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## PART 2 : THEME PAPER INTEGRATION OF VALUE CHAIN IN THE CONSTRUCTION INDUSTRY

#### INTEGRATION OF THE CONSTRUCTION INDUSTRY THROUGH PARTNERING – THE MALAYSIAN INITIATIVE

#### 1.0 Executive Summary

The construction industry has been typified as fragmented resulting from inefficient and ineffective traditional procurement methods and practices, contracting approaches and construction methods. The Malaysian Construction Industry Master Plan (CIMP) has identified and recommended partnering as an approach to integrate the construction industry supply chain, improve clientcustomer relationship and enhance levels of productivity and quality of construction project implementation. This paper will attempt to present Malaysia's initiatives to address the fragmentation by adopting the partnering approach. It will define partnering, identify the benefits of partnering, its critical success factors, major difficulties in implementing partnering, types of projects suitable for partnering, partnering and to conclude, what will be the way forward.

## 2.0 Introduction

The Malaysian construction industry has contributed significantly to the Malaysian economy as an enabler of growth to other industries. The industry is an essential growth enabler because of its extensive linkages with the rest of the economy e.g. the manufacturing industry and financial services. Malaysia will need to develop a construction industry that is internationally competitive to achieve developed nation status by 2020 where the industry will be seamless and all stakeholders will work in collaboration with each other.

The general perception on the Malaysian construction industry as a whole is under achieving. It has low profitability and does not invest enough capital in training, research and development. Many of the industry's clients are dissatisfied with its overall performance.

The key problem areas experienced in the Malaysian construction industry are such as limited trust, little cooperation, poor communication and an adversarial relationship that have resulted in construction delays, cost overruns, difficulty in resolving claims and litigation. The traditional competitive approaches to procurement which relied on independent firms brought together by competitive bids had caused adversarial attitudes and fragmentation of the construction industry. With the increasing call for more price competition profit margins for consultants and contracting organizations are declining sharply. In addition, demands for project performance in terms of time and quality have greatly increased. The situation is one where there is uneven risk allocation between the contractual parties resulting in a "heads I win, tails you lose climate". The Malaysian construction industry has traditionally a lot in common with the construction industry in the United Kingdom, Australia and Hong Kong in that its industry structure, systems, practices and procedures, remain as those which were introduced by Great Britain. The project procurement and administrative arrangements in use have also been inherited from the United Kingdom. These arrangements determine the documentation, procedures and practices in the industry as well as the roles of the participants and the relationship among them. In general the present arrangements stress formality and rigid channels of communications.

Our vision for the Malaysian construction industry is no different to that of other countries which is for the Malaysian construction industry to realize maximum value for all clients, end users and stakeholders and exceed their expectations through the consistent delivery of world class products and services. In order to achieve this vision the industry must:

1. Add value to its customers, whether occasional or experienced, large or small

2. Exploit the economic and social value of good design to improve both the functionality and enjoyment of its end users of the environment it creates

3. Become more profitable and earn the resources it needs to invest in its future

4. Enhance the built environment in a sustainable way and improve the quality of life

To achieve the above vision, Malaysia has launched the Construction Industry Master Plan covering the period of 2006 – 2015. The Plan which was crafted for the industry by the industry has outlined the Vision, Mission, seven Strategic Thrusts (ST) and twenty one specific recommendations. ST1 is to integrate the construction industry supply chain to enhance productivity and efficiency. One of the strategies to integrate the construction industry supply chain is through the partnering approach to procurement.

Although the culture and the business philosophy in Malaysia lend itself to the concept of Partnering, there is very limited experience with regard to a formal partnering arrangement. Informal partnering arrangements have been practiced by a few organizations and the public sector has embarked on post contract partnering arrangement in some limited contracts.

As partnering experience in the UK, Australia and Hong Kong had demonstrated good project outcomes in terms of time, cost and quality and owing to the lack of formal knowledge and information in Malaysia, the Construction Industry Development Board (CIDB) Malaysia had identified the partnering practices from the UK, Australia and Hong Kong for benchmarking and formulating a better conclusion.

Premised on this, CIDB Malaysia has initiated a comprehensive study on Partnering with the objectives of reviewing the past and current scenario of partnering in both public and private sectors locally and abroad. These inputs will assist in identifying the best model for Malaysia, suitable Key Performance Indicators and incentives to successfully implement the partnering programme in Malaysia. The study will also include the practices of Partnering in UK, Australia and Hong Kong with the intention of sharing best practises.

The contents of this paper have extracted findings from literature reviews and the study visits conducted to United Kingdom. From these findings, we are able to learn and leverage on them to develop our initiative for Malaysia.

# 2.0 Partnering Defined

Partnering was introduced in the 1980s in the USA as an innovative construction procurement route. Project partnering is the term given to the relationship of two or more members of the principal team coming together on a single project. This arrangement goes beyond Design and Build contracts by getting more members of the project team together, including client, contractor, sub-contractors and consultants, to work as a team at design stage.

Strategic partnering alliances take project partnering further by involving the same partnering team on a number or series of projects, or for a specified period of time for repeat works. Framework agreements are basic agreements which govern the project members for the projects which they will be involving for the next few years. With the framework agreements, integrated teams from the client, contractors and consultants are established to deliver the individual projects at the earliest stages of a scheme. More detailed agreements for each project are established at the later stage.

Pain/gain sharing mechanisms are commonplace within partnering arrangements though the precise details, usually linked to a target cost, vary from project to project. Value is a personal matter, not an objective fact. What we value stems from what values we hold and from what we choose to value. It can be usefully defined as the balance between what you get and what you give. Positive value exists for any player when they get more in their own terms than they must give up. Positive value exists when benefits exceed sacrifices. In reverse, negative value exists when the sacrifices exceed benefits.

## 3.0 Benefits of Partnering

Major benefits identified from case studies are as follows;

- Predictability of both time and cost improved as late design changes became less as a result of early involvement of carefully selected supply chains.
- An approach of early involvement and forward planning increased potential for cost reductions and savings.
- A long-term relationship arrangement provides a continuity of works that allows contractors to understand the client's needs.
- A pain/ gain share formula encourages supply chains to be innovative and improve performance.
- Problems identified at the early stage and resolved in a collaborative manner.
- Close communication and partnering working within the projects reduces defects and accident rate.

- Lessons learned shared across the industry creates a culture of continuous improvement.
- Benchmarking and performance measurement of completed schemes enables clients to measure and monitor project progress.

## 4.0 Critical Success Factors of Partnering

Major critical success factors for adopting partnering identified from case studies are as follows;

- 1. Support from senior management Senior management are committed to partnering arrangements and in driving forward an agenda of improvement and operational changes throughout the whole of the organisation.
- Commitment from all participants All parties are required to be committed and play their role in driving forward the initiative. Partnering is about building teams, promoting trust and long term relationships between individuals involved and creating the right environment in which they can work best to deliver the project most efficiently and effectively.
- 3. Accredited Project Directors or Project Sponsors They act on behalf of the clients for all aspects of a construction project throughout its lifecycle. They are fully responsible in delivery of a scheme. They are required to undertake extensive training programmes, an accreditation process and formal courses. They generally have technical backgrounds and competencies.
- 4. Openness and Trust Real trust between partners is essential for the success of partnering. Partnering requires a cultural shift that requires recognition of interdependence between clients and contractors.

## 5.0 Major Difficulties In Implementing Partnering

Major difficulties in implementing partnering are as follows;

- 1. There is an inherent distrust within the construction industry. It is not an easy task to establish real trust between the client and main contractor relationship and it takes time.
- 2. There are behavioural problems. Some individuals in an organization may resist partnering because of their past experience and understanding of traditional approaches.
- 3. Contractors and sub-contractors do not understand partnering. All stakeholders need to be educated on what partnering is all about and the benefits it is likely to bring.
- 4. A lowest tender price mentality on part of clients is difficult to change. The mindsets that cheapest tenders produce cheapest construction cost have been undermined for a long time.
- 5. Changing the culture is one of the biggest hurdles in adopting partnering. Moving away from traditional procurement approaches requires entire supply chains to change their existing policies and procedures.
- 6. Clients may have approached partnering with insufficient thought and not given serious attempts to make it work.

- 7. Lack of capable and competent partnering champions who are truly empowered to ensure that partnering could be implemented efficiently.
- 8. Lack of well structured courses and training programmes for supervisors and managers.
- 9. Pain/ gain sharing mechanisms are not always equitable and risk allocation remains a contentious issue.

# 6.0 Types Of Projects Suitable For Partnering

Partnering works for both one-off projects and a series of different types of projects. The underlining requirement is that the project is of a significant size and value in order to make the investment worthwhile. Certain clients may pay a substantial premium through partnering arrangements, it is important to ensure that the initial costs of establishing partnering are outweighed by the benefits. The degree of success is greatly depended on the nature of the work. Based on case studies, it is clear that successes can be achieved on large, complex, new build and repeat type projects. In some cases, a series of small or different projects can be blended and bulked under a single scheme. For example, 10 schools in a same location controlled by a local council.

## 7.0 Partnering Models And Tools

The model of The Seven Pillars of Partnering (Bennett and Jays, 1998) can be used to set up a strategic partnering framework. The model is as follows:

- Strategy: is the point in the process where long-term objectives of the initiative are set.
- **Membership**: selection of the right partners is fundamental. It is important that all key members of the partnership are brought together as early as possible.
- Equity: for cooperation, rather than opportunism and conflict to prevail, the agreement must be fair to its members from the outset. The fairness extends to such matters as sharing of works, profit and loss, risk and reward strategies, problem solving and the management of differences.
- Integration: although it must be remembered that the partner organizations are separate entities, attempts at integration should be made wherever these enhance the efficiency or effectiveness of the initiative.
- **Benchmarks**: performance measurement and comparison are fundamental in maintaining the health of the initiative and for improving it.
- **Project Processes:** the development of standard, integrated processes.
- Feedback: it is essential to communicate all of the above to all member organizations at all levels of their operation.

An 'eighth pillar' that can be considered as well is the :

• Maintenance and Improvement: Incorporating the learning acquired from experience as the strategic partnering increases in maturity.

Various collaborative tools which are integral to partnering are as follows;

- **Project bank account**: eliminates the problem of main contractor holding the payments of subcontractors. It provides a fair payment regime throughout the supply chain.
- **Project insurance:** reduces financial waste and avoids blame culture. It covers the financial loss for the whole team.
- Partnering facilitators: advice the clients on the selection process, on the success factors, on how to select the team, strengths of partners, obstacles to success, on how to overcome obstacles, soliciting ideas to make partnering work, development of the Partnering Charter and the action plan, setting up of the problem resolution process and nomination of partnering champions. The facilitators do not get involved in the design process to maintain their independence.

## 8.0 Partnering Incentives

For most of the partnering projects, the benefits delivered provide scope for the formulation of incentives. In agreeing how incentives to be dealt with, the goal should be aligned with the interests of all project stakeholders with fully meeting the client's objectives. This means the payments to each firm of the supply chain should be arranged in such a way that their profits increase directly with the success of the project. Therefore, providing a fair return for the supply chain should be an important aim.

It is not easy to establish effective incentives for a group of firms with little or no partnering experience as many of the building industry's normal practices cause people to concentrate on financial issues and so make it difficult for them to work effectively. For these reasons it is often best to begin the move to partnering using a simple agreement to share any savings identified by teams on some predetermined basis.

## 9.0 The Implementation Of Partnering Initiative In Malaysia

CIDB Malaysia is aggressively moving forward in implementing the Partnering programme in Malaysia to fulfill the recommendations set forth by ST 1 of the CIMP. The comprehensive study on Partnering is almost completed with overviews on Partnering in Hong Kong and Australia yet to be done.

At this initial stage, we have identified suitable projects that can employ Partnering. These projects are complex in nature and are procured through the PPP concept. It can certainly utilize Partnering to ensure the full benefits can be reaped especially with the inclusion of the Whole Life Cycle Costing approach in acquiring the necessary fundings to enhance the value of the assets. This is more so now that the PPP will be the way forward to many Government projects for the 10<sup>th</sup> Malaysia Plan period (2011 – 2015)

Rather than come up with its own partnering formula, the more expedient approach for Malaysia is to borrow viable partnering concepts and models from the United Kingdom, Australia and Hong Kong, adapt them to suit the unique characteristics of the Malaysian construction industry while at the same time avoiding its pitfalls and drawbacks. The key features, benefits and risks of the partnering concepts and models can be used as a guide by enlightened clients to carefully craft appropriate procurement arrangements and contract conditions depending on the nature and requirements of different projects.

Currently, CIDB Malaysia has developed an initial roadmap for the implementation of partnering in Malaysia. It will be continuously reviewed and refined taking into account all segments of the construction industry – the consultants, material suppliers and other service providers e.g. the banks, legal fraternity, etc. It has to be acknowledged that partnering cannot be applied across the entire spectrum of the Malaysian construction industry. Only competent service providers throughout the supply chain should be engaged in partnering. Training and accreditation schemes must be developed across the construction spectrum and consider it to be the requisite to successful partnering.

Aggressive and continuous awareness campaigns to drive home the message would be initiated to the various Ministries in attempting to sway their decision to adopt the Partnering concept. It may even be necessary to forward the proposal to the Cabinet level for a top down directive which could ease the implementation of Partnering. However, other considerations like equity in the share of Governments' projects must be given to ensure fair distribution among the players.

## 10.0 Conclusion

In line with the recommendations and findings from case studies and literatures, partnering can be effective to its full extent by identifying critical success factors and mitigating potential problems for partnering failures. The level of partnering success is greatly depended on the top management support. If the top management is seen to only provide lip service to the partnering approach, the partnering relationship is bound to fail (Hellard 1996).

Changing the mind-set of everyone in the construction industry will be the greatest challenge in implementing partnering in Malaysia. The success of partnering is much dependent on whether the people can accept the new idea. There must be partnering champions at all levels to overcome inertia, from the government level right down to the individual organizations of key players of the construction industry. These champions must have a strong commitment to drive the partnering agenda and remove cultural and economic barriers. There are several unique characteristics in Malaysia which might favour the implementation of partnering. Unlike in the United Kingdom, the major public sector clients are the federal ministries, not the local authorities. Getting the few major public procurers to adopt partnering would be easier than trying to convince the many minor public spenders. CIDB Malaysia can take on this role of being the partnering champion at the policy level.