EFFECTIVE PARTNERING IN CONSTRUCTION – A CRITICAL LITERATURE REVIEW

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ABSTRACT: The construction industry has been often criticized as an industry of adverse relationships with negative procurement practices as well as lacking in innovation and knowledge sharing. Many have attributed the adverse relationships to formation of temporary organizations working together towards completing a project. The possibility of a construction firm working with a different set of firms in their next project is always present. Due to this, issues had arisen, where construction firms are faced with problems with the learning curve in projects, dissimilarities in organizational culture and business practices with other firms in the temporary organization and distrust in the traditional bidding process. The partnering strategy is being advocated by many literatures as the solution to the many problems in the construction industry. It has started to gain recognition since the publication of Latham and Egan reports, proposing the strategy as an antidote to the industry's many diseases. Various studies have collectively added to the current knowledge of known partnering factor, possible outcomes and barriers to partnering. The many frameworks and models that has been formulated to act as guidelines for successful partnering to construction firms wishing to enter a partnering agreement has reflected the importance of partnering is to the construction industry. Therefore, this paper will first review the definitions of partnering, then report a synthesis of factors that enables partnering, which includes a brief summary of available frameworks revealed from the literature review conducted for an ongoing postgraduate research. The gap in the current partnering knowledge will be highlighted, indicating the need for further study in the area of organizational culture within partnering firms.

Keywords: Partnering, organizational culture, construction industry.

1. INTRODUCTION

Partnering in construction industry has been loosely practiced by most construction firms. Naturally a firm in construction industry will be familiar with other construction firms operating in the same area, and would probably have worked together in past construction projects. However, recent developments in the last decade had indicated and documented its many advantages. Construction partnering has been implemented successfully in the UK, USA, Australia and Japan. These countries have been made the main point of reference due to their success in establishing suitable procedures for the selection of subcontractors in public sector contracts (Naoum, 2003).

Why construction partnering, one might ask? In dealing with various parties, miscommunication and misinterpretation are bound to happen, which contributes to adversarial relationships. Adversarial relationships are not only detrimental to the participating firms, but also will significantly affect the end product as well as the possibilities of innovation in a construction project. Literatures in construction partnering has preached its many benefits, mostly in terms of improved relationship, improved communication, better productivity and reduction in disputes amongst project participants (Chan et al, 2006).

Previous research had indicated that structured approached in the application of construction partnering is more favourable for success and the benefits associated with partnering. It is therefore critical to identify the specific factors that enable successful partnering in construction, as well as the possible barriers to successful partnering. The literature review has revealed some of the factors which enable partnering to function successfully. These factors include commitment, collaboration, communication, tools, policies, procurement, trust and culture. Each of these factors are as equally important as the other, however there seem to be lack of attention to the role of organizational culture in promoting partnering success within current literatures. The issue of organizational culture is even more critical when partnering occurs between firms of different sizes.

This paper will attempt to identify the overall concept of construction partnering, which will include its definition, enabling factors and impeding barriers. The frameworks for partnering that are currently available will also be discussed and classified, highlighting the current lack of attention to the role of organizational culture in partnering within existing literatures. The following sub-section addresses the definition of construction partnering as found in current literatures and the key definition within the context of this paper.

2. DEFINITION OF PARTNERING

Crowley and Karim (1995) had identified that partnering is typically defined in one of two ways. Firstly, by its attributes such as trust, shared vision, and long term commitment; or secondly by the process where partnering continues to be seen as a verb, such as developing a mission statement, agreeing on goals and conducting partnering workshops. This format of defining the term partnering in the construction

industry can be seen up to the present moment. Lu and Yan (2006) whom defined construction partnering as a working relationship between stakeholders based on respect, trust, teamwork, commitment and shared goals; which clearly falls into the first category of partnering definition. Whereas on similar note, the definition provided by Naoum (2003) perfectly fits into the second category. Naoum (2003) defines partnering as a concept which provides a framework for the establishment of mutual objectives among the building team with an attempt to reach an agreed dispute resolution procedure as well as encouraging the principle of continuous improvement. The following Table 1 includes some of the definition of partnering in construction industry from existing literatures.

Table 1: Definitions of partnering in the construction industry

Saurce	Definition
Barlow (2000)	A bundle of business processes designed to enhance collaborations between organizations.
Bastiss et al. (2004)	A method to improve working relationships and project performance in terms of quality, cost and time
Beach et al. (2005)	A generic term for a variety of formal and less formal arrangements that embrace a range of practice designed to promote a greater collaboration and involve differing time frames.
Bennett and Jaxes (1998)	A set of strategic actions which embody the mutual objectives of a number of firms. These are achieved by cooperative decision making aimed at using feedback to continuously improve joint performance.
Cheung et al. (2003)	An approach to manage construction projects, which is regarded as an important management tool to improve quality and programme, to reduce confrontations between parties, thus enabling an open an non-adversarial contracting environment.
Eriksson et al. (2008)	Amethod that aims to increase cooperation and integration between the actors by building trust an commitment whilst decreasing disputes.
Bresnen and Marshall (2000)	A broad concept that covered a wide spectrum of attitudes, behaviour, values, tools, techniques an practices.
Giapola and Sheedy (2002)	The essence of good business practices, its roots are founded in the tenets of trust, mutual respectand integrity, it achieves its goals and objectives through open communication, mutual risk taking an profit sharing.
Thomas (2005)	An integrated team-working approach to achieve better value for all partners by reducing duplication and waste of resources, based on mutual objectives, a robust approach to issue resolution and proactive approach to measurable continuous improvement.
Kwan and Ofori (2001)	An approach that is based on the principles of trust, mutual respect and cooperation towards th achievement of a common goal.
Matthews et al. (2000)	The proactive approach to the management of business relationships, not a technique whice establishes rules, regulations, documentations and procedures.
Naoum (2003)	A concept which provides a framework for the establishment of mutual objectives among the buildin team with an attempt to reach an agreed dispute resolution procedure as well as encouraging th principle of continuous improvement.
Ngari (2007)	A form of alliance between parties that are not in direct competition with one another.
Reading Construction Forum (1995)	A management approach used by two or more organizations to achieve specific objectives b 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.
Social (2003)	Amethod that greatly reduces the transaction costs of tendering and drawing up contracts. These ar replaced by performance measurement and improvement targets for quality, timeliness and costs.
Swan and Khalfan (2007)	Partnering at its most basic level is a non-adversarial approach to procuring and engaging i construction projects.
Lu and Yan (2006)	A working relationship between stakeholders based on respect, trust, teamwork, commitment an shared goals.

Within the context of this paper, the definition provided by Bennett and Jayes (1998) shall be adopted. They had defined partnering as a set of strategic actions which embody the mutual objectives of a number of firms, which are achieved by cooperative decision making aimed at using feedback to continuously improve joint performance. This is mainly due to the fact that it has described partnering as an intentional act to achieve certain objectives, and also because it incorporates the use of feedback to improve the performance of parties involved. The term strategic refers to a certain time expectations, which in this case it refers to the long term relations between parties who are prepared to work together over long periods of time (Peace 2008). By this stage, the parties involved are in tune with each other's expertise and knowledge, could possibly share similar working cultures which will result in maximising the effectiveness of each other's business.

3. FACTORS THAT INFLUENCE PARTNERING

There are massive amount of literature on construction partnering, and most have attempted to identify the critical factors for effective and successful partnering. For the purpose of this research, the following factors most commonly cited will be discussed in this section. The discussion will focus on how these factors assist the partnering approach in realizing partnering benefits.

3.1 Collaboration and Cooperation

In order to overcome the problem of adverse relationships in construction industry, partnering is advocated as the best solution which will enhance collaboration and cooperation for better relationships. This is supported by Bayliss et. al. (2003) and Nystrom (2008) which identified partnering could potentially remedy the negative attitude of construction participants from confrontational to cooperative. Collaborative working and cooperation among construction parties can create a much more pleasant environment when working towards completing a project. This pleasant working environment is much more conducive to increased knowledge sharing, continuous learning and possibly ideas for innovation (Eriksson et. al. 2007; Stewart and Fenn 2006; Khalfan and McDermott 2006). Another important result from collaborative working that needs to be considered is how disputes can be handled in a timely manner, with the aid of partnering and initial setting of mutual objectives at the beginning of any partnering relationships (Drexler and Larson 2000; Bresnen and Marshall 2000). This is particularly critical as disputes can be

easily caused when there are various parties with unique abilities working on a construction project which may influence differing opinions and solutions that could in turn affect their personal agenda.

3.2 Commitment

Evanschitzky et. al. (2006) had indicated commitment reflects the clients' self-evaluation of the consumption context and the active decision to engage in a long-term relationship with a firm. Within the context of construction industry, long-term commitment to partnering can be the extent of the willingness of one party to maintain the current partnered relationship with other parties based upon the favourable outcomes. One of the common problems with firms initially venturing into partnering relationships is that the drive and main reason for partnering may be forgotten along the course of project. This is where commitment is critical for the success of partnering, regardless of whether it is top management commitment (Bisschoff and Benade 2008) or project participants' commitment in implementing the partnering relationship and staying with the same ideology throughout the entire project. Long-term commitment is necessary for successful partnering relationships (Cheng et. al. 2000; Chan et. al. 2004; Yeung et. al. 2007; and Jones and Kaluarachchi 2007).

3.3 Communication

In facilitating the flow of information and sharing of knowledge throughout the project, communication is an important part of any partnering relationship. Open and timely communication provides the basis of a sound partnering practice, and can potentially avoid issues such as dispute and mistrust among contracting parties in a project. Open communication between partners is one of the foundations of successful partnering, along with mutual risk taking and profit sharing (Glagola and Sheedy, 2002). Effective means of communication across the whole partnership has been highlighted as one of the prerequisites for performance improvements in the industry. It is also imperative that effective communication and transfer of information could result in an efficient industry which can cater to the needs of its clients (Wang et. al., 2009). Several studies conducted on construction partnering have concluded communication as one of its critical success factors (Black et. al. 2000; Cheung et. al. 2003; Wong and Cheung 2004; Chan et. al. 2006 and Anderson et. al. 2006).

3.4 Tools

Tools are an essential element of partnering as they provide the necessary reinforcement throughout the partnering relationship. Whilst moving towards a culture of complete trust and mutual commitments, it is still necessary to install some checks to avoid abuse and misuse of such relationship (Palaneeswaran et. al. 2003). This is where partnering tools becomes indispensable. Some partnering relationships may develop their own specific tool better suited to monitor their partnering initiative and interests. The following Table 2 lists the examples of partnering tools that has been mentioned in partnering literatures.

Table 2: Partnering tools in the construction industry

Source	Type of partnering tools	
Cheung et. al. (2003)	Partnering Temperature Index (PTI)	
Bayliss et. al. (2003)	Monthly review meetings and incentivisation agreement	
Yiu and Cheung (2007)	Construction mediator tactics for use in construction alliances	
Li et. al. (2001)	Co-operative benchmarking	
Kaluarachchi and Jones (2007)	Training for partnering	
Anderson et. al. (2006)	Partnering workshop, regular meetings and project specific online rating system.	

The importance of partnering tools to maintain the spirit of partnering throughout the partnering process is widely accepted. However, there seems to be little mention about effective tools to sustain partnering efforts in existing literatures. This could be due to partnering still in its infancy within the construction industry and the best format of partnering and tools that shape it are still undefined at present.

3.5 Policies

The construction industry is normally bounded by governmental policies and regulations. Governmental policies and regulations may affect the industry's receptiveness towards partnering. The importance of policies in achieving successful partnering can be reflected in the findings of a study conducted by Eriksson et al (2008) among Swedish construction clients. They had established that in countries which industry norms of partnering exist there may be also a need to increase understanding of how to interpret policies and implement partnering. For instance, in the UK partnering gain its popularity with support from governmental policies and recommendation. The UK government started to promote partnering

through PFI in their public sector projects. Manley et. al. (2007) in their study had noted how the construction industry is watching and waiting to see if the government is genuine in its endorsement of partnering. Policies will ensure certain idealism is passed on, which in turn will create awareness among construction industry players and provide enough interest for them to initiate the partnering approach in their own subsequent projects. Governmental policy have been noted as one of the key influences in promoting a new technique or products in the construction industry, simply because the government is one of the biggest clients in any construction industry. However, it should be noted that the current partnering literature seems to be lacking especially how some governmental policies can act as enablers or barriers to the industry's acceptance of partnering approaches.

3.6 Procurement

Partnering advocates more flexible procurement systems which may not only benefit the client of a better solution and quality end product, but also adds constructability to the project design and less cost-related disputes. With a different way of procurement, conventional tendering cost and contract documents cost can be reduced. Sorell (2003) found that through flexible partnering procurement, previous tendering costs were replaced by performance measurement and improvement targets for quality, timeliness and costs. Win-win relational contracting approaches such as alliancing and partnering could act as channels for clients and contractors to achieve excellence by providing quality with greater value (Palaneeswaran et. al. 2003). Straub (2007) confirms this by indicating that a long term partnership form promises more benefits inhered in new procurement approaches than price and performance agreements. The industry needs a revamping whereby long term view of value is the main outcome of all construction projects. A radical change for a more flexible procurement methods to deliver value added product and improved performance is necessary for change.

3.7 Trust

The degree of trust affects the success of a partnering relationship. A positive atmosphere based on trust between all parties involved is required to engage in a partnering relationship (Crespin-Mazet and Ghauri 2006). It entails to what extent the partners are willing to share their knowledge and resources (Yiu and Cheung 2007); and in some cases possibly sensitive information that may jeopardize an

organization's competitiveness in the industry, but essential to the partnering success. The issue of trust in partnering has been widely researched, and is commonly cited as one of the most important critical success factors to successful partnering (Akintoye et. al. 2000; Kwan and Ofori 2000; Drexler and Larson 2000; Olsson and Epsling 2004; Beach et. al. 2005; and Chan et. al. 2006). Trust-based relationships are concluded by Lazar (2000) to be critical to maximising positive economic outcomes form partnering and may be necessary to keep the owner/contractor relationship from deteriorating. The element of trust in partnering enhances working relationships and could solve some issues that may arise with collaborative working. With the aid of trust; disputes, misjudgements and unanticipated needs can be effectively managed and dealt with in a way that can benefit all parties involved (Matthews et. al. 2000; and Olsson and Epsling 2004).

4. THE INFLUENCE OF CULTURE IN PARTNERING

Culture, another factor of partnering, forms an integral part of any relationships and it can work either as an enabler or barrier to effective partnering. Schein (1986) has defined culture as a pattern of basic assumptions which could be invented, discovered, or developed by a given group as it learns to cope with its problem of external adaptation and internal integrations. Consequently, organizational culture serves the leader of an organization through nurturing the value system created by him to both serving and incoming members. Within the construction industry itself, culture is considered to be about the characteristics of the industry, approaches to construction, competence of craftsmen and people who work in the industry and the strategies, goals and values of the organizations within which they work (Ankrah et al, 2009).

The nature of construction industry where different organizations come together in a project has contributed in organizations having to adjust one another's culture when working together. Culture also governs the way partners affect on another, which is also why Ngowi and Pienaar (2005) concluded that sharing culture by partners in an alliance made it easier for them to trust each other and allow them to progress further to building the alliance faster. Furthermore, Fletcher and Fang (2006) had implied that key personnel in construction firms need to understand the impact of culture on the relationships they create and the network they form.

At present there have been many attempts to develop with frameworks and guidance to assist in achieving the full benefits of construction partnering. Based on the findings from literature review, these frameworks are categorized according to specific themes as shown in the following Table 3. It should be noted that some of the authors who formulated these frameworks (Crespin-Mazet and Ghauri, 2006; Ngowi and Pienaar, 2005) has highlighted how culture influences partnering. However, as shown in the table in Appendix 1, there seems to be lacking of emphasis on culture of any sort in partnering as mentioned in Abdul Nifa and Ahmed (2009).

Culture can be dissected into several types, pertaining to varying layers in society. Among these types are national culture, industry culture, professional culture and organizational culture. To actually study the entire aspect of culture and seek how it affects partnering in construction industry may require a series of research focusing on the different types of culture, and will definitely require more time to gain a full understanding of the situation. It could be a much feasible effort to begin with the basic unit of culture which begins within construction organization itself.

A framework which emphasize on the influence of organizational culture will be very beneficial to the construction industry. Without an understanding of the organizational culture and the ways in which the daily business activities threaten or reinforce that culture, the management may have a hard time predicting what solutions are likely to work (Rubin and Rubin, 2005). Cheung et. al. (2010) agrees with this by stating that organizations need to pay attention to its culture and develop appropriate infrastructure and capability to manage uncertainties.

5. CONCLUSION

This paper has firstly identified partnering and its general concept. Numerous definition of the term partnering has been included, highlighting how the concept is perceived by authors in existing literatures. Then, the factors of partnering, as derived from the literature has been elaborated in ways that they enable partnering. Revisiting the partnering factors has revealed that some of the partnering factors, such as policy, tools and culture are still lacking in current literatures. Policies and tools can be formulated as needs arises and both are tangible factors can be easily evaluated. However, culture is more abstract and its evolution depends on the social

interaction of the players in the construction industry. In classifying the available frameworks in current literature, the paper has highlighted a possible gap in the partnering knowledge, where there is a lack of knowledge in ways that organizational culture affects partnering success. Researching the influence of organizational culture in partnering may yield a rich finding which will benefit the industry in general, and the organizations considering to partner in particular. Obtaining an insight of how organizational culture affects the success of a partnering venture could possibly save time and frustration. This paper has provided a basis for further research to understand how organizational culture affects partnering, particularly in the construction industry. It has also briefly reflected how innovation could happen with the use of partnering. Therefore, future work will concentrate on understanding the construct of organizational culture and to what extent it affects partnering success in general, and innovativeness within partnering ventures, in particular.

6. REFERENCES

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