Study of Project Partnering in Hong Kong

Albert PC Chan, Kathy SK Ho, Patrick TI Lam
Department of Building and Real Estate
Hong Kong Polytechnic University

Tony YF Ma
School of Geoinformatics, Planning and Building
University of South Australia

Abstract

The adversarial relationship between clients and construction contractors creates an environment which jeopardises the success of the construction industry as a whole. The client and the contractor represent two distinct organisations with separate sets of objectives, management styles, and operating procedures. In most cases with the traditional procurement system, members of the two management teams do not normally know one another prior to the start of the project. Previous studies suggest that project partnering can be used successfully in building projects and provide time and cost benefits to both clients and contractors. A research task force has been set up in the Department of Building and Real Estate of the Hong Kong Polytechnic University to evaluate the performance of project partnering and investigate ways how the industry can implement these systems successfully in the Hong Kong context. The aim of this paper is to provide an interim report on an on-going research of project partnering. The characteristics of the partnering process and the significant ingredients that make up a good partnering venture will be discussed. A research framework will be proposed to facilitate the evaluation of project partnering in Hong Kong.

Introduction

The construction industry is a very competitive, high-risk business. They are facing many problems like little co-operation, limited trust and ineffective communication resulting in an adversarial relationship between each party. This kind of relationship is reflected in construction delays, difficulty in resolving claims, cost overruns, litigation and a win-lose climate (Moore et al, 1992). Thus, this relationship has made the need for a new approach all the more urgent. This need is compounded by the experiences of many within the industry who, in the past, have suffered as a consequence of litigation or arbitration processes whilst attempting to resolve difficulties.

Many new management techniques have gained popularity to help solve these hurdles (Sanders, 1994; Eckert, 1994; Schriener, 1991). Partnering is one such technique, which attempts to create an effective project management process between two or more organisations. It aims at generating an organisational environment of trust, open communication and employee involvement (Sanders and Moore, 1992). This is achieved through the rapid creation of a project culture, to fulfil the function, which is served by a corporate culture in longer lasting organisations.

Definition of partnering

There are various definitions of partnering from past studies. Indeed, partnering is a process of establishing a moral contract or charter among the project team members which will bind each party to act in the best interest of the project and the project team members.

Crowley and Karim (1995) used an organisation's point of view to define partnering. Partnering can be conceptually viewed as an organisation that is formed by resolving conflicts, expediting decision-making and increasing organisational competence in achieving project goals (Figure 1).

The United States' Construction Industry Institute (CII, 1991) and the United Kingdom's Construction Industry Board (CIB, 1997) conducted some famous research into partnering. They had developed their only definition of partnering.

The CII (US) defines partnering as:

"*a long-term commitment between two or more organizations for the purposes of achieving specific business objectives by maximizing the effectiveness of each participant resources. This requires changing traditional relationships to a shared culture without regard to organizational boundaries. The relationship is based on trust, dedication to common goals, and an understanding of each other's individual expectations and values.*" *(CII, 1991)*

The CIB defines partnering as:

"a structured management approach to facilitate team working across contractual boundaries... it should not be confused with other good project management practice, or with long-standing relationships, negotiated contracts, or preferred supplier arrangements, all of which lack the structure and objective measures that must support a partnering relationship". *(CIB, 1997)*

Characteristics of partnering

Commitment

The most important element in establishing a partnering relationship is commitment from senior management (Morgan and Dowst, 1988).

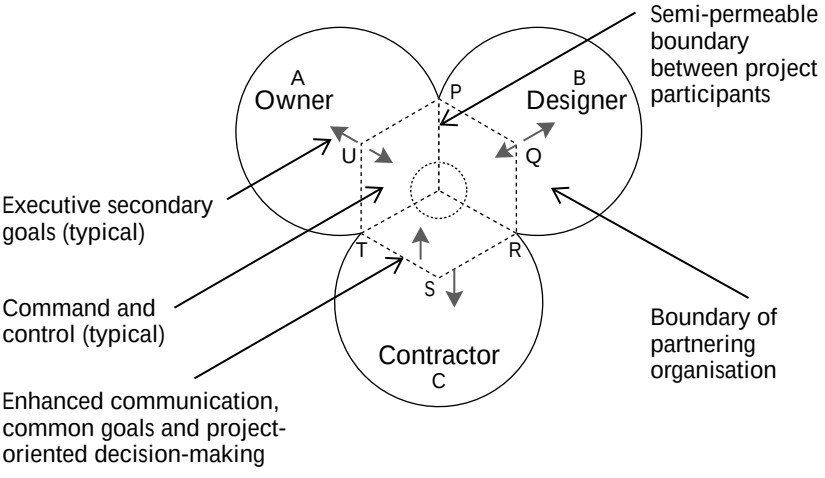

Figure 1. Conceptual model of partnering (Crowley and Karim, 1995)

It must be visible, supportive, ongoing and sensitive to organisational change (CII Aus, 1996). Although the jointly developed partnership charter is not a contract, it should be strongly and widely communicated to all within the whole project community when the commitment is made (Hellard, 1996).

Equity

All the stakeholders' interests are considered in creating mutual goals and there is commitment to satisfying each stakeholder's requirement by utilising win/win philosophy (Hellard, 1996). It reflects a sense of proportionality and balance transcending simple fairness (CII Aus, 1996).

Trust

Teamwork is impossible where there is cynicism about partners' motives. With understanding of each shareholder's risks and goals, mutual trust developed within parties comes the possibility of synergy (Hellard, 1996).

Goals and objectives

At a partnering workshop, the stakeholders identify all respective goals for the project in which their interests overlap. Typical jointly developed goals include achieving value engineering savings, project delivery on or before time, maintaining desired quality, etc. (Hellard, 1996; CII Aus 1996).

Win-win philosophy

As partners work together toward a common goal, each party agrees to examine each situation and strive to attain a win-win solution (Slater, 1998).

Implementation
At the workshop, stakeholders together develop strategies for implementing their mutual goals and the mechanisms for solving problem (Hellard, 1996).

Evaluation
In order to ensure implementation, the stakeholders should agree to a plan for periodic joint evaluation based on the mutual goals to ensure the plan is proceeding as intended (Hellard, 1996). Continuous joint evaluation ensures adherence to the agreement and provides a valuable learning process (CII Aus, 1996).

Significant ingredients for making partnering success

Adequate resources
Since resources are scarce and competitive, it is not common for an organisation to share its own resources with others. The main resources include knowledge, technology, information, specific skills and capital. Several researchers have pointed out the importance of shared resources (CII, 1991; CIB, 1997). It is also significant to ascertain the maximum use of shared resources. The complementary resources from different parties not only can be used to strengthen the competitiveness and construction capability of a partnering relationship (Cheng et al, 2000), but also are a major criterion of the partnering success.

Top management support
Commitment and support from top management is always prerequisite for a successful partnering project. As senior management formulate the strategy and direction of business activities, their full support and commitment are crucial to initiating and leading (Cheng et al, 2000).

Mutual trust
For a successful partnering project, parties involved must have mutual trust towards the other partners. They should have the belief that the others are reliable in fulfilling its obligations in an exchange relationship. It is crucial to "open" the boundaries of the relationship as it can relieve stress and enhance adaptability, information exchange and joint problem solving and promise better outcomes (Mohr and Spekman, 1994; Cheng et al, 2000).

Long-term commitment
Long-term commitment can be regarded as the willingness of the involved parties to integrate continuously to the unanticipated problems (Cheng et al, 2000). More committed parties are expected to balance the attainment of short-term objectives with long-term goals and achieve both individual and joint missions without raising the fear of opportunistic behaviour (Parkhe, 1993; Mohr and Spekman, 1994).

Effective communication
Partnering requires timely communication of information and the maintenance of open and direct lines of communication among all team members. For the construction project, problems need to surface and be solved on site immediately. If it is only used for routine matters while important issues are sent from each site office back to the respective home offices and then back to the site before any interaction, partnering will fail (Moore et al, 1992). It is clear that effective communication skills can help in facilitating exchange of ideas, visions and resolving difficulties (Cheng et al, 2000).

Effective coordination
Coordination reflects the expectations of each party from the other parties in fulfilling a set of tasks (Mohr and Spekman, 1994). Effective coordination resulting in achievement of stability in an uncertain environment can be attained by an increase in contacts between parties and sharing of information.

Productive conflict resolution
Because of incompatible goals and expectations, conflicting issues are common among parties. Conflict resolution techniques like coercion and confrontation are counterproductive and fail to reach a win-win situation. In fact, the conflicting parties look for a mutually satisfactory solution and this can be done by joint problem solving to create alternatives for the problematic issues. Such a high level of participation among parties may help them to create a commitment to the mutually agreed solution (Cheng et al, 2000).

Research framework

This research consists of an empirical study to evaluate the applicability of project partnering in the Hong Kong construction industry. It specifies the partnering process, the role of the

parties involved, the risks and liabilities that each party is subject to, and identifies the significant ingredients that make up a good partnering venture. The future of project partnering will be evaluated and the best practice in the Hong Kong context will be developed.

Problem identification

Building works have been delivered in a traditional manner where clients appoint consultants to act on their behalf to produce a design and supervise the construction phase. The adversarial relationship between clients and construction contractors inherent in this procurement system is one of the major hurdles to jeopardise the success of the construction industry. The industry bodies started to recognise that if the construction were to compete for investment funds, particularly internationally, both the methodology and the public image of the construction industry would have to be re-engineered. Partnering is one such approach, which attempts to create an effective project management process between two or more organisations.

Research objectives

The specific objectives of the proposed investigation are to:

1) To ***Analyse*** the partnering process in terms of:
- Organisational structure.
- Duties and responsibilities of the parties involved.
- Lines of communication, control mechanism and types of partnering charter used.

2) To ***Identify***
- How client, consultant and contractor, supplier, and subcontractor organisation view the partnering system.
- What are the client's criteria for satisfaction.
- Why project partnering is preferred to procurement methods.

3) To ***Evaluate***
- The performance of project partnering in terms of client's criteria of satisfaction, i.e. time, cost, quality, and other areas of satisfaction.
- Problems associated with project partnering, the risks and the liabilities that the clients, consultants, contractors, suppliers, and subcontractors will be subject to.

4) To ***Develop***

The future and the best practice of project partnering to suit the Hong Kong market.

Research methodology

A research process model which is developed by Sekaran (1992, cited in Walker, 1996) will be applied in this research. This model provides a helpful process for basic and applied research. This model is to convert the vague ideas from research team into testable hypotheses that are designed specifically for the research questions (Figure 2). (Walker, 1996)

The specific methodology of this research will follow the concept of Walker's model which will be based on literature review, questionnaires, interviews and case studies (Figure 3).

1) Pilot study

A pilot study will be carried out to develop the empirical questionnaire. Walker (1997) concludes that a pilot study proves to be useful tool in providing a focus mechanism to establish the research direction more clearly. This is a critical stage to identify the significant ingredients that make up a good partnering venture and the evaluation items for the best partnering practice.

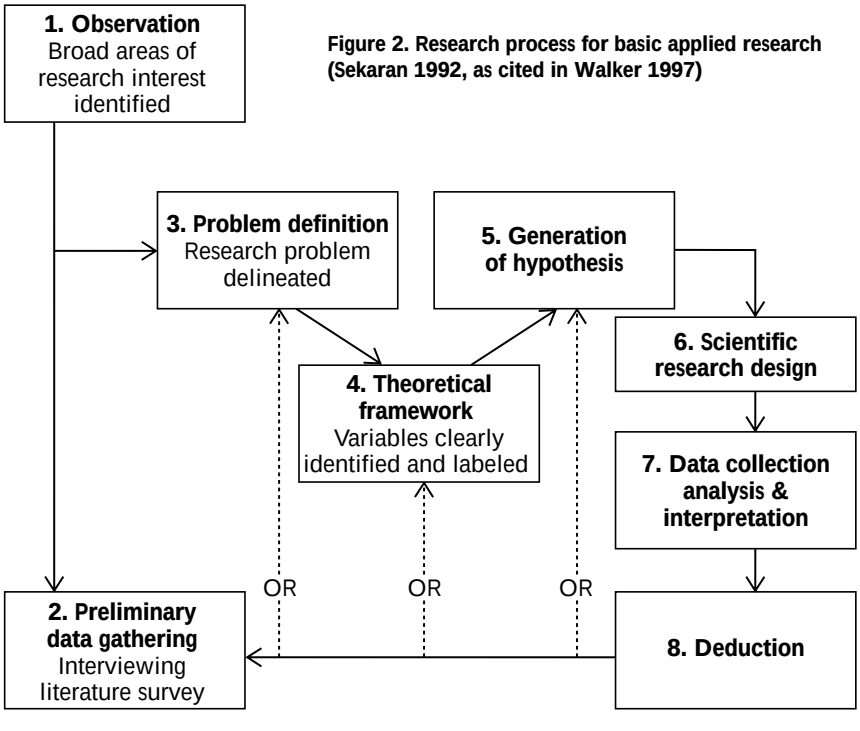

Figure 2. Research process for basic applied research (Sekaran 1992, as cited in Walker 1997)

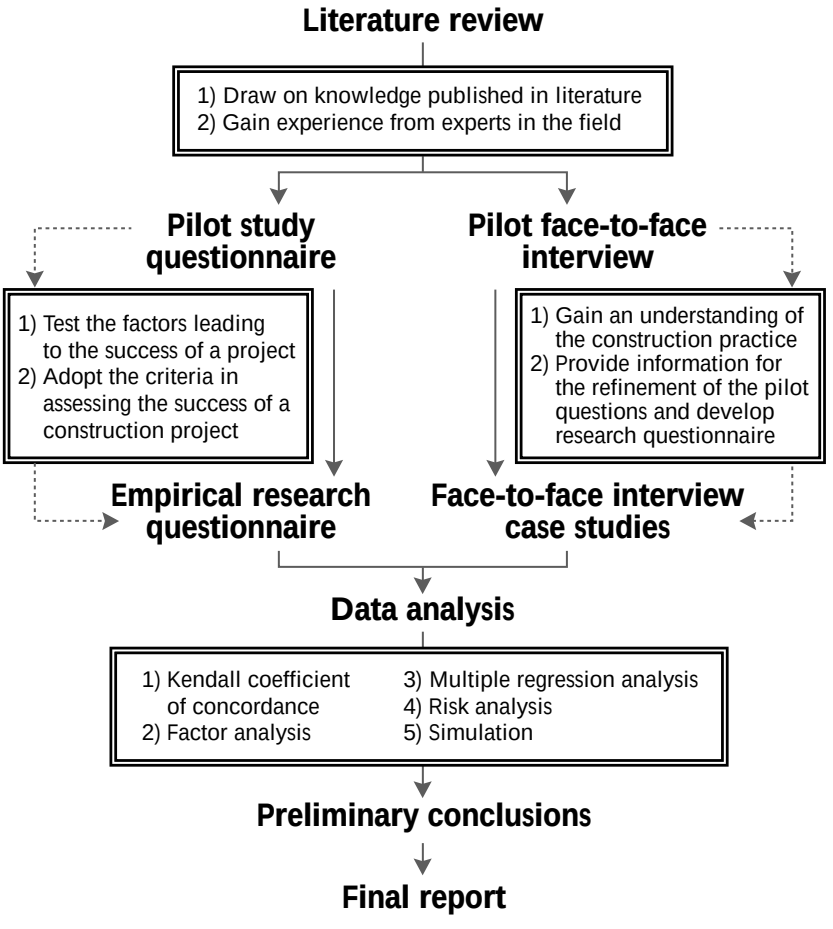

Figure 3. The research framework for this study

2) Questionnaire surveys
The pilot questionnaire survey will be drafted to test the factors leading to, and the criteria adopted in assessing the success of a construction project. Face-to-face interviews will be conducted to gain an understanding of the construction practice in Hong Kong as well as to provide information for the refinement of the pilot questionnaire and the development of the research questionnaire. The empirical research questionnaire will be reviewed by the pilot survey participants and their comments will be incorporated to develop the final questionnaire.

3) Face-to-face interview surveys
The face-to-face interview survey will be carried out to facilitate the specify practice of partnering projects in Hong Kong. Background information about the interviewee's organisation and relevant projects will also be collected to strengthen researchers' understanding of interviewee's decision on partnering project. In addition, the data will be documented and compared with secondary, archival data pertaining to the rationale of adopting partnering projects whenever possible. The targets for interviews include client's organisations, consultant firms, contractors, sub-contractors and suppliers.

4) Case study method
The case study method will be carried to collect the actual information in industry. It investigates a contemporary phenomenon which is vital to the viability of the research study.

5) Data analysis
The result of the questionnaire survey and interviews will be analysed to explore the participants' view on the partnering. Non-parametric statistical technique will be used to analyse the research findings. The Statistical Package for the Social Sciences (SPSS) will be used to handle the statistical calculations.

Kendall's Coefficient of Concordance (W) will be computed to test the same nature group comparison. This statistical analysis aims to ascertain whether the respondents within a group responded in a consistent manner. A high or significant value of W would reject the null hypothesis that there is a complete lack of consensus among responses within a group. Factor analysis will be used to test the relationship between partnering performance and also the problems associated with project partnering. Finally, a regression model will be developed to examine the practices in the constriction industry in Hong Kong.

Details of the analytical techniques are given below:

a. Kendall Coefficient of Concordance
Kendall's Coefficient of Concordance (W) is a statistical analysis which aims to ascertain whether the respondents within a group responded in a consistent manner. A high or significant value of W indicates that the different raters are essentially applying the same standard in ranking the objects under study. Thus, if there is a complete lack of consensus among the respondents on the ranking of the objects under study, W will be zero. A perfect agreement on the other hand will result in W having a value of one.

b. Factor analysis
Factor analysis is a statistical technique used to identify a relatively small number of factors that can be used to represent relationships among sets of many interrelated variables.

c. Multiple regression analysis

A regression model is a mathematical model, which can relate a number of independent variables to a dependent variable. The technique is one of the most versatile data analysis procedures. Regression can be used to summarise data as well as to study relations among variables. When more than one independent variable is needed in the regression model, it is called a multiple linear regression model. Multiple linear regression extends bivariate regression by incorporating multiple independent variables.

d. Risk analysis

A commercial computer package will be used to identify the risk sources, assess their effects and develop a management response to these risk factors in choosing a partnering system.

e. Simulation

Simulation will be used in conjunction with the risk analysis to identify the risk sources and predict the likely outcome of project partnering. A computer package will be used to aid the process.

6) Research Documentation

After the data analysis, the preliminary conclusions will be drafted. The final finding will be discussed with senior industry practitioners involved in the study to help understand the relevance of findings in context with changing circumstances prevailing over the period studied. The document of research findings, i.e. the preparation papers and reports, provides guidance on project partnering systems and their implementation.

Conclusion

This paper is an interim report on an on-going research of analysing project partnering in Hong Kong. It reviews the characteristics of the partnering process and the significant ingredients that make up a good partnering venture. The research framework illustrates the research process and research methodology. The proposed research will comprise the pilot study, questionnaire surveys, face-to-face interviews and a case study. A triangulated approach will be adopted to ensure data validity. Various analytical techniques will be also used to derive findings for the research study.

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