

A Research Framework for Comparing the Partnering Practices in Australia and Hong Kong

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Abstract

The construction industry is faced with many problems such as little co-operation, limited trust, and ineffective communication often resulting in an adversarial relationship among all project stakeholders. This type of adversarial relationship can give rise to construction delays, difficulty in resolving claims, cost overruns, litigation, and a win-lose climate. Over the past decade, partnering has been acknowledged in both Australia and Hong Kong as an innovative and non-adversarial approach to the procurement of construction services in the industry. This paper provides an initial report of a Research Grants Council (RGC) funded research project in Hong Kong, which aims to compare and contrast the partnering practices in Australia and Hong Kong, and to study the cultural impact on partnering performance. The background, the research approach, and the likely impact of the study will be discussed in this paper.

Keywords:

Construction partnering, comparative study, research framework, Australia, Hong Kong.

1. Introduction

The construction industry is a very competitive and risky business. It is faced with a lot of problems such as little co-operation, limited trust, and ineffective communication often resulting in an adversarial relationship among all project stakeholders. This type of adversarial relationship is likely to lead to construction delays, difficulty in resolving claims, cost overruns, litigation, and a win-lose climate (Moore *et al*, 1992). In the late eighties, professional bodies started to recognize that if the construction industry was to compete for investment funds, particularly internationally, both the operating methodology and the public image of the construction industry would have to be improved (Gyles, 1992). Various inquiries were conducted into the practices and productivity of the building and construction industry, upon which some reports were based like Ireland (1988); Smith (1988); Parliament House Construction Authority (1990); NPWC/NBCC (1990); Latham (1994); Egan (1998); and Construction Industry Review Committee (2001). Over the past decade, partnering has been acknowledged in both Australia and Hong Kong as an innovative and non-adversarial approach to the procurement of construction services in the industry (Manley and Hampson, 2000; Chan *et al*, 2004).

1.1 Partnering Development in Australia

The Master Builders Australia (MBA) pioneered the partnering concept in Australia in 1992 by bringing Charles Cowan to Australia in September 1992 and again in 1993 and 1994 to conduct a series of seminars and meet industry leaders. The result is that a large number of projects have utilised the concept in the construction and other industries (Wilson, 1994). A recent development is to take project partnering a step further into what is known as project alliancing (Manley and Hampson, 2000). Project alliancing is different from partnering in that it is more all-embracing in its means for achieving unity of purpose between project teams (Walker *et al*, 2002). Under the partnering culture, one team may 'sink or swim' without necessarily affecting the business position of other teams. With alliancing, there is a joint rather than shared commitment. If one party in the alliance under-performs, all other alliance partners are then at risk of losing their rewards and could even share losses according to the agreed project pain-sharing/gain-sharing model (Walker *et al*, 2000). The Australian National Museum project provides a useful illustration of project alliancing (Walker *et al*, 2002).

1.2 Partnering Development in Hong Kong

The earliest formal partnering arrangements recorded within the Hong Kong construction industry were exclusively applied to hospital projects in 1994 (Skues, 1996). In recent years, the application of the partnering principle is extended to other types of projects. The mass transportation providers, Kowloon-Canton Railway Corporation (KCRC) and Mass Transit Railway Corporation Limited (MTRCL), have introduced partnering for their development projects such as the West Rail and the Tseung Kwan O Railway Line Extension, respectively (Bayliss, 2002). Moreover, a focus on reducing construction disputes via partnering has been placed both in the public and private sectors. For example, the Hong Kong Housing Authority (HKHA) and the Hong Kong Housing Society (HKHS) are very active in nurturing a partnering culture in the public and semi-public sector residential developments (Chan *et al*, 2001a; Chan *et al*, 2004).

1.3 Significance and Value

The initial partnering development of construction industry in Hong Kong was greatly affected by the Australian practices – the first partnering project in Hong Kong was facilitated by a team of Australian consultants, and the development of construction partnering in Hong Kong has been sustained partly through the enthusiastic support of Leighton Contractors (Asia) Ltd. However, because of the differences in culture, politics, regulations, and economic conditions in the two places, the development of partnering practices was bound to be different and occurred at different paces. For instance, the recent development in Australia is to take project partnering a step further to project alliancing, while in Hong Kong the prevailing practice is still in project partnering.

On the other hand, partnering has been practised in the two regions for around a decade and numerous building and construction projects are using the concept, but not all partnering projects are equally successful. The need to identify critical success factors for partnering projects is becoming more urgent. Earlier research (Chan, 1998) indicated that differences between Australia and Hong Kong in terms of culture, politics, regulations, economic conditions, and construction practices have a significant impact on project performance. Likewise it is hypothesized that such differences will have a similar impact on partnering.

Despite the level of interest shown in partnering, actual empirical research is rather thin on the ground, and empirical evidence concerning partnering in practice has largely been piecemeal and anecdotal (Bresnen and Marshall, 2000a; 2000b). There is still a need for more systematic and in-depth research which examines the nature, efficacy and feasibility of a partnering approach (Bresnen and Marshall, 2000a). New understanding of the impact of the different cultures on partnering practices and performances will be gained upon completion of this project. The research project could improve the delivery of construction

projects using project partnering. This could, in turn, increase value for construction money, enhance the international competitiveness of the industry, and encourage a higher level of investment in construction.

2. Overall Research Approach

The research will follow Walker's model (1997) to combine the use of questionnaire surveys, interviews, and a case study approach for the collection of information and data on partnering schemes. The overall research framework is shown in Figure 1.

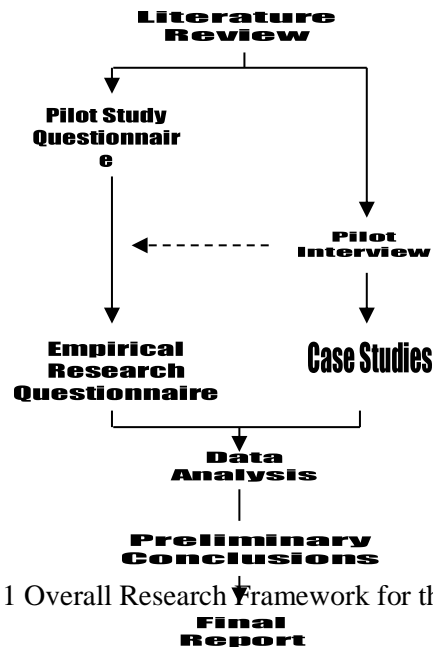


Figure 1 Overall Research Framework for the Study [Source: Walker, 1997]

Literature on partnering, including books, journals, magazines, newsletters, conference proceedings, workshop reports, seminar materials, and other sources will be extensively reviewed. Past and current practices of partnering will be documented. The review exercise will also include the development of an instrument with which to conduct the questionnaire survey and the case studies.

Data of the case study projects will be collected through questionnaire surveys and face-to-face interviews. Practitioners with involvement in project partnering will be targets for the questionnaire survey. Participants with hands-on experience in partnering will be interviewed. Each participant will be interviewed separately, and each interview will be fully documented.

3. Quantitative Data Analysis

A pilot questionnaire will be developed to test factors leading to, and the Key Performance Indicators (KPIs) adopted in assessing the success or otherwise of a partnering project. Pilot interviews will be conducted to gain an understanding of the partnering practices in Australia and Hong Kong as well as to provide information for the refinement of the pilot questionnaire and the development of the main research questionnaire. The outcome of the pilot survey will enable the fine-tuning of the empirical research questionnaire.

The empirical research questionnaire will be designed to examine the project participants' perceptions on the benefits and drawbacks of partnering arrangements. Certain characteristics of respondents may likely

affect their answers to the questions, resulting in the presence of group effect on the answers. For the sake of testing the group effect of respondents, they will be divided into different groupings, such as the client group (building owner, consultants, users, statutory organisations, and financier) and the constructor group (contractors, operators, subcontractors, and suppliers); Australian group and Hong Kong group. Different grouping criteria (i.e. client group vs constructor group; Australian projects vs Hong Kong projects) will be compared to explore whether there will be differences in groups' responses. If there is no significant difference, the groups can be combined for analysis. The questionnaire will also be used to examine the relative importance of factors leading to the success of a partnering project. The cultural impact and the Critical Success Factors (CSFs) affecting partnering performance will be tested in this empirical research questionnaire.

The quantitative data collected will be analysed using the Statistical Package for Social Sciences (SPSS). The techniques that will be used in this research, in respect of quantitative data, include Kendall coefficient of concordance, Spearman rank correlation, factor analysis, discriminant analysis, and multiple regression analysis.

4. Qualitative Data Analysis

To gain an in-depth understanding of partnering practices, the study will further analyse approximately ten partnering projects in each country on the basis of a common methodology. One partnering scheme brings together several participating organisations (e.g. client, main contractor, consultants, and subcontractors). Each case study will collate information from these four key stakeholders on their organisational structures, responsibilities, communication, satisfaction, motivation, inter-relationship, risks, and difficulties faced. Information from the case studies will help verify and triangulate the findings developed through the interviews.

Information from all the participants associated with the projects vis-à-vis the client group (client and consultants) and constructor group (main contractor and subcontractors); and the Australian group and the Hong Kong group, will be analysed. Thus it is anticipated that data will be collected on a combination of interview and workshop basis from eighty organisations (4 interviews per project and 10 projects in each country). The case study projects will cover a range of project sizes, types, consortium groups, client groups, pathfinder projects, and non-pathfinder projects. In each case, patterns of partnering approaches, processes, satisfaction, motivation, communication, relationships, and difficulties within each project will be examined, and similarities and differences between the cases will be sought. The aim will be to look at the cases both individually and collectively. The approach in each case will be to examine the process by which participants make partnering deals to work. The approach for each case study project will be mapped, and the decision-making process in the selection of particular approaches and processes will be documented.

In the analysis, both the procedural regularity and consistency with the suitability of the procedure will be considered in relation to the objectives of the project. In essence, given a particular set of partnering project objectives and by comparing with contemporary projects, it can assist to determine whether the procedures adopted by the respective organisations in different projects are consistent, and if not, identify the reasons.

The qualitative data to be generated will be analysed using both the exploratory techniques developed by Morgan (1994) and a reputational approach (Seymour and Fellows, 1999) to establish consistency in the delivery of partnering projects. Applying Grounded Theory¹ techniques, an inventory of typifications and key terms used in project partnering will be identified (Fellows and Liu, 1997). These qualitative analyses will be undertaken using the NUDIST6 software.

¹ Grounded theory involves the gathering of data from observation of the sample to identify categories of the data.

5. Validations of the Results

Research data and analyses will be triangulated from multiple sources to help improve the credibility of the findings. Results derived from the questionnaire survey and case study will be cross-referenced to complement each other. Delphi group workshops and focus group discussions will be used to generate relevant information and to supplement and/or confirm outcomes of these analyses (Chan et al, 2001b). Workshops will be used to discuss (preliminary) conclusions with industry practitioners involved in the study to help understand the relevance of the findings in the context of changing circumstances prevailing over the period studied. The input from the Delphi group to be constituted for the project will be in the form of a discussion and moderation of the results obtained and confirmation of the framework developed. Three workshop sessions in each country have been included in the research programme. Towards the final stages of the project, two of these workshop sessions will be used to jointly assess experiences with best practice within certain exemplary projects.

6. Conclusion

This paper provides an initial report of a RGC funded research project commencing in January 2005. The research adopts a holistic approach to compare and contrast the partnering practices in Australia and Hong Kong and to study the cultural impact on partnering performance. Upon completion of the project, a series of KPIs will be developed to evaluate the success of a partnering project. A database of construction projects where partnering is applied in Australia and Hong Kong will be established and a comparative analysis on the partnering practices and their performance will be conducted. More importantly, a list of CSFs contributing to the success of these partnering projects will be identified, and the cultural impact of partnering practices and their performance will be investigated. As a result, a best practice framework for project partnering will be developed, which will provide valuable insights into the successful implementation of partnering for enhancing overall project performance and achieving construction excellence.

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