

# **Evaluating the Success Factors of Partnering in the Building Construction Industry in Accra Metropolis, Ghana**

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#### **Abstract**

Partnering is a new methodology in dealing with disputes or a disputes prevention mechanism, among parties to a public / private process such as construction or building industry. Its intent is to avoid or solve disputes so they do not interrupt unnecessarily with the project that brought the parties together in the first place. Partnering can lead to construction projects being delivered quickly, efficiently and cost effectively. The aim of this paper is to investigate the effect of partnering in the Building Construction Industry. The objectives are to identify the success factors of partnering; to identify the critical factors of partnering and to identify whether risk in a partnering relationship is distributed fairly between the parties. Twenty companies were randomly selected. However, fifteen companies/ stakeholders responded, representing 75% respond rate. Five questionnaires each were administered to the fifteen construction companies. Out of the ten success factors identified in the findings, Increased opportunity for innovation and value engineering; Improved project outcomes in terms of cost, time and quality; Lower administrative and legal costs; Achieving better buildability; Establishing a more dynamic organizational structure and clear lines of communication; Developing an environment for a long-team profitability with mean score 4.55; 4.17; 3.83; 3.77; 3.60; 3.40 respectively, were identified as critical success factors.

Keyword: Partnering; Time; Quality; Cost; Litigation

## 1. Introduction

Over the past decades, the international construction industry has observed an increasing frequency of litigation on major international projects. This has often been a consequence of the tendency of employers to minimize their risk profile through passing ever more contractual risk on to the contractor. According to recent experiences of many international contractors, this trend has been mitigated only partly by the general reworking of the accepted industry standard forms of contract issued in 1999 (Totterdill, 2006).

Partnering process attempts to create working relationships among the parties through a mutually-developed, formal strategy of commitment and communication. It attempts to create grounds where trust and teamwork prevent disputes, to help it develop a cooperative bond to everyone's benefits and make it easier the completion of a successful project. (LeFrios 2008).

Parallel to these developments in the international industry, project partnering has become increasingly established as a non-adversarial and performance enhancing approach to contracting in a number of national markets including the UK and US.

#### 1.1 Problem Statement

According to Ansah (2011), most of the construction projects that have been executed have resulted to cost and time overrun. The quality of job is not achieved as specified by the specification. Due to this, there is a need for alternative management practices that can be used to improve project performance.

The aim of this paper is to investigate the effect of partnering in the Building Construction Industry. The objectives were to identify

- 1. the success factors of partnering;
- 2. the critical factors of partnering
- 3. whether risk in a partnering relationship is distributed fairly between the parties

# 2. The origin of partnering in the building industry

The first broad application of partnering in the construction industry was by the US Army Corps of Engineers in



the late 1980s. Traditional methods of competitive tendering together with one-sided contracts and ineffective administration were leading to cost overruns and late completion. Furthermore litigation was becoming a significant problem. The Corps proposed a process whereby, post-tender, the successful contractor and the employer would discuss the nature of the project they were building and their mutual expectations. Goals would be defined and issues of concern and potential challenges openly discussed with a view to identifying and sharing risks. The result was a partnering agreement or charter jointly signed by all participants outlining mutually agreed-upon goals and principles (Howlett, 2002).

Partnering was first applied in the UK in the North Sea oil and gas industries in the early 1990s. Major industry players such as BP were driven to this new model in an attempt to achieve profitability from what would have been otherwise uneconomic oilfields. The new approach proved successful in achieving significant cost savings in platform construction for the employers and in creating increased profits for the participating partners (Bennett and Jayes, 1998). The form of partnering differed typically from the US Corps of Engineers' approach with individual contracts between the employer and each alliance member and an additional umbrella agreement binding all parties to the alliance (the alliance members being the employer, the contractor, the designers and the key subcontractors).

Partnering in the UK civil engineering and building industry emerged from the background of the initial successes of this new approach in the oil and gas industry and the US building industry. In 1994 Sir Michael Latham, commissioned jointly by the government and the construction industry to conduct an independent review of what was generally accepted to be an under-performing construction industry, produced his constructing the Team report. The central message of this report was that the employer should be at the core of the construction process. The use of teamwork and co-operation was advocated to improve employer satisfaction. One specific method recommended was the use of project partnering. When commenting on how to implement partnering, Latham noted that the New Engineering Contract (NEC) from the Institute of Civil Engineers (ICE) contained most of features required and would be, therefore, an appropriate form of contract for project partnering (Latham, 1994; ICE, 2001).

In the following year Bennett and Jayes (1998), of the influential Centre for Strategic Studies in Construction at the University of Reading, published Trusting the Team: The Best Practice Guide to Partnering in Construction (1995) based on research into Japanese construction and case studies of partnering in US construction. This work discusses the principles and the practical implementation of partnering, including contractual and legal issues, and was highly influential as a standard reference in establishing partnering in UK construction.

The development of partnering in other countries has been less prominent. In Australia, the US approach based on non-binding partnering agreements was introduced with mixed success in the early 1990s. The initiative was given momentum through the findings of the Gyles Royal Commission (1992) which carried out a pilot study on partnering. More recently, the Association of Australian Contractors has published a general guide on "Relationship Contracting" (1999). This term refers appropriately to all forms of partnering practiced. The South African industry has followed the UK approach and the use of the ECC contract and partnering is finding increasing application (Awodele and Ogunsemi, 2007). In Hong, Kong intensive reviews of the industry (Tang Report and Grove Report) have advocated partnering and it has recently been introduced on a number of projects including one high profile metro project.



Figure 1: Source: The Reading Construction Forum – Trusting the Team (Cooke & Williams. 2006). The following generic definition reflects the views held in most literature:

- Partnering is a set of collaborative processes rather than simply a form of relationship;
- Partnering is a co-operative arrangement between two or more organizations based on mutual objectives and increased efficiency through shared resources, open communications and continuous improvement;



- Partnering is applied either in project situation known as project partnering or in a long-term relationship known as strategic partnering;
- Project partnering is typically practiced at a first generation level or at a more developed, more committed second generation level (Awodele and Ogunsemi, 2007).

## 2.1 Second Generation Partnering

However, extensive research and analysis now suggests that this approach to Partnering is only the first step, and a new, much more sophisticated `second generation` style of Partnering has now emerged. This is a genuinely strategic approach that produces significantly greater benefits and can deliver cost savings of up to 40% and can reduce timeframes by 50%, or more.

These developments mean Partnering is now defined in the following terms:

`Partnering is a set strategic actions which embody the mutual objectives of a number of firm achieved by cooperative decision making aimed a using feedback to continuously improve their joint performance.`

Second Generation Partnering begins with a strategic decision to cooperative by a client and group of consultants, contractors and specialist engaged in an ongoing series of projects as indicated in figure 3.2 Jointly they establish a Strategic Team that builds up `The Seven Pillars of Partnering.

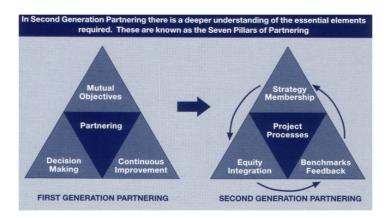


Fig. 3. The evolution second generation partnering

# 2.2 Third Generation Partnering

Research is suggests the emergence of Third Generation Partnering where the construction industry becomes a modern industry that manufactures and markets products. This vision involves modernized construction firms using Partnering to deal with their customers to provide comprehensive packages of products and supporting services. These could include land, new or refurbished facilities, plant and equipment, finance options, and facilities management.

In Third Generation Partnering construction firms work with regular customers to understand their business well enough to see how construction can help it .Occasional and one-off customers are likely to be offered packages, put together on the basis of market research, that give them a choice of standard answers plus a range of options.

In Third Generation Partnering modernized construction firms will use cooperation throughout their supply chains to build up efficient 'virtual organization' that respond to and shape rapidly changing markets.

They will harness new technologies to satisfy customers `expectations. In doing so they will combine the efficiency that comes from standardized processes with flexibility that comes from creativity and innovation.( Bennett & Jayes, 1998)

## 2.3 The Seven Pillars of Partnering (Bennett, 2000)

Strategic – developing the client's objectives and how consultants, contractors and specialists can meet



them on the basics of feedback

- Membership identifying the firms that need to be involved to ensure all necessary skills are developed and available
- Equity ensuring everyone is rewarded for their work on the basis of fair prices and fair profits
- Integration improving the way the firms involved work by using cooperation and building trust
- Benchmarks setting measured targets that lead to continuous improvements in performance from project to project
- Project Processes establishing standards and procedures that embody best practice based on process engineering
- Feedback capturing lessons from project and task forces to guide the development of strategic
- Figure 3.3 illustrates the Seven Pillars of Partnering Concepts of the Seven Pillars

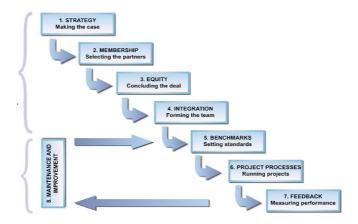


Fig. 4. The Seven Pillars of Partnering - Concepts of the Seven Pillars

The Seven Pillars of Partnering' form a controlled system to deal with the rapidly changing markets and technologies that shape today's construction industry. Working together the Pillars provide the basis for individual projects to be carried out efficiently yet enable the Strategic Team to search systematically for ever better designs and ways of working. This combination of efficiency and innovation is the hallmark of leading firms in all modern industries. It is only by breaking free of an over emphasis on projects and developing the habits of strategic thinking and actions that the building industry will make significant improvements to its own performance reputation in society.



Fig. 5 The relationship between the "seven pillars of partnering"

#### 2.4 Potential Problems in Partnering

Partnering requires that all participants "buy into" the concept. There concept is harm or destroyed completely if



there is not true commitment.

Those conditioned in adversarial events around that influence may be uncomfortable with the obvious risk in trusting.

Giving lip-service to the term: treating the concept as a fallacy is not true commitment.

The other benefits attributable to partnering include the following:

- Improved communications.
- Better working environments.
- Reduced adversarial relationships.ss
- Less litigation.
- Fewer claims.
- More repeat business/long-term relationships.
- Improved allocation of responsibility, improved value engineering, and decreased schedules.
- Better control over safety and health issues.
- Reduced exposure to litigation through communication and issue resolution strategies.
- Increased productivity because of elimination of defensive case building.
- Lower risk of cost overruns and delays because of better time cost control over the project.
- Increased opportunity for innovation and implementation of value engineering in the work.
- Potential to improve cash flow due to fewer disputes and withheld payments.
- Improved decision-making that helps avoid costly claims and saves time and money.

(Fryer, et al.2006).

#### 3. Research Methodology

The research strategy that was used to implement the research, included literature reviews on partnering. Simple random sampling technique was used to select the respondents who worked at the construction companies. Structured questionnaires were used. Textual Analysis method involving content analysis was adopted.

# 3.1 Target Population:

There are thirty five registered Building construction companies with the Accra Metropolitan Assembly.

#### 3.2 Sampling design

Simple random sampling technique was used to select twenty construction companies out of which 15 companies responded to the questions. Five questionnaires each were administered to the fifteen companies so a total of seventy-five questionnaires were received.

# 3.3 Sampling Procedure

Adequate measures were taken to minimize bias as a prelude to the sample selection process. For instance, the study ensured that the respondents were within the research area.

The rationale for adopting the random method was because of its feasibility and the need to ensure fair representation of each stratum as well as increase precision.

#### 3.4 Research instrument

Questionnaire was the main data collection instrument used for the study. Two formats of opinion questions were used to collect the data and these were the checklist and rating scale.

#### 3.5 Data processing and analysis

Descriptive statistics method involving mean score was used to analyse the data. A measure of central tendency was applied to find the most typical value for the critical factors.



#### 3.6 Findings and Discussion

Based on the content analysis of literature on partnering ten success factors were identified and these are: Developing a win- win solution; Placing a value on long term relationship; Improved project outcomes in terms of cost, time and quality; Lower administrative and legal costs; Increased opportunity for innovation and value engineering; Reduced exposure to litigation; Eliminating contractual conflict; Establishing a more dynamic organizational structure and clear lines of communication; Developing an environment for a long-team profitability and Achieving better buildability.

Table 1: Success Factors of Partnering

Item	Factor Or Activity Description	Ratings based on the respondents experience over time						
		Least Influential		Most Influential		<b>→</b>		
		1	2	3	4	5	Total	Mean
1	Developing a win- win solution	28(28)	20 (40)	12 (36)	5(20)	5 (25)	149	1.99
2	Placing a value on long term relationship	18 (18)	23(46)	12 (36)	7 (28)	5 (25)	153	2.04
3	Improved project outcomes in terms of cost, time and quality.	2 (2)	3(6)	10 (30)	25(100)	35(175)	313	4.17
4	Lower administrative and legal costs.	5(5)	5( 10)	15 (45)	2 3 (92)	27 (135)	287	3.83
5	Increased opportunity for innovation and value engineering	2 (2)	4 (8)	18 (54)	28(112)	33(165)	341	4.55
6	Reduced exposure to litigation	15(15)	13(26)	17 (51)	19 (76)	11 (55)	223	2.97
7	Eliminating contractual conflict	25 (25)	15(30)	15(45)	10(40)	10 (50)	190	2.53
8	Establishing a more dynamic organizational structure and clear lines of communication.	10 (10)	5 (10)	15(45)	20 (80)	25 (125)	270	3.60
9	Developing an environment for a long-team profitability	8(8)	10(20)	18(54)	22(88)	17(85)	255	3.40
10	Achieving better buildability	12(12)	8(16)	20(60)	15(45)	30(150)	283	3.77

As indicated in table 1, ten success factors were identified out of which six were the critical success factors based on the mean score. These included Increased opportunity for innovation and value engineering; Improved project outcomes in terms of cost, time and quality; Lower administrative and legal costs; Achieving better buildability; Establishing a more dynamic organizational structure and clear lines of communication; Developing an environment for a long-team profitability with mean score 4.55;4.17;3.83;3.77;3.60;3.40 respectively.



For all the participants of a project, Partnering is a high-leveraged effort. It may require. Increased staff and management time up front, but the benefits accrue in a more harmonious, less confrontational process and at completion a successful project without litigation and claims, as discussed by Turner & Simister (2000). The Partnering process authorize the project personnel of all participants with the freedom and authority to accept responsibility- to do their jobs by encouraging decision making and problem solving at the lowest possible level of authority.

Reduced exposure to litigation through open communication and issue resolution strategies Lower risk of cost overruns and delays because of better time and cost control over project. Potential to expedite project through efficient implementation of the contract. Open communications and unfiltered information allow for more resolution of problems Lower administrative costs because of elimination of defensive case building. Increased opportunity for innovation through open communications and element of trust especially in the development of value changes and constructability improvements. Increased opportunity for a financially successful project because of non-adversarial win/win attitude.

#### 4. Conclusion

Most stakeholders i.e. Project Owner, Project Contractor, Project Architect/Engineer and consultants, Project Subcontractor and Suppliers have used Partnering and attest to the fact that the benefits elaborated in the literature review is true, by the confirmations from the case study.

There is sufficient theoretical and practical evidence to indicate that effectively implemented project partnering improves the performance of the participating parties (stakeholders). In particular the benefits to be gained are more significant on complex large-scale projects. Finally, contractors indicated a very clear preference for an incentive mechanism ("gain sharing/pain sharing") in partnering agreements.

A further study can be carried out in establishing a model of partnering for the construction industry in Ghana.

#### References

Ansah, K. S. (2011). Partnering: An Alternative Contractual Arrangement for Construction Project Delivery in Ghana. JOPOG, ISSN: 0855-8760, University Printing Press, KNUST, Kumasi.

Awodele, O.A. and Ogunsemi, D.R. (2007). An Assessment of Success Factors and Benefits of Project Partnering in Nigerian Construction Industrywww.academia.edu/.../An \_Assessment of Success Factors and Benefits of Project Partnering in Nigerian Construction Industry

Bennett, J. (2000). The Seven Pillars of Partnering: a guide to second generation partnering, United Kingdom: Thomas Telford.

Bennett.J and Jayes.S.,(1998).The Seven Pillars of Partnering. A Guide to Second Generation Partnering Pp. 3 - 4 London- United Kingdom: Thomas Telford

Cooke.B., Williams.P., (2006).Construction Planning, Programming & Control.(2th ed.) Partnering. Pp. 44-46. United Kingdom: Blackwell Publishing Limited.

Fryer. B., Egbu, C., Ellis.R.,& Gorse. (2006). The Practice of Construction. Management. (4th.ed.) Partnering. Pp.224-227. United Kingdom: Blackwell Publishing Limited.

Howlett, A. M. (2002) International construction developments – what comes after partnering? Publication of Jones, Day, Reavis & Pogue <a href="http://m.jonesday.com/i nternational-construction-developments--what-comes-after-partnering-05-01-2002/">http://m.jonesday.com/i nternational-construction-developments--what-comes-after-partnering-05-01-2002/</a> Retrieved June, 08, 2011

LeFrois Development (2008). Develop Design and Build. Partnering: A Team Approach To Success. What Is Partnering? Partnering Benefits; the Partnering Process Guidelines. Retrieved August 26, 2010 from http:// site: www.lefrois.com

Totterdill, B. W. (2006) FIDIC users' guide: A practical guide to the 1999 Red Book. ISBN: 0 7277 28857 <a href="http://www.thomastelford.com/books/SampleChapters/Fidic%20users%20guide%">http://www.thomastelford.com/books/SampleChapters/Fidic%20users%20guide%</a> 20a%2 0pra <a href="http://www.thomastelford.com/books/SampleChapters/Fidic%20users/

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