PARTNERING PRACTICES: AN INVESTIGATION OF INFLUENCES ON PROJECT SUCCESS

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> Historically, traditional procurement systems have resulted in low levels of client satisfaction, owing mostly to poor cost and time predictability. Alternative approaches, including partnering and collaborative working have consequently been developed. This paper examines whether such collaborative approaches can deliver improvements in project procurement and management, and considers the extent to which partnering practices influence the success of building projects. Project success in this regard is measured in terms of cost predictability, programme implications, quality control, health and safety, risk management, teamwork and communications. A focus is made on the importance and influence of contractor selection processes within collaborative procurement, and what constitutes best practice in this regard. Exploratory interviews were conducted with a group of construction project managers who have had extensive experience with both collaboratively and traditionally procured construction projects. Coding and analysis of the resultant data indicated that collaborative procurement routes do have many advantages over traditional adversarial routes in most cases, but not all. Practitioners regarded the individuals deployed on projects having more influence on success than choice of procurement method. Projects were categorised as suitable or unsuitable for modern innovative procurement methods, dependent on a number of determining factors. There is support for the premise that partnering practices can potentially yield more benefits where projects are highly complex. Early supply chain involvement in design is required, and robust contractor selection processes are vital for collaborative procurement to be successful. Further research is proposed to expand the knowledge base around the range of suitable projects which may benefit from partnering approaches to procurement, in order to facilitate decisions in practice.

Keywords: collaboration, contractor selection, partnering, procurement.

INTRODUCTION

Perceived benefits of collaborative working could emanate from the early intervention of contractors, and include: early starts on sites, utilisation of contractors' management skills, buildability, contractors' procurement knowledge, supply chain knowledge, contractors' health and safety expertise, dispute avoidance, clients involvement in the procurement of subcontractors, reduced tender costs and improved team working between contractors and design teams (Latham 1994; Egan 1998; Tam 2000; Egan 2002; Hacket *et al* 2007). However some clients still consider that open and competitive procurement systems, that truly market test prices, are the only way to assure stakeholders of the lowest possible initial capital cost (Ross 2011); and in

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this economic context, 'partnering has not lived up to expectations' (Gadde and Dubois 2010).

Using value for money, quality, duration and cost predictability as key performance indicators, this study seeks to explore whether collaborative procurement routes deliver improvements and more successful outcomes for projects. Whilst there is a wealth of previous studies relating to partnering, this research is designed to be unique in specifically considering the importance and influence of contractor selection processes, barriers to successful implementation and the suitability of partnering for different project types.

LITERATURE REVIEW

Background to Partnering

The choice of procurement strategies on projects has long been a contentious issue within the construction industry. Banwell (1964) and Emerson (1962) outlined deficiencies within traditionally procurement methods and made recommendations for change, which included bridging the gap between design and construction and encouraging early contractor involvement in areas such as value management and buildability.

There is an argument that when companies enter into highly complex, uncertain and potentially risky projects as relative strangers, it is not surprising that in traditional procurement systems conflict and disputes frequently arise (Chan et al. 2004). Partnering, collaborative approaches and integrated teams seek to avoid conflict and disputes by increasing levels of co-operation and developing organisational relationships built on trust (Larsen 1997). It was thought that such early collaboration minimises disputes, reduces tender costs and improves team working practices (Egan 1998). Furthermore the benefits of collaboration have been argued to include an increase in profits brought about by sharing expertise, knowledge, ideas, innovation, best practice, and promoting efficiencies and improvements in decision making (Hansen and Nohria 2004). More recently, the Governments' Construction 2025 report "Industry Strategy: Government and Industry in Partnership" (HM Government 2013) emphasises the need for incentivising the extent and degree of collaboration on building projects, thus stimulating innovation and successful outcomes. The report also identifies low levels of innovation, low investment and uncertain demand as potential causes of limited collaboration and team integration. It finds that fractious qualities are embedded in the UK construction industry, emanating from low vertical integration and poor levels of design and management interface in the supply chain; thus limiting the scope for knowledge sharing across projects, hampering familiarisation and learning from experience.

Partnering has, however, attracted its critics and it is recognised that such collaborative approaches do not provide guaranteed mechanisms for successful projects (Marshall and Bresnen 2000). Morgan (2009), for instance, explains that on major capital projects, procurement routes that promote alliances and partnerships are not always appropriate and open to abuse owing to the scale of the commercial interests involved. Perhaps these perceived risks of abuse could explain why such collaborative working practices appear to be losing popularity in recent years (Challender *et al* 2013).

The importance of the selection processes has been well documented in previous literature when using collaborative procurement strategies to enable the appointment

of the most appropriate contractors; thus permitting the realisation of benefits of partnering through pro-activity, building team spirit, lateral thinking and exploring alternatives (The National Joint Consultative Committee 1996; Critchlow 1998; Government Procurement Group 1999). More recently the Governments' Construction 2025 report (HM Government 2013) reinforces this view and advocates that selection processes should carefully evaluate contractors' experience, skills, resources and expertise rather than simply appointing contractors on lowest tender price.

METHODOLOGY

Explorative in-depth semi-structured interviews (Gillham 2005) were held with six construction project managers from both contracting and professional consulting backgrounds in the Northwest of England from late 2012 to early 2013. This was intended as a sample of convenience and only project managers who could demonstrate considerable experience in partnering were included. This size of sample does not indicate universal findings but does provide insight into the perceptions of those construction professionals working in partnering arrangements.

A qualitative analytical approach was used to explore key themes, understandings and attitudes of those who work within this environment on a daily basis (Flick 2009). In order to obtain feedback on the data collection tool, and tease out any difficulties with the way it was designed and administered an initial pilot study was implemented.

The interviews were digitally recorded, transcribed verbatim and subsequently coded and sorted (Silverman 2001; Langdridge 2005). Examples of the main qualitative codes included contractor selection process, potential barriers to collaborative working, value for money and quality control. The raw data was then summarised in tables; codes were listed, themes developed, content analysis data presented, key literature sources identified, data consistencies and inconsistencies noted and propositions made (Taylor and Bogdan 1998). The table became a plan to develop a narrative to construct a contemporary picture of partnering and those influences on its success.

FINDINGS AND DISCUSSION

Although partnering can potentially create a less antagonistic and stressful working environment, facilitating better individual performance, and arguably better team and project performance according to the review of literature, it is still met with some scepticism from some of the construction professionals interviewed. Suspicion of realisable benefits has emerged from the research accordingly. For example, cost savings for clients from collaborative working are perceived by some of those interviewed as being exaggerated over time and certainly have not been realised on all projects. Whilst shared ethos built upon trust between partners is supported theoretically, according to those interviewed, rarely is there realisation in practice. Whilst the project managers found partnering can facilitate successful projects in some instances the study also uncovered negative experiences in sharing information, inequitable working relationships and prompt payment initiatives, leading to organisational mistrust in some extreme cases. Table 1 summarises the study findings based on similarities and inconsistencies with data from the review of literature and the narrative below offers potential explanations for these.

| Qualitative Themes | Literature Source | Observation, Proposition or Explanation | Data Inconsistencies | Data Similarities |
|--|---|---|--|---|
| Measurable Project Outcomes: Cost Predictability Reduced Programme | Latham (1994) HM Government (2013) | Value engineering from early contractor input could lower construction costs, especially on large complex projects. | Partnering can in some cases result in higher tender costs through less competition. | Greater familiarity with clients requirements Lower tender prices. |
| Quality Control | Egan(1998) Hacket et al (2013) Ross (2011) | Collaboration can increase fitness for purpose and client satisfaction. | Cost savings over exaggerated in the past. Project partnering less effective than strategic partnering. | Potential cost savings and shorter programme timescales. |
| Teamwork | Latham (1994) Egan (1998) Chan et al (2004) | Change of culture to partnering will increase fairness, teamwork and performance. | Choice of team more important than procurement route. Less scope on smaller projects. | Partnering can instil improved teamwork, job satisfaction and more effective relationships. |
| Client/Contractor Interface | Erikson et al (2010) Thuraujah et al (2006) | Selection of contractor paramount to client/contractor interface and overall project success | Collaboration can occur naturally outside partnering arrangements. | Robust selection processes to choose right partnering contractor for the project is critical. |
| Project Risks | Walker (2009) Marshall and Bresnen (2000) | Mitigation of project risks through early contractor dialogue/interface. | Reliance on trust could increase commercial risks in some cases. | Health and safety risks can be potentially 'designed out' through contractor's expertise. |
| Working Relationships | Critchlow (1998) Larsen (1997) | Reduced conflict and less emphasis on commercial approaches. | Blame culture may still exist if partners are not fully committed to collaboration. Partners may still | Confrontation is reduced and claims can be more effectively managed. Partnering |
| | | | not wish to share commercially sensitive information. | provides to right context for building longer term relationships |
| Importance and Reliance on Trust | Larsen (1997) Thuraujah et al. (2006) Cheung et al (2001) | More trusting relationships under partnering can improve communication, cooperation and problem solving. | Trust is equally important in traditional arrangements. Inequitable working relationships compromise trust. | Trust enhances collaboration and bonds teams together. Closer working relationships can provide right context for trust. |

Table 1: Qualitative themes and data analysis

Construction Cost Predictability, Value for Money and Client Risk

Most of the practitioners did support the some of the findings of Egan (1998) and Latham (1994) on improved cost predictability in partnering practices, which may

partly stem from establishing clients' requirements more comprehensively, especially at tender stage. They believed that early design intervention introducing innovation and considering alterative design options at the outset could potentially give rise to considerable cost savings in some cases but not all. Certainly on smaller scale projects of less than £5million they felt that potential reports of significant cost savings had become exaggerated over time. However, practitioners did concede that there is greater scope for value engineering on larger and more complex projects where, for example, specialist supply chain advice on sophisticated and specialist mechanical and electrical installations or working within live environments is required at an early stage. Another example was given by one of the project managers who referred to a new cladding system being introduced on a large high rise office project where potentially high costs associated with increased health and safety risks were prevalent. Recommendations provided by the specialist subcontractor on this project brought buildability benefits and associated cost savings.

There was a belief from those interviewed that collaborative processes in partnering arrangements can potentially provide more effective open book mechanisms for developing final contract sums with contractors, to ensure that tendering processes are fully transparent, fair and appropriate in most cases. They outlined that there are still too many instances of contractors in traditional contracts inflating the value of claims for variations. For this reason collaborative working under partnering may offer an alternative procurement route in managing such claims to lessen risks of overspend and potential contractual disputes. In this way commercial issues could possibly be identified earlier and addressed accordingly to avoid potential delays and protracted disputes through early dialogue and communication.

Some of the interviewees did, however, not share previously positive views of the other project managers and reported that collaborative working has been tainted by inequitable working arrangements which potentially give little or no benefits to partnering organisations. In some cases, anecdotal evidence was presented of organisations that suffered financially under partnering and such reports could reinforce fears and anxieties over risks within the industry, promoting a reluctance to move away from traditional working methods. Arguably this disparity of power between clients and other organisations may have allowed the former to use the power derived from scarcity of work in the construction sector to use a 'take it or leave it approach' and potentially to intimidate contractors into accepting unfair returns under the banner of a collaborative arrangement. The temptation to abuse power by construction clients to secure gains at the expense of others, appears to possibly have become too much to resist in some cases. The project managers felt that such a shift in philosophy during operational partnering frameworks, renders organisations highly vulnerable to exploitation as they are virtually held to ransom; to accept revised or reduced terms, or be cast back into 'the other' competitive cut-throat market place. Such exploitation through partnering frameworks may increase the risk of this procurement option, reducing its attractiveness and contributing to a reduction in willing partners. Other concerns emerged from the study including the potential fears or unwillingness of partners to share information that could be regarded as commercially sensitive in some cases.

Programme Timescales and Quality Control

The construction project managers generally agreed that specialist input and value engineered solutions at an early stage could shorten pre-tender periods whilst

enhancing quality control and greater client satisfaction. They also concurred with Walker (2009) and Erikson *et al* (2010) that procurement routes should be tailored to the nature of projects especially with the growing trend for more demanding deadlines and project outcomes in recent years where traditional procurement routes may be deemed less effective and unsuitable. Views were also presented that partnering could be more successful than traditional procurement routes where health and safety issues on projects represent greater risks to programme and quality. This was explained through the intervention of contractors at preliminary design stages with the associated benefits of early dialogue to address and overcome such issues.

The project managers reported that partnering on longer projects, which potentially involve sophisticated and challenging phasing and programming to best suit specific employer's requirements, could potentially offer more scope than traditional procurement routes in reducing overall project durations. This was explained in terms of enhanced teamwork and contractors working alongside clients with common objectives to achieve phased handover dates; especially when working within live building environments, where disruption to the overall end-users' operations is a key issue. In this way they concurred that construction programme timescales could possibly be improved at the early design stages by working with contractors to specify the most suitable and conducive materials and construction techniques to suit the nature of projects. Furthermore through improved team integration they considered that partnering has the potential to raise levels of quality and performance through reduced conflict, allow more efficient deployment of resources, increase job satisfaction and facilitate fewer defects on completion.

Suitability to Different Types of Building Project; Complexity and Specialism

The project managers concluded that partnering is best suited to large or complex projects where, in the early stages especially, the expertise of contractors in value engineering and project logistics would be extremely beneficial. As an example, one of the project managers interviewed referred to a refurbishment scheme on a museum which incorporated a sophisticated and complex mechanical and electrical installation. It was explained that the building services were designed around the specialist's requirements for a technologically advanced building management system. For this reason, partnering presented the most appropriate and suitable option to ensure that early interfaces of specialists' expertise were introduced early in the life of that particular project. Conversely where projects are less complicated the project managers deduced that benefits from partnering may be significantly reduced, since early contractors' specialist advice may represent essential rather than desirable inputs. This tends to confirm findings from Hacket et al (2007) and Egan (1998) that for some simpler projects, collaborative procurement routes may not be a suitable option, particularly where contractors and subcontractor's expertise and inputs in the early design are less critical.

The duration of projects may also have some influence over the success of partnering in practice. For instance one of the practitioners advised that shorter projects do not facilitate enough time to build strong working relationships and for partners to become familiar with each other's ways of working. Furthermore there was a view that more controlled financial management on projects through partnering and collaborative working could be achieved on projects with longer contract durations. The explanation for this was that longer projects can give rise to more variations as clients' requirements change over time and partnering can facilitate more cost effective solutions than under traditionally procured contracts accordingly. One practitioner also suggested that longer projects provide more time for reflection on alternative building systems and ways of working which could provide the most suitable context for value engineering. It was also felt that when managing clusters of many projects of short duration strategic partnering may be more desirable than project partnering, as trust can be generated within encouraging contexts, where the developmental nature of this collaborative process aligns with the long-term vision of integrated teams.

Importance of the Contractor Selection Process and Appointing a 'Trustworthy Partner'

A surprising outcome to the research is the suggestion that the choice of contractors and the individuals deployed on projects was felt by the project managers to be more important than the choice of procurement routes. This clearly needs more testing and validation since it seems to contradict certain aspects of Egan (1998) and Latham (1994). It can perhaps be explained through the sense of teamwork that can be maximised, from having the right team members appointed on projects and the benefits that emanate from this. They also reiterated that traditionally procured projects have had extremely successful results from teamwork even though contractors may have had little influence on the design processes. For this reason trust between the team members was regarded by the practitioners as a major key factor irrespective of the nature and particulars of projects and procurement routes. Notwithstanding this, the study suggests that having the right contractor on board is more crucial in partnering arrangements, owing to teamwork and shared philosophies, than in more traditional procurement routes. Perhaps this indicates therefore that the quality of collaboration can be reinforced or weakened, depending on the behaviour, approaches and attitudes of organisations and individual participants. Clearly the contractor selection process is important in terms of evaluating these criteria. alongside expertise, experience and specialism, in choosing the right partner. The study also found that the selection process should incorporate robust selection criteria, interviewing, short listing, and quality assurances measures to ensure that the resources and specialism of contractors are suitable for the project. They all concurred that having the wrong contractors on board especially at early design stages could severely jeopardise the success of projects. One practitioner felt that, in partnering, having 'aligned cultural synergies' was one of the most important criteria to evaluate in this regard and concurred that 'if organisations and individuals working within partnering agreements are not working as one collective project team or committed to the same beliefs, values and objectives then such projects will be severely compromised from the start.' This again demonstrates the importance and reliance on choice of suitable contractors for the benefits of partnering to be realised fully.

The interviewees all agreed that a 'culture' of trust allows projects to move forward effectively, and creates an environment where problems can be shared and therefore solved more easily. In this regard, they believe that trust is not something that can be engineered through contractual conditions, nor through procurement routes alone, but needs to be developed, built up and earned over time. Notwithstanding this, they concurred that where trust is compromised, this could lead to a downward cycle of trust where working relationships may become untenable. The study also highlighted the belief from those interviewed that the perceived return to short-term contracts and the constant quest for lowest initial bid price perhaps could be jeopardising the development of trust between organisations. However, where long-term organisational

collaboration is a potential future work-stream, the development of trust within such relationships may become 'incentivised' and consequently active in practice.

The study suggests that possibly the strength of trust is more dependent on individual personal relationships, developed from mutual respect, rather than simply 'good' working relationships. According to those interviewed trust generated from previous relationships and dealings between individuals at senior levels is regarded as critical in the cascading of trust throughout organisations, and between those currently operating partnering arrangements. Not surprisingly at an operational level, 'human' factors such as integrity, honesty, consistency, reliability and competency are regarded as important in facilitating trust and good collaborative working. Such factors are suggested by Thuraujarah *et al* (2006) and Coulson-Thomas (2005) and confirmed by the interviewees, to be vital for the greater integration of project teams. Yet, hard factors are also put forward by those interviewed as crucial in the partnering process: experience, technical ability, education and competence of individuals, management systems, resources, and commitment of the organisations.

CONCLUSIONS

There is an overriding consensus of opinion in the study that partnering can certainly bring about improved cost certainty, reduced project durations, improvements in quality of build and benefits to project management and construction innovation in some contexts but not all. The project managers strongly felt that assessing the suitability of projects to partnering is critical to realising the potential benefits in practice. Certainly on very complex projects it was generally accepted that the early intervention of contractors, subcontractors and suppliers through partnering was essential in many cases to encourage project success where more traditional forms of contract, based on separation of design and construction may be mostly unsuitable. It was found that other less tangible and softer outcomes that could be used as key performance indicators to measure success of a given project through partnering arrangements. These include motivation, teambuilding, trust and respect and were felt to be more likely to be generated through partnering and creating the right environment for successful projects. Perhaps the most surprising outcome from this study is that the practitioners regarded the individuals deployed on projects having more influence on success than the choices of partnering per se. They believe that both traditional and collaborative procurement could both produce successful outcomes provided that the right individuals are employed, with suitable experience, expertise, motivation and proactive attitudes to team working.

The study clearly highlights barriers to successful implementation of partnering including factors related to fairness, cooperation and sharing information. Perhaps BIM as a management tool in encouraging greater collaboration could assist in changing the culture of the UK construction industry and facilitate integration across the whole supply chain to address perceived deficiencies.

Certain elements of best practices for partnering have been highlighted in this study. These include ensuring that the nature of the project and partnering are appropriately matched as a test of suitability and compatibility and choosing the most suitable contractors through a robust selection process. This will then hopefully ensure the right choice of partners who are committed to 'the spirit of partnering' and not just those individuals and organisations that 'pay lip service' to its philosophies and values. Without this commitment it was felt that partners will feel propelled to 'collaborate' by the terms of the contract only which could risk reversion back to old traditional adversarial behaviours.

One of the limitations of this study is clearly that it was based on a very small sample of interviewees. This has reduced the reliability and validity of the study and the study findings clearly are not representative of the population at large accordingly. This study is related to the early stages of a PhD and it is intended that further qualitative work with a larger sample and broader range of experienced construction professionals may need to be undertaken to interpret existing data more effectively.

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