ADVERSARIES OR PARTNERS? A CASE STUDY OF AN ESTABLISHED LONG-TERM RELATIONSHIP BETWEEN A CLIENT AND MAJOR CONTRACTOR

Rachel Cooper, John Hinks, Stephen Allen & Stuart Carmichael University of Salford, Salford M5 4WT, UK.

The paper presents details from a pilot case study from an IMI EPSRC funded research project. The case study examines a 20 year relationship between a client and contractor during which 15 projects have been successfully completed. The paper also examines the traditional nature of relationships in the construction industry and contrasts this to those found in the manufacturing industry. Research findings from the case study are presented and examined and, combining this with recent literature from both construction and manufacturing, a conceptual model of business relationships is presented. The intention of the research is to test and develop this model in subsequent case studies with the intention of producing practical guidelines for effective working relationships between designated stakeholders on construction projects.

Keywords: Long-term relationships, attitudes, culture, behaviour

This paper is based upon research for an EPSRC IMI funded project into 'partnering' and organisational relationships in the construction industry. The project methodology is based upon a multiple case study strategy, combining retrospective and on-going projects and utilising multiple data collection techniques. This paper is based upon a retrospective case study of a successfully completed project. This forms one case within the multiple-case strategy, other case studies are ongoing. Aims of the project include the identification of best practice in the development and management of a long-term business relationship in the construction industry.

The paper will seek to explain the background for this research project; illustrate how the research will be conducted within an overall case study methodology, presenting the protocol which has been used in a completed case study of an established, long-term client-contractor relationship; present the initial findings from this case study; and, provide a discussion of these findings in relation to 'partnering' in other business contexts. Some preliminary conclusions in the form of conceptualisations of the 'problem situation' will be made based upon the findings of this case study, interviews with industrialists and the literature review which has been conducted.

The construction industry's drive towards 'partnering' has created lots of headlines in the press, debates within the industry, attracted a great deal of research funding and seen a number of publications (Bennett and Jayes, 1995; Baden-Hellard, 1995; Lorraine, 1994; NEDC, 1991). Indeed, it seems that everybody, academics and industrialists, have their own view about partnering and there is no standard definition of what partnering is, what it entails and the benefits it may bring. The first section of this paper presents some of the difficulties faced in defining a partnering approach to business relationships in the construction industry.

1.0 Research Background

There is a growing feeling within the construction industry, at all levels, that a more co-operative, less adversarial and maybe even collaborative approach to business is essential. This is a result of a variety of drivers highlighted in the Latham report to the industry (Latham, 1994), including perceived inefficiencies within the construction process, the fragmented nature of the industry, conflict, client demands and overseas competition. Also, benchmarking studies of the UK with the US construction industry (Baden-Hellard, 1995) highlighted a widespread appreciation of the need to improve. A combination of the macro-economic climate and a generally poor economic situation (The Tavistock Institute, 1996; Ball, 1988), allied to the gathering momentum for reform of the industry's traditional ways of doing business, seems to have resulted in an industry-wide perception of a timely opportunity to embrace change. Against this backdrop of the need for change, new working philosophies and techniques, such as those already adopted and refined in other industries, particularly manufacturing and process engineering (Lamming), are seen to present opportunities to the Construction Industry (Latham, 1994). The industry response has recently turned its focus on developing and maintaining long-term relationships and the process of partnering.

A current problem is that the organisational structure, the general industry culture and the manner in which companies set about fulfilling their business objectives are not always conducive to the development of successful long-term relationships in the industry. The analysis of successful relationships within this scenario may offer guidelines which the industry in general could follow to reduce conflict, 'hassle' and ultimately extra cost. Risk allocation and profit sharing are also key issues to which partnering has the potential to offer new solutions. Culture and the power relations between organisations will have a strong influence upon how risk is allocated and whether this allocation could be considered equitable.

Definitions of partnering which have appeared in academic reports, in press releases or which have been provided by industrialists, present similar concepts, ideas, or realities yet no universally accepted definition exists. It would appear that no all-inclusive, over-arching definition is plausible, a point emphasised by Lorraine (1993):

'Partnering is an imprecise term covering a range of different arrangements of varying degrees of intensity. For this reason, no single definition of the term is adequate, but all partnering arrangements share some common characteristics which are worth noting.' (Lorraine, 1993)

These common characteristics can be identified from other research and empirical evidence into partnering and provide a useful benchmark for developing and maintaining successful relationships. Evidence indicates that the concept of partnering, of common goals and shared objectives between firms, has been around a long time in the construction industry with many developed relationships. There are examples of contractors who have developed a culture and tradition of non-adversarial relationships with particular clients since the 1930's. Recently, attempts have been made to label such arrangements as 'partnering', borrowing from the manufacturing literature, but is this appropriate for the construction industry? In practice, the term partnering covers a broad spectrum of relationships and each is

flavoured by the particular stakeholders within the arrangement and their own organisational objectives. Partnering in construction has been defined as:

'Partnering is a long-term commitment between two or more organisations for the purpose of achieving specific business objectives by maximising the effectiveness of each participant's resources... The relationship is based on trust, dedication to common goals and an understanding of each other's individual expectations and values. Expected benefits include improved efficiency and cost-effectiveness, increased opportunity for innovation, and the continuous improvement of quality products and services' (NEDC, 1991, p.5)

and more recently:

"...a management approach used by two or more organisations to achieve specific business objectives by maximising the effectiveness of each participant's resources. The approach is based on mutual objectives, an agreed method of problem resolution and an active search for continuous measurable improvements." (Bennett and Jayes, 1995)

This partnering approach to construction activity has been the subject of much recent research (Bennett and Jayes, 1995; Baden-Hellard, 1995; Lorraine, 1994; NEDC, 1991). What is the basis for this management approach and how does the long term commitment manifest itself? Due to the problem with definition alluded to earlier in this section, this research seeks to analyse further the nature of relationships, benefits which may be achieved by partnering, how these may be achieved, and the relevance of management styles and organisational cultures in achieving these. To do this and to collect appropriate data, a case study strategy was adopted. The purpose of the case study was to provide insights into the above issues. Some detail concerning the use of case study research will now be provided.

2.0 The Case Study

This paper presents initial findings from an investigation into a 20 year relationship between a client and a contractor which has seen the completion of 15 successful projects. One of these projects was examined in detail in an attempt to understand 'what' made the relationship successful and, to identify good practice, 'how', this could be achieved. Specific objectives of the case study can be identified as follows:-

- to investigate a long-term relationship between a client and a contractor
- to identify critical success factors for a successful relationship
- to analyse and evaluate 'management initiatives' in operation on this project
- to tell the project 'story'
- to review the project and identify areas which could be improved
- to identify best practice for 'inter-organisational' relationship management

Due to the importance of the choice of methodology, some time is devoted to describing in detail the reasoning, the preparation and the process of collecting case study data. An outline protocol for the study is included, and some notes on conducting a case study in an organisational context. From this long-term relationship and from experiences of a project within this relationship, best-practice

and critical success factors are identified in Section 3 and suggestions made for future improvements in section 4.

Stages in the presentation of the case study are as follows:

- 1. initial briefing (section 2)
- 2. the protocol (section 2)
- 3. initial findings (section 3)
- 4. reflection and conclusions (section 4)

Stages 1 and 2 will now be considered.

(1) Initial Briefing

The project was identified in an initial research briefing conducted with executives from the construction company and the client organisation, a national food manufacturer and distributer. Time was set aside to inform all collaborating organisations of the purpose of the research, their contribution and the intended outcomes. This phase is important in developing trust and confidence between the University and the outside world. Emphasis was placed upon developing good relationships, understanding each other's objectives and working together to achieve these, resulting in mutually beneficial outcomes.

(2) The Case Study Protocol

Prior to conducting the case-study a protocol was prepared to scope the investigation and provide a data collection and analysis strategy ensuring that maximum benefit was attained from the co-operation and access provided by the project stakeholder organisations which were involved (6 no.). Preparing this protocol prior to starting the investigation was a key activity and forms a basis from which the academic community can relate to industry. Details of the structure of the case study are as follows with notes concerning the design of the investigation, data collection, data analysis and reporting:

(a) Case-Study Design

Five key elements of a case-study design, with a description related to this particular study are as follows:

The study's questions - What are the key factors for the success and longevity of the relationship (management style, organisational culture, problem solving procedures, and the importance of inter-personal relations and professional relationships)? What are the costs and benefits of this approach to working in construction?

Propositions - Critical importance of management style, cultural alignment of organisations and the importance of key individuals within organisations. These could be considered as being component parts of the relationship and the research would seek to establish measures of their relative importance.

Unit of Analysis - The study of 'inter-organisational relationships' looking at both the historical background of the relationship, the current situation on an ongoing project and future possibilities.

The logic linking the data to the propositions - The data which was collected was based upon structured interviews investigating management styles, cultural alignments and the importance of individuals and their impact upon the successful completion of a construction project.

The criteria for interpreting the findings - The basis of interpretation is through the identification of commonalities and differences in relation to various individuals' understanding of particular 'issues' or 'incidents'. Data triangulation to confirm perceptions, i.e. if three people from different organisations say the same things then this is taken as strong evidence.

(b) Data Collection

Multiple methods of data collection are anticipated, combining qualitative and quantitative methods. The level of access within the organisations permits this and, it is felt, provides a more rigorous examination of the situation. The case-study interview data was collected during the period January-April 1996.

Carrying out this case study involved interviewing a number of 'key' people from stakeholder organisations involved in the development of the new facility. Interviews were conducted with the following individuals:

- Contractor's Project Manager
- Project Surveyor
- Client's Project Manager
- Architect
- Cost Consultant
- Structural Engineer

A number of telephone calls were also made to these people, and to others involved in the long-term relationship and / or project to explain the purpose of the research, to clarify aspects of the interview and to answer further questions which arose.

The aim of these interviews was to illustrate the 'story' of the project, highlighting those areas which were conducted differently due to the nature of the established long-term relationship and the fact that this was the fourteenth project undertaken. (Subsequently the fifteenth project has been completed). The phases investigated and which formed a basic outline structure for the interviews were *pre-construction*, *construction* and *post-construction*. At each stage of the process, particular areas of interest were identified with the subsequent interviews seeking to assess the impact of the relationship upon the course of events, project progress and the dealing with problems which arose. A breakdown of the areas of concern follows. This also provides a semi-structured indication of the interview content:-

(i) Pre-Construction Project initiation (Timescales) How was the contractors involvement initiated? What Documentation was produced? When? Meetings - What for? Attendance?

Team Building exercises
Expectations
The Contract - What Type?
Whose risk? How allocated?
Developing the programme

(ii) Construction

Progress
Dispute Resolution
Dealing with problems which arise (stakeholder response)
Relationships
Settlement

(iii) Post-Construction Performance Measurement Post project learning and project evaluation

To complete the data collection it is intended that key management personnel (those interviewed) within the relationship complete a questionnaire. The purpose of this is to assist with the identification of management style and organisational culture differences and similarities between the organisations.

(c) Data Analysis

Both soft and hard analysis techniques will be utilised:-

- Soft Case study 'story' telling, which will report on events, the development of relationships and how problems were dealt with. The identification of critical success factors and performance measurement criteria will subsequently be tested on a wider basis.
- Hard Statistical analysis of completed questionnaires on management style and organisational culture.

The management style and culture questionnaire will be used in both client and contractor organisations to assess whether there is a statistical correlation between organisations which, when considering past performance, appear able to work well together.

(d) Reporting

The case-study will form the basis of a number of reports and papers to help disseminate findings:-

- Case-study reports for industry
- Case-study reports for academics
- Academic papers (methodological and outcome oriented)
- Part of a multiple case study strategy which will contribute to the development of 'best-practice' guidelines for industry

It is also intended to use the findings from the case studies as the basis for the production of a video highlighting 'Best - Practice Guidelines' for the management of

relationships on a construction project. This video would concentrate upon *relationships* and *people*, in particular how these factors contribute to dealing with problems in a non-adversarial manner. It is anticipated that this video would be accessible to both an industrial and an academic audience.

So having taken a great deal of time to plan and prepare for the investigation the study needed to be conducted and data collected. The next section will consider some initial findings which were gathered and facilitate the production of conceptual models of relationships within the industry.

3.0 Initial Findings

The case study project was successful in the sense that the facility was delivered on time and within budget. However, these metric measures of a projects success do not tell the full story and can sometimes hide the dynamics and drama of the process of construction. This section will provide a review of the key points identified in maintaining a successful relationship through the course of the case-study project and consider the nature of the relationships identified in construction in comparison to manufacturing. A completed study from the automobile industry (Cooper & Leverick, 1995) will provide an analytical framework for the ongoing case-studies in the construction sector. Using the research findings from the automotive study as a template, comparisons and comments will be made with an emphasis particularly upon the following aspects of the industries:-

- the length, nature and extent of supplier / customer relationships
- the extent of supplier design and product development capability
- the nature and extent of supplier involvement in design decisions
- the extent of organisational communication throughout the manufacturing / construction process
- supplier perceptions of price setting processes and of their own competitiveness

These aspects of conducting business will be considered in relation to the three phases of the construction process focused upon in the case study, and the differing levels of partnering which exist, namely strategic and operational.

Construction Phases

A summary of key factors and their impact at each phase in the construction process, in relation to the above, can be identified as follows:-

Pre-Construction

Teamworking initiative undertaken bringing together all team members to establish objectives and the nature of working together on this project. Selection of organisations and people to work on this project based upon a long term relationship which had seen many successful projects completed. If the main contractor is considered to be a 'supplier' to the client, as opposed to an assembler, then design and product capability is an important factor in choice of who does the job and there will be a reasonable amount of involvement in design decisions. The design team was established within the relationship and had worked together on numerous projects. The cost estimate was prepared at this stage, this was followed by the establishment of a 'value engineering' initiative to save the client money.

Construction

Due to the need of a short project duration, the design and construction process was integrated as much as possible with the implementation of a 'Just-in-Time' design-production of construction drawings and tendering process. Sub-contractors were used who were known to the main contrctor of design team were possible so that capabilities and competence were understood. Construction problems were dealt with as and when they arose to mitigate the problem of escalation, delay and disruption. Communications were acknowledged to be important, although no specific use of integrated technology occurred on this project.

Post-Construction

Project review and debriefing exercise undertaken to identify learning opportunities for improvement on future projects. This corresponded with the project close down and ensured that an opportunity was created to celebrate the project completion and for individuals within organisations to amicably reflect over problems which arose, stresses which were placed upon relationships and how these were overcame. This activity presents a positive opportunity to learn and can create a 'feel-good' attitude between the parties.

Partnering Levels

Differences were found with the degree of interaction at distinct levels of hierarchy within the partnership. 15 projects have been successfully completed in the last 20 years, yet the concept of partnering and the reality appeared to be perceived differently at Strategic and Operational levels within the industry. A discussion of the case study findings at each of these levels now follows and the problems which are faced due to a lack of integration of these two levels.

Strategic Level

At a strategic level within the relationship, the importance of *key people* was emphasised. These individuals provide continuity and the necessary tacit understanding to maintain the relationship at a business level at times of stress. Frequently these people are directors and company executives who have a long history within the relationship and have seen it established over a long period of time. Good relations here were important to ensure that when another project is to be given the go-ahead all organisations are ready to make their commitment and deliver successfully. In a sense this is a 'golf-course' relationship about personality and seeks a corporate understanding of each others business. This relationship can withstand a certain amount of difficulty at a lower level with the need to maintain the relationship paramount in terms of each companies individual objectives.

The basis of the establishment and maintenance of the relationship was *honesty*, *trust* and *mutual respect* between partners and this was based upon an understanding and knowledge of the *capabilities* of, and trusting in the *competence* of organisations you are working with. Mutual understanding and confidence were identified as prime factors in developing successful working relationships. To achieve this understanding open two-way *communications* were required. It was found that these key people had developed close personel level relations to compliment the professional lebvel and helped to communications and to resolve any problems or misunderstandings which

were identified. Effective *team-building* is an important element of the strategic level. Suitable individuals in key management positions were identified and offered appropriate training and experience to learn and understand the business objectives and culture of partner organisations. The purpose of this is to maintain continuity, to invest in people, a critical resource, and to foster the concept of a learning organisation.

At a strategic level the *Integration of Design and Construction* activities was identified as an area which would offer potential benefits to building projects. Within the relationship wherever possible effort was taken to work with the same team of consultants whenever possible to exploit the shared understanding and intrinsic knowledge which had been gained in the course of the relationship. As with client contractor, strong personel relationships had been developed by key people in these organisations. People knew each other and each others working practices.

Operational Level

At an operational level the importance of *key personel*, with experience of the other organisations requirements and an understanding of the relationship was stressed. This provides continuity, helps to maintain quality standards which ensures that projects are delivered successfully and, hopefully the relationship continues. As at a strategic level, *honesty*, *trust* and *mutual respect* were continually identified by participants as being essential factors in a successful relationship, both on a project and longer-term basis. The need for open two-way *communications* was accepted at an operational level to ensure the project progressed smoothly, yet little empirical evidence was identified concerning the implementation of practices which would ensure that this happened such as integrated, networked computer systems between organisations. This was clearly one area where improvements could be made on future projects.

The established long-term relationship allowed for *innovation* at a project level which produced tangible cost savings. An example of this was the contractor's use of an inhouse cost consultant which negated the need for the payment of QS fees. This innovation came about due to the successful implementation of a project specific 'effectiveness initiative' focusing upon three areas:-

- procurement methods
- cost control
- development of teamwork

The above initiative went relatively well, although there was a general feeling that it operated as a front for a cost-cutting exercise on the part of the main-contractor. With regard to procurement, the importance of knowing the *capabilities* of, and *competence* of organisations tendering for work was emphasised. Mutual understanding and confidence being prime factors in developing successful working relationships. Once this had been established then *team-working* is an essential ingredient for successful partnering. *Sub-contractor selection* created problems and was not as well managed as it could have been. This led to difficulties with performance and delivery of some

work packages. Cost-control was deemed a success with savings due to revisions to the specification, commercial gains and the innovative use of in-house cost-consultants on behalf of the main contractor which saved professional fees. Also, there was a concensus that the 'team-working' element of the effectiveness initiative was not a complete success. The feeling was that this element of the initiative was over 'hyped' which led to increased expectations initially, followed by disappointment and frustation as the project progressed. However, the management problem created by the 'virtual' nature of the project team (i.e. contractors -Midlands, client - Northern, architects - London, structural engineer - North West) was successfully handled. This was attributed to team-working, co-operation and an attempt at open communications between stakeholders.

Integration of Design and Construction activities was identified as an area which would offer potential benefits to building projects. There was a concensus between client, consultant and main-contractor organisations over this issue. The virtual nature of the organisation and the lack of an integrated information system may be creating a barrier for full integration to occur. There is potential here as a well established framework of co-operation is in place which should help the development of further intregrated practices. Detailed design and construction was performed on a 'just-in-time' basis. This method of working required high levels of confidence in the capability and competence of fellow partners.

The focus of this study at an operational level was between client, consultant and main-contractor organisations. Detailed focusing upon the relationship with sub-contractors is an important area which needs to be addressed by both academics and industrialists.

Summary

The nature of this long term relationship has been analysed at the construction phase level and the hierarchical level (in terms of roles and responsibilites not necessarily power) where the five elements of relationships have varying degrees of effect. This relationship is very much one based upon a positive mental 'attitude' between all organisations concerned with the emphasis upon getting the job completed successfully with minimum disruption and aggravation. A problem solving mentality which operates at both the formal and informal levels. Also, from the above it can be concluded that the lack of integration between the design and construction still creates problems for organisations in the industry. A conceptual model, and the identification of the benefits of the development and integration of a virtual organisation at a project level within the industry is presented in section 4, and some suggestions of how this could be achieved.

4.0 Reflection and Conclusions

This case study could be considered exploratory with findings qualitative in nature but this does provide the basis for further investigation. The conduct of this study helped to produce guidelines for the next phase of the research and put into context other research which had been conducted. The next phase of the project will seek to establish a firm definition of what partnering is, in terms of desirable characteristics, which can help to create successful business relationships. Initial findings indicate that culture, attitude and behaviour play an important role.

Using the initial findings in conjunction with other research a conceptual model of business relationships within the industry can be presented. This model considers the nature of the relationship which exists between various stakeholders, the essence of which is that relationships are based upon attitudes, agreements or some combination of these two. In the matrix shown in figure 1 we can see the relationships suggested between a contracting organisation and a client organisation.

Figure 1: Relationship Diagnosis based upon Attitude and Agreement

The idea behind this diagram is that any relationship between organisations is based to some extent upon attitude and formal agreements and that one or other of the parties may be more proactive in setting the terms of the relationship. This can be related to Hall's assertiveness and responsiveness scales in her compass model which can contribute to a successful management of culture between organisations (Hall, 1995). The closer to the centre of the matrix the relationship lies then the more harmonious it will be. This is not to rule out the possibility that a relationship strongly defined by one of the players will not be successful in meeting specific objectives. This idea of harmony within the relationship and the possible lack of integration between parties gives rise to the development and formation of a virtual organisation which exists on construction projects. A problem faced by researchers is creating a tool which can assess levels of integration and relative performance levels. If this can be done then this unique problem of construction in relation to other industries, the virtual nature of project delivery, could be managed more effectively.

To assess the empathy and potential for successful long term arrangements between organisations on a construction project, both organisational cultures and actual behaviour are fundamental. The combination of these leads to a particular level of 'performance' on the project. The understanding, management and measurement, if possible of this performance offers an opportunity for organisations to be proactive in their relationships with other organisations. How can this be measured to identify successful partnering arrangements and the development of successful relationships? The following key areas were identified from the conduct of this case, and other empirical and critical work. Future research will seek to explore the relative

importance of these factors for successful partnering arrangements, and examine the importance of relationships within the construction process. The factors identified as critical to the performance of a job and which will have a bearing upon the nature of the relationship are as follows:-

- *Design* (in particular relationship between design team and contractor, innovation at design stage, project variations)
- *Quality* (innovation by Contractors / Design Team)
- *Programme* (dealing with problems and unexpected situations to ensure that deadlines are met)
- *Cost* (Risk Allocation / Sharing)
- Safety (responsibility of 'team' members)
- *Communications / Site Issues* (interactions and interfaces between key people and processes)

These above factors form the basis of performance measurement criteria which have been identified by stakeholders within the project. If all parties can receive a level of satisfaction with respect to the above criteria, then this will a long way towards ensuring that the project and crucially the relationship is successful. By open communications and the understanding of strategic and operational issues the above factors can be synthesised successfully in the virtual organisation which is created.

So, if lean production includes the use of innovative technologies and management procedures then partnering offers a way for construction to reduce costs introduced into the process through disruption, delay and conflict. This is achieved by the integration and collaboration of partner organisations so that communications are improved, with individual and mutual objectives known to all parties in a successful virtual organisation. Defining partnering is a problem and it seems that everybody has their own definition but two quotes from the case study which provide useful insights into what partnering is are as follows:-

Using these as a benchmark, industry must strive to achieve the state of mind and customer focus in order for partnering to achieve all the benefits which are claimed. This is no easy proposition and requires a lot of hard work within the industry.

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