

AN INVESTIGATION INTO PERCEPTIONS OF CLIENT- PROFESSIONAL INTERACTIONS AT PROJECT INCEPTION: AN AUSTRALIAN CLIENTS' PERSPECTIVE: PILOT STUDY RESULTS

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There is a consensus between United Kingdom (UK) and Australian literature on the key factors that need to be addressed when clients and construction professionals are communicating at the project inception stage. The theoretical foundation to this research has already been established with key factors being identified. One of the objectives of this research pilot study, upon which this paper focuses, was to elicit the perceptions and experiences of construction clients, in Australia. The research method involved conducting a series of in-depth semi-structured interviews with 'experienced' construction client representatives, in Australia. Ethnographic software was used to code, sort and analyse the interview data. The data were analysed by comparing Australian clients' perceptions against each other to identify if any significant consensus existed. The results strongly support the key outcomes of the literature review, reinforcing the importance of: comprehensive project briefs; the use of appropriate procurement procedures; and the definition of client and professional roles, responsibilities and communication systems. The research impact is a greater understanding of the nature of formative client-professional interaction and relationship development, from the perspective of experienced clients.

Keywords: client, construction professionals, interaction, project inception.

INTRODUCTION

The objective of this paper is to report the second stage of a funded pilot study; the first being the investigation of client – professional interaction during the inception stage of project development from a theoretical (i.e. literature-based) perspective, reviewing both UK and Australian literature, to identify key issues (Gameson and Sher 2005). It begins by briefly re-stating the theoretical foundations to this research. Next the research method used to collect and analyse data to satisfy one of the project's research objectives, the collection of Australian construction clients' views, is explained. The results of the data analysis are then presented and discussed. Finally, conclusions, in the form of a comparison of theory with test outcomes, are outlined.

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CONSTRUCTION CLIENT ISSUES

The relationship between participants in a project process is the source of unpredictable behaviour that impacts upon project performance. Project processes involve many independent agents, interacting with each other in many different ways, creating situations of great complexity. The behaviour of each agent, while directed at the project objectives, is also influenced by their own agenda, and determined by a combination of *incentives*, constraints and connections (Groak 1992). One significant growth area, in the UK and in Australia, has been in the public sector's procurement of facilities using the Public-Private Partnerships (PPP), leading to longer term, possible multi-project, relationships between project participants (e.g. over 20 to 30 year design, build, finance and operate periods) and reinforcing the importance of creating efficient and effective project teams (Kumaraswamy *et al.* 2009). Effective relationships within a project team have been demonstrated to be directly related to improved performance (Walker, 1995; 1996). As Boyd and Chinyio (2006: xi) state, "*Buildings are conceived and then produced in the future allowing for great disjunctions as reality comes to meet expectation.*"

Major UK government funded reports from task forces have consistently identified the important role which clients play in construction projects. Latham (1994) noted that clients needed to be a driving force in implementing change and developing "best practice". The Egan report (DETR 1998), which reviewed and built upon the previous report by Latham (1994), found growing dissatisfaction with construction amongst both private and public sector clients. Projects were widely seen as unpredictable in terms of delivery on time, within budget and to the standards of quality expected. In Australia, a major catalyst in reviewing the Australian construction industry was the New South Wales government initiated Royal Commission into productivity in the building industry (Gyles 1992). At this time the industry was dominated by the use of more traditional procurement methods such as lump sum and package (design and build) methods (Kennedy *et al.* 2003). The commission identified issues such as significant time and cost over-runs due to adversarial relationships between parties involved in construction projects; findings which were not dissimilar to those the UK reports of Latham (1994) and Egan (DETR 1998). Gyles's report was instrumental in advocating the utilisation of alternative methods of procuring construction services, such as partnering; with the New South Wales government leading the way (Kennedy *et al.* 2003). The more recent Royal Commission (Cole 2002) has focused more upon industrial relations and trade union practices.

A number of authors, in the UK and in Australia, have highlighted key factors relating to early stage, project inception client requirements for construction projects, as summarised in Table 1.

Table 1: Summary of client requirement key factors: early stage / project inception

Gameson (1992)	Kamara <i>et al.</i> (2002)	Sidwell <i>et al.</i> (2002)
Site	The project	Cooperative project teams
Building requirements	The client	Client competency & commitment
Planning (legislation)	Client interest groups	Continuity of key personnel
Project organisation	Proposed use and users	Equitable risk allocation
Client organisation / policy	Facility functions / attributes	
	Facility acquisition, operation and disposal	

Having analysed literature and previous research in the UK and in Australia a number of key issues have emerged which form the basis of the test for one of the key objectives of this research pilot study (Gameson and Sher 2005). The key issues are:

- Factors influencing clients' decision to build and their decision-making processes;
- The definition of clients' requirement for their proposed facilities (i.e. a project brief);
- The appointment of professional advisors to assist clients in procuring their facilities;
- The determination of appropriate procurement processes and procedures (i.e. procurement systems and forms of contract);
- The definition of client and professional roles, responsibilities and communication systems, and,
- The debriefing processes to capture and disseminate experiences into new projects to improve processes and outcomes.

RESEARCH METHOD

The research method is now presented in the form of an over-arching aim and set of measurable objectives, followed by an explanation of data collection and analysis methods employed.

Research Aim

To compare the perceptions and experiences of Australian construction clients, and construction professionals providing services to such clients in Australia, against those in the United Kingdom (UK) construction industry.

Research Objectives

1. To conduct a critical review of literature relating to construction client and construction professional interactions, at the project inception stage, in order to identify key issues [THEORY];
2. To collect and critically analyse data from a sample of experienced construction clients, in Australia, in order to elicit their experiences of procuring facilities [TEST 1];
3. To collect and critically analyse data from a sample of construction professionals, in Australia, in order to elicit their experiences of procuring facilities [TEST 2];
4. To benchmark Australian clients' and construction professionals' experiences against UK client and construction professional experiences [TEST 3];
5. To discuss and compare theoretical constructs with the empirical research findings and draw conclusions [CONCLUDE].

Objective 1 of this research project has already been completed and published (e.g. see: Gameson and Sher 2005). The research, reported in this paper, relates to objective 2: Australian clients' experiences of procuring facilities.

Data collection

Data were collected by conducting in-depth semi-structured interviews with senior representatives of 6 large Australian construction clients, all of whom would, firstly, be classified as '*experienced*' (Gameson 1992) in the procurement of facilities, and, secondly, who focus their procurement on particular types of facilities.

This method of data collection was considered to be the most appropriate given the pilot nature of the research requiring the exploration of meaning (Haigh 2008; Naoum 2007). Details of the interviewees are summarised in Table 2 below:

Table 2: Summary of client interviewee details

Client Code*	Position in Organisation	Sector
CL1	Property manager	Retail: Shops
CL2	General manager - property	Transport Facilities
CL3	Development manager	Property Development
CL4	Managing director	Property Development
CL5	Development manager	Retail: Food
CL6	Property and projects manager	Local Government Facilities

* An identifying code was assigned to each client and their organisation to maintain their anonymity and ensure confidentiality.

The key issues identified from the literature (Gameson and Sher 2005) were developed into a set of interview questions. The questions were grouped into the following sections:

- **Section 1: General Questions.** Collects general information on the interviewees and their organisations (e.g. name, company, role) [3 questions].
- **Section 2: Background Information.** Collects data relating to the number, type and scope of projects that the interviewees are involved in [3 questions].
- **Section 3: Case Study Project Information.** Collects data relating to a typical construction project (e.g. facility type, location, cost, timescale, procurement method) [7 questions]
- **Section 4: Issue Identification.** Collects data relating to key issues identified from the literature: (a) decision to build [5 questions]; (b) project team and management [8 questions]; (c) briefing process (e.g. meetings and communication processes) [23 questions]; (d) detailed design and construction [6 questions]; (e) post-completion reflections [11 questions].

Consideration of ethical issues is particularly important when conducting interviews because, according to Easterby-Smith *et al.* (1991: 82), “...of the potential freedom within the interaction for exchanging information and interpretations.” Therefore the research method was submitted to, and approved by, the University’s ‘Human Research Ethics Committee’ before any potential interview participants were approached. The consent of all interview participants was obtained in writing before the interviews were conducted.

Data processing

All interviews were audio tape recorded and then transcribed. To expedite the analysis of the interview data a specialised computer software package was used. The ‘Ethnograph’ software is, “...a collection of procedures designed to enhance and facilitate the process of qualitative data analysis....the process of noticing, collecting and thinking about interesting things.” (Seidel 1998: 3)

Each interview question response was assigned a unique code word. The ‘Ethnograph’ software allows for all answers from interviewees, in this case six, to be retrieved so that the answers can be compared and analysed by identifying differences and similarities in the interviewees’ responses. An example of a screenshot of the software, showing an example of an output of the analysis of one question (question code word = CLQ21) is shown in Figure 1 below.

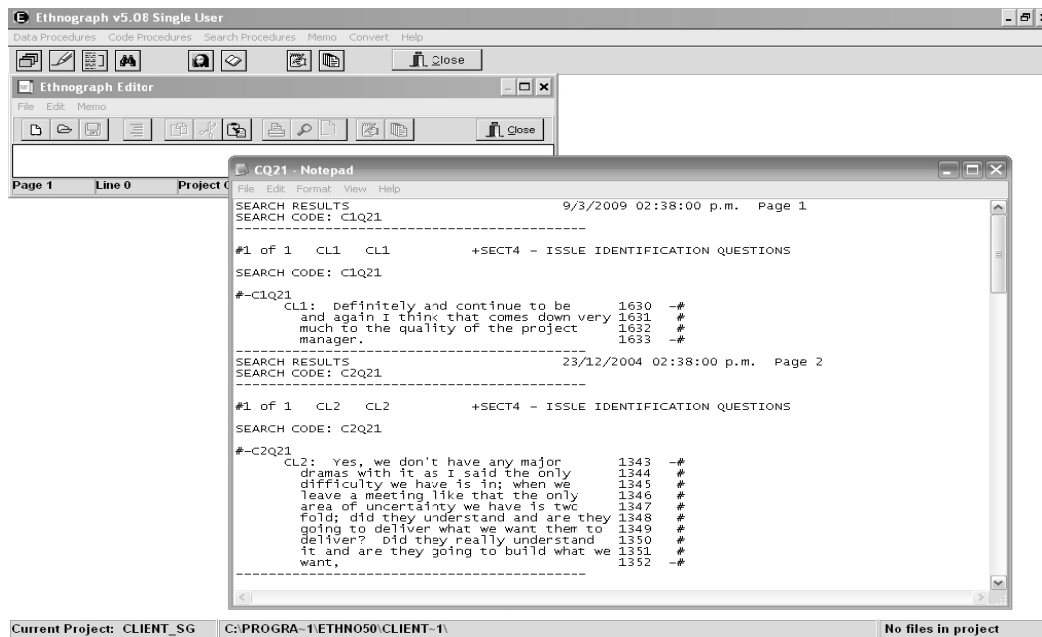


Figure 1: Screenshot of Ethnograph software showing processed data (Seidel 1998)

RESULTS

Results are presented from the analysis of the client interviewees' responses to the interview questions. The following sub-sections relate to the sections of the interview question schedule. Key issues identified in the analysis of data are summarised, presented and supported by, where appropriate, quotations from interviewees, shown in *italics*. All costs cited are in Australian Dollars (\$).

Section 1: General Questions

Data collected relating to this section is shown in Table 2. The 'Client Codes' (e.g. CL1) assigned in the table are used throughout this results section.

Section 2: Background Information

The number of construction projects that the clients were involved in each year varied from 3 to 4 new build up to 15 to 20 refurbishment / maintenance projects. Client [CL1] stated, *"...say over one million dollars we'd most probably have three or four per year. However, we also mostly do anything up to one hundred projects per year that vary in value maybe from twenty thousand to two hundred thousand."* The types of building projects included: retail, industrial, residential, commercial, restaurants and community / amenity. The scope of projects was also wide-ranging from \$20,000 up to \$85,000,000.

Section 3: Case Study Project Information

Interviewees were requested to put forward details of a typical / representative project which they had recently procured and completed. 5 of the clients were in the private sector and 1 was in the public sector, with building types ranging from apartments to community facilities. All clients mostly operated in the state of New South Wales, but 3 private clients also operated nationally and, in 2 cases, internationally. Typical project costs ranged from \$520,000 to \$12,000,000, with project durations from 5 months to 6 years. The majority of projects were procured using a standard fixed-price contractual arrangement, with selective contractor tender lists. 2 clients had used the construction management approach. One client [CL2] stated, *"We prefer to do a*

standard fixed type...but we do go to construction management where it is high risk, high cost and high uncertainty.” Other issues of relevance mentioned by clients included restricted sites, ground conditions and environmental factors.

Section 4: Issue Identification

(a) Decision to build

The clients’ decision to build was predominantly based upon one criterion: operational need – either for own use or for speculative development taking into account market conditions. For example one client [CL5] said, “...*we do a lot of analysis to find out where can we go ahead and build a new restaurant where the population growth and convenience is, where you can make money.*” Clients considered factors such as market needs (particularly for speculative projects) and finances. They also considered balancing operational needs and finances. One client [CL6] raised the issue of environmental considerations stating, “...*the design competition was won on the basis that the building would be a green building – that was a key criteria.*” Previous experience was a key factor in how all clients approached their projects. One client [CL1] used a construction management approach because of experience on a previous, similar project. With regard to alternatives to ‘new build’ three clients [CL1, CL2 and CL5] were now involved in both sell and lease-back and lease schemes; a significant departure from previous facility procurement strategies. One client [CL5] said that this was driven by cuts in capital expenditure.

(b) Project team and management

All of the clients stated that projects were driven by time, cost and quality issues. However, environmental issues were becoming more dominant; as client [CL2] said, “*we go beyond code to satisfy internal policies, particularly environmental*”. All of the clients produced briefs for their projects but to different levels of detail and through different processes; one client [CL2] normally received performance specifications from internal clients and then translated them into briefs with the assistance of consultants. All of the clients had in-house construction expertise, mostly in the form of project / development managers, and the majority of the clients had lists of preferred consultants and contractors with whom they worked on a regular basis. Most of the clients had project managers, either in-house or employed externally, to manage their projects. One client [CL5] said, “*Being the project manager no matter what is required to produce that job...I have to make sure that it happens.*” All of the clients had clearly defined project procedures including detailed programmes, milestones and definitions of responsibilities. Client [CL3] highlighted the importance of people, stating that, “*A computer can spit out a programme that’s extremely reliable until you actually give it to people to run – you need quality people with the ability to process information and work quickly.*” A single point of client contact was seen by all clients as being critical, albeit that this contact may be working on more than one project.

(c) Briefing process

The quality rather than the quantity of briefing meetings was identified by most of the clients as being crucial; with the client representative / project manager being present and active in all meetings. Client [CL3] said, “...*It’s important I’m there...the last thing I want to do is let consultants start making personal decisions... without keeping an eye on them.*” The majority of briefing meetings were held at the clients’ offices, with the clients’ project manager normally chairing the meetings, normally

systematically following a defined agenda. All clients agreed that although briefing meetings should be systematic they should normally be conducted in an informal atmosphere; *“I think people speak and communicate better when they’re relaxed and comfortable”* [CL5]. A wide variety of media were used during the briefing process to communicate between clients and professionals including sketches, CAD, written documents and verbal dialogue. Client [CL1] said, *“...a lot of professionals are incredibly capable of communicating something on a plan but they try to talk in big macro stuff....they’ve got the technical but not the interpersonal skills...so the project manager often has to act as a technical interpreter.”* Given that all of the clients interviewed were experienced they tended to dictate procurement system delivery methods to consultants. Client [CL2] said, *“...some consultants are design and construct people....we’re very wary of people like that and usually don’t go along with them.”* All of the clients were generally satisfied with how the briefing process was conducted on their projects. Minor issues of concern raised included: discontinuity in consultants’ staff and whether consultants sometimes understood the clients’ needs.

(d) Detailed design and construction

Clients were generally in agreement that their input was higher during design development than during the construction process, depending upon the procurement method used. For example, if a construction management approach was used, client involvement would be higher during construction as client risk is high. Some degree of variation was seen as inevitable during the construction phase, particularly on refurbishment / fit-out projects. Client [CL5] commented on time pressures affecting designs, *“...when consultants are put under time pressures there is a big difference in the quality of construction drawings and tender drawings.”* Clients emphasised the importance of regular feedback during design and construction project phases, mostly via regular meetings. Clear and concise outcomes / deliverables were considered by clients to be the most crucial information to be communicated to construction professionals, *“The information we want are: what are the deliverables, when they due and this are is how much it’s going to cost.”* [CL2]. Quality feedback, *“...genuine and honest...”* [CL1], from professionals was considered by clients to be essential.

(e) Post-completion reflections

All clients were in agreement that the completed facilities met their requirements satisfactorily. Client [CL1] stated, *“We do so many and most of them go like clockwork.”* Long term relationships with consultants appear to contribute to client satisfaction; *“...we do pay them well and we’ve had long term relationships with many of them...but we always try to provoke, push, feed back, help and advise them.”* [CL5]. Some clients referred to problems regarding standard contracts for procuring their projects; *“...many times in a project things go wrong the contract doesn’t cover.”* [CL2]. One client, [CL3], highlighted the importance of the client driving projects, *“...when people sit down with [CL3] there is a real comfort level that these guys will actually get this built.”* Achieving a balance was also identified as important by client [CL2], *“..when you set down a regimental structure and process, it has a strength and consistency and accuracy, but it also has a weakness in creativity and innovation.”* Client [CL3] stated that, with the benefit of hindsight, he would have had the project manager totally involved in the briefing process, *“...he needs to be there every step of the way for input and his ownership of the project.”* Given the long term, multi-project relationships that the clients have with consultants and contractors they tend to review projects post-completion with their professional teams.

Client [CL5] said, “*We always do a post opening audit on every single job, and feedback nationally on what did and didn’t work.*” Such reviews are often captured in ‘best practice’ manuals, leading to improvements in contractual procedures, cost savings and improvements in quality.

CONCLUSIONS

The results strongly support the key outcomes of the literature review, reinforcing the importance of: comprehensive project briefs; the use of appropriate procurement procedures; and the definition of client and professional roles, responsibilities and communication systems. The research confirms that experienced clients have clearly defined system and preferences for procuring their facilities which, if captured and documented, can be used to educate and assist less experienced clients. A recent report in the UK (Rethinking Construction Ltd. 2002), a follow up to the Egan report (DETR 1998), presents three main principles: client leadership; integrated teams through the supply chain and, respect for people. This research has confirmed the respect for people agenda is also strong in Australia. As client [CL5] stated, “*The biggest thing for us is just having a good rapport, relationship and conduct yourself with respect and decency.*”

The research impact is a greater understanding of the nature of formative client-professional interaction and relationship development, from the perspective of experienced clients.

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