliancing has so far produced mixed results and this research aims to shed light on the practice and pre-requisites for alliancing to be successful: see Bresnen and Marshall (2000a,b,c) for example. A number of characteristics have been identified in recent studies e.g. Rowlinson (2001), Winch *et al*. (2000; 1997) which addressed innovation and change in the context of the working relations in project organisations. The main parameters identified as being significant in shaping how an organisation performed and the spirit within the organisation were: Organisational culture; Organisational structuring; Commitment and Culture.

Despite initial scepticism by the project participants concerning the measurement instruments it was found that the research results, as explained in the questionnaire responses, provided a good picture of the problems and issues facing the organisation. By using independently collected data it was possible to verify the thinking of key individuals in the organisation as to the strengths and weaknesses of the systems currently in place. As a consequence, the organisation has been able to move forward confidently in the expectation that the changes and solutions it is putting in place are soundly based in fact, and not just opinion.

The objective of this research is to investigate the impact of the various cultural variables on project performance, which then allows patterns, in which alliancing contracts work and other patterns where traditional contracts work, to be defined. The research was carried out by investigating the organisational structure, culture and commitment in a large public sector organisation in Queensland Australia and to identify the key issues affecting project performance. In order to do so, an audit was carried out to find out where the organisation currently stands, along with questionnaires, interviews and case studies which were conducted in order to validate the results. Hence, the study was triangulated and the results presented here distil the key research issues and findings that came from this particular piece of research.

## ORGANISATIONAL CULTURE – TASK VS. ROLE

Task culture is found to be more preferable by the professionals in the organisation. According to Handy (1985), task culture is best suited to groups, project teams or task forces which are formed for a specific purpose, which very much describes the job nature in the public sector organisation. Individuals in the organisation belong to his/her own project team for each project and are highly likely to work with a different team of people in each new project.

Task culture can be found where the market is competitive, the product life is short, speed of reaction is important. In this instance this fits well with the organisation as the participants generally work as a team, a project team. The participants form as a team for a specific purpose, the project. Also, achievement is judged by results, success of the project. Lastly, the work relationships within the team are emphasised. However, when the results were analysed further it was found that the culture that was perceived to exist within the organisation was in fact a role culture.

Role culture is often found where economies of scale are more important than flexibility or where technical expertise and depth of specialisation are more important than product innovation or product cost. In this context it is apparent in bureaucracy; heavy reliance on procedures and formal authority; and long product life i.e. the department still exists when projects (e.g. roads, bridges, schools, residential blocks, hospitals) have finished. Professionals in the organisation would not expect to be abandoned after each project completion and see their future as being tied into the continued existence of the parent organisation rather than individual projects. Hence, the existing structuring, necessary for a large public sector organisation to work effectively is fundamentally at odds with the needs of short term project organisations. This paradox is not new but is one that many organisations find difficult to cope with in terms of their organisation and employee satisfaction and needs to be recognised as an important issue that must be addressed, even if it cannot be optimally resolved.

The mismatch identified here can be seen to have an effect on issues such as commitment and structuring. Such mismatches are not uncommon in organisation which have the conflicting objectives of long term employment, service and systems but which also need to be involved in relatively short term projects.

## COMMITMENT – AFFECTIVE, NORMATIVE AND CONTINUANCE

The same group of professionals was questioned at the same time on the concept of commitment, using Meyer and Allen's (1997) affective, continuance and normative commitment scales. Both affective commitment (emotional attachment to the organisation) and normative commitment (acceptance of the organisation's set of values) were found to be a little stronger than continuance commitment (costs of leaving the organisation outweigh the opportunity costs of staying). However, all scores are rather "middling", indicating a "non-committal" level of commitment. It is interesting to note that these scores are still substantially higher than those reported by Rowlinson (2001) in his study of Architectural Services Department (a public sector organisation) in Hong Kong. A relational contracting approach cannot succeed if the collaborating organisations do not accept its ethos. Hence, commitment to the goals and objectives of the organisation is crucial in implementing new approaches to contract strategy.

## ORGANISATIONAL STRUCTURE – DEVELOPMENTAL VS. SYSTEMATISED

The type of the structuring prevalent in the organisation was explored using Van de Ven and Ferry's (1980) organisational assessment. This is to relate to the nature of the tasks being undertaken by the organisation, with a view to identifying mismatches. Again, the same group of professionals was questioned, together with further questioning, by means of a sub-questionnaire, sent out to another group of professionals (here-in-after called Other Units), who had work relationships with the respondent in the past six months, as identified in the main questionnaire. The aim of

this was to explore the quality of relationships and depth of communication within the project team.

Van de Ven and Ferry (1980) suggested that organisational units that undertake work at high levels of difficulty and variability adopt what they termed a developmental group mode. Table 1 presents the hypothesised patterns of their three design modes in complex organisations. A developmental group mode is aimed at creating a programme for handling tasks, problems or issues that have not been encountered before, and/or are sufficiently difficult or complex, which require further work for solutions. It is also suggested that a developmental programme consists of (1) general goals or ends to be achieved in a specified amount of time, leaving unspecified the precise means to achieve them, and (2) a set of norms and expectations regarding the nature of behaviour and interactions among group members. The characteristics mentioned above seem to fit in with the organisation's mission very well. One of the major roles of the organisation is to be part of the project team in a construction project, including being able to react to unforeseeable events which occur during the project, whether these events have natural or man-made causes. It is also common not to have the project thoroughly strategically planned and specified at the outset, particularly when dealing with complex "multi-clients", as often happens with this public sector organisation. Based on the facts and characteristics described above, a developmental group mode is seen as being the most appropriate design mode for the organisation.

| | Systematized Impersonal Mode | Discretionary Personal Mode | Developmental Group Mode |
|---|---|---|---|
| **Difficulty & Variability of Tasks, Problems, Issues Encountered by subsystem –** | **Low** | **Medium** | **High** |
| **Salient Dimensions of Managerial Subsystem** | | | |
| 1.  Organizational Referent | Central information systems | Hierarchy & staff | Coordination committees |
| 2.  Coordination and Control by: | Rules, plans, schedules | Exceptions to hierarchy | Mutual group adjustments |
| 3.  Resource & Information Flows among Organizational Levels, Units, & Positions: | | | |
|     a.  Direction | Diffuse | Vertical | Horizontal |
|     b.  Amount | High | Medium | Low |
|     c.  Standardization & Codification | High | Medium | Low |
| 4.  Perceived Interdependence among Components | Low | Medium | High |
| 5.  Frequency of conflict among Components | Low | Medium | High |

**Table 1  Hypothesised Patterns of Systematized, Discretionary and Developmental Modes in Complex Organisations** (extracted from Van de Ven and Ferry, 1980, p. 368-369)

Using the results generated from the survey, Table 2 is developed to test the hypothesised patterns suggested by Van de Ven and Ferry. It is noticed that although the organisation was initially expected to follow the logic of developmental group mode, in reality, the logic of systematised mode is more closely followed (although it is apparent from Table 2 that the mode displayed is to some extent a hybrid). This again reflects the results emanating from Handy's instrument but, as Van de Ven has

written extensively on organisational change, he does provide us with a useful set of tried and tested methods (tools) to bring about an appropriate organisational change and to measure the degree of change over time.

The average frequency of conflict for both public sector organisation and Other Units is found to be low. There is no correlation between degree of personal acquaintance and frequency of conflict; the nature of the construction industry is such that it allows conflicts or disagreements to appear during work due to uncertainties, and misunderstanding or misinterpretation.

| | Systematized Impersonal Mode | Discretionary Personal Mode | Developmental Group Mode |
|---|---|---|---|
| **Salient Dimensions of Managerial Subsystem** | | | |
| 1. Organizational Referent | Central information systems? | Hierarchy & Staff? | |
| 2. Coordination and Control by: | Rules, plans, schedules | | |
| 3. Resource & Information Flows among Organizational Levels, Units, & Positions: | | | |
| a. Direction | Diffuse? | | |
| b. Amount | | | Low |
| c. Standardization & Codification | High | Medium | |
| 4. Perceived Interdependence among Components | | | High |
| 5. Frequency of conflict among Components | Low | | |

**Table 2 Hypothesised Patterns of Design Mode in the Government Organisation**

An explanatory conclusion can be drawn from the findings above. The professionals, in theory, should be following a developmental group mode and do prefer working in a task culture but are actually in a role culture and follow the systematised mode. Hence, the results support one another. It would appear that there is a mismatch between how the organisation in general operates, the role model, and what those working in the project side of the organisation actually want to be and to achieve – the task model.

When disagreements arise, the most frequently used resolution method was by an open exchange of information about the conflict or problem and a working through of differences to reach a mutually agreeable solution. A significant correlation is found between effectiveness of working relationship and frequency of conflict from the government organisation, suggesting the lower the effectiveness of working relationship, the higher frequency of conflict. However, there is found no significant correlation with Other Units on the tested variables. The resolution of disagreements reflects an intra-organisational partnering/alliancing approach within the organisation. This suggests that a social infrastructure already exists within the department which is in harmony with relational contracting approaches and this should be further nurtured and documented as a learning and skills issue.

Face-to-face talks were found to have a high correlation with the effectiveness of the public sector organisation's working relationship with other parties. One common behaviour observed from successful alliancing projects or projects using relationship management is frequent, frank, face-to-face talks between parties. Issues or foreseeable problems are often resolved before conflicts arise, allowing relationships between parties to be nurtured and sustained. This is the essence of relational contracting. One interviewee pointed out face-to-face talks or meetings as being an issue for project teams due to distance between parties, physical meetings are not feasible and telephone conferences are used instead. With today's technology, one suggestion to achieve some of the benefits of face-to-face talks is to carry out video conferencing or use *Netmeeting*® or similar via the internet. Although physical presence does not exist, these technologies do allow behaviour or body language of the other party to be observed. Of particular importance is the role of external consultants in this process and attention should be applied to bringing them into this loop.

A very strong correlation is found between consensus and quality of communication, indicating there is a higher degree of agreement in situations when it is easier to get ideas across, whereas a positive correlation is found between difficulty getting in touch and hindered performance in Other Units. This is purely a consequence of the nature of construction in that all works are inter-related. For example, there being a problem on the quality of concrete, consent is required from the person-in-charge from the department. Should the person not able to be reached in a day, work will then be delayed for one day and so on. Quality of information flow has always been crucial in the project team. Such is again confirmed by the positive correlation between difficulty in getting ideas across and frequency of dispute, suggesting a poor quality of communication often leads to a higher frequency of dispute. All of these issues have surfaced as anecdotal evidence in case studies and reinforce the issue of face-to-face meetings.

Significant correlations are found between variability of resource flow and standardisation of relationship. This suggests that a higher degree of official communication channels and standard operating procedures, rules and policies, a higher uniformity of resource flows may well in fact lead to a higher frequency of interruptions and problems encountered in transferring work objects and materials between parties. A more formal and standardised relationship does not necessarily lead to more uniform resource flows. More problems or interruptions might well be encountered (the view was expressed that not everything can be "solved" or "clarified" or "problems reduced" by having everything down in black and white, in fact the opposite attitude pertains. The number of rules and procedures does not run in parallel with improved relationships). Thus, these findings back up the observations on organisational culture and organisation mode – a task culture and developmental group mode fit the needs of a project based organisation, albeit a temporary multi-intra-organisation, rather than the role culture and systematised mode which appear to be evident as the predominant cultures in the organisation. A theme that has emerged in this survey research and in the case studies is that the organisation's management of its own clients, the temporary multi-intra-organisation

that is imposed on it during projects, is a key issue in the whole project delivery process.

A positive correlation is found between the extent of commitment by the organisation and Other Units, suggesting that there is the potential to increase the extent of commitment by other parties if more evidence of commitment is made apparent by either the public sector organisation or Other Units.

The power of informal relations, intra-organisational alliancing even, is apparent from the survey results which show that the level of standardised relationship has a negative correlation with the equality of transactions, meaning the more formalised the relationship is, i.e. the more the agreement between parties is written down or contracted, the less acceptable are informal and collaborative problem solving with the other party which actually move the project forward.  This is further evidence that simple stated, but well run, relationship management contracts can be successful.

## CULTURE

A number of questions were asked which related to individual participants' cultural values.  Professionals in the organisation rate personal time, challenges at work and freedom to adopt own approach at work as very important for their ideal job.  However, working in a successful company and the size of the organisation is considered to be not so important or desirable.  It is agreed by the respondents that it is very important to have a good relationship with their direct superior.  Being consulted by their superiors is important, yet it is found less important than the immediate work place relationships.  It is suggested that although respondents work together in the same organisation, each idividual is engaged in various project teams.  One of the main philosophies in relational contracting is to have a good working relationship with the project team.

Respondents find they do not often feel stress at work.  Also, the majority disagree that a large corporation is a more desirable place to work than a small company, and theory X is strongly rejected – these all match nicely with what Hofstede suggested to be found in an organisation with a low masculinity index.  It is shown in the survey results that relationship and cooperation with co-workers are rated of high importance, yet the importance of having sufficient time left for one's personal life is rated the highest, suggesting work is less central in people's lives, which again coheres with an organisation with a low masculinity index as suggested by Hofstede.  It is also agreed by the majority that formal procedures should be retained in order to ensure both personal and firm's objectives are met.  The high uncertainty avoidance found in the organisation is again verified.

From the survey results and the data collected in the interviews with the respondents, the majority agree very much that personal relationships are an important aspect in managing projects.  One common statement obtained from the interviewees is they all find having a good personal relationship with their project team members helps to minimise the chance of conflicts during work.  Such observation is reinforced by the disagreement to the statement on "one must be will to sacrifice personal relationships

with members of the project team to ensure one's personal objectives are met". However, as noted earlier in this paper, the degree of personal acquaintance is found to be low. Also, the majority agree that personal relationships need to be sacrificed to ensure a successful project completion and to meet the firm's objectives. Suggesting after all, work is work, and with reference to earlier survey results, task culture is preferred by those in the organisation.

## CONCLUSION

The most obvious issue raised in this study is the mismatch between expectations of professionals in terms of organisational culture and structuring and how it is actually perceived in practice. It would appear that there is a mismatch between how the organisation in general operates, Handy's role model, and what those working in the project side of the organisation actually want to be and to achieve – the task model. Although the organisation was initially expected to follow the logic of Van de Ven and Ferry's developmental group mode, in reality, the logic of systematised impersonal mode is more closely followed. This situation is not uncommon in large organisations which have ongoing, long-term goals but which are also involved in many, short-term projects. However, as Van de Ven has written extensively on organisational change, he does provide a useful set of tools to bring about organisational change and to measure the degree of change over time. However, the issue of commitment needs to be addressed; levels of commitment are, at best, average in this survey.

That said, generally the results are found to be very promising. The level of awareness between the organisation and Other Units increases as the frequency of communication increases, a lesson to be re-learnt in those projects when communications fail. It is also noted that when there is a high domain similarity, the lower the amount of conflict that exists between parties. However, it is interesting to see that high productive relationships actually occur despite lower quality of communication. As mentioned previously, quality of communication here refers to difficulty in getting in touch and getting ideas across. It is often the case for a person to be involved in more than one project at the same time. One common issue pointed out by the participants from the public sector organisation in this survey is more face-to-face and continuing open communication is needed. To find time to get around the table and discuss is often a challenge, and this inability leads to problems such as late provisions or approvals, late response to queries, poor quality of response, cost and programme problems, opinions on design elements, etc these mostly relate to information flow issues. "Finding time" for communication seems to be a major issue in the organisation.

It was expected that there would be a correlation between resource dependence and frequency of communication. However, no significant correlation was found. It may well be that the frequency of communication remains at a high level, not necessarily high quality, due to the nature of the construction industry. No matter what the circumstances, site inspections will be carried out whether work is carried out by in-house personnel or contracted out; project meetings will still be held periodically e.g. partnering meetings and regular site meetings. A significant issue is that site meetings

and project meetings are held separately from partnering meetings/workshops, suggesting project teams in relationship management projects have more set meetings (higher frequency of communication) than traditional types of contract, allowing each party to become more familiar with other parties' goals and services and, perhaps significantly, for the communication to take place at all levels within the organisation. The organisational cross-sectional nature of the participants taking part in meetings in relationship management projects appears to have a positive impact on the quality of communication and information flow and is a stimulus to timely and appropriate action.

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