# EFFECTIVENESS OF PROJECT PARTNERING IN THE SRI LANKAN CONSTRUCTION INDUSTRY

N.A.R.U. Nissanka and Mahesh Abeynayake\*

Department of Building Economics, University of Moratuwa, Sri Lanka

# **ABSTRACT**

Complexity and disputes are some of the inherent features of the construction sector. Building up more effective and sustainable relationships as a means of avoiding such disputes would result in value addition to the final outcome of a project. Under these circumstances, concept of 'partnering' is emerging to play an essential role in terms of avoiding adverse relationships. The research anticipates to provide a comprehensive knowledge on reasons behind the concept of project partnering not being well practiced and its effectiveness within Sri Lanka. Quantitative research method was followed in attaining the research aim and objectives. Semi structured interviews and questionnaire survey were carried out in gathering required information for the purpose of analysis.

Information gathered via semi structured interviews revealed that project partnering is hardly or not used at all within Sri Lankan construction sector and considering current situations the need for such concept within industry is timely. Research identifies six major reasons behind project partnering not being broadly practiced in Sri Lankan context and highlights the strategies to be implemented in order to promote this concept within industry. Further suitability and effectiveness of project partnering concept within Sri Lankan context was evaluated based on the results of questionnaire survey. It revealed that time saving, increase in understanding between parties, less adversarial relationships as well as high customer satisfaction are highly possible if this is implemented in Sri Lanka. Further it highlights the government has a major role in identifying this concept and promoting it throughout the industry.

**Keywords:** Commitment; Construction Industry; Customer Satisfaction; Disputes and Conflicts; Mutual Benefits; Project Partnering; Trust-based Relationships.

#### 1. Introduction

Industries in which inter organizational relationships are playing an essential role in enhancing the business, it is important to build sustainable relationships and in order to build that relationship, parties involved should shift from low trust base to high trust base environment (Wood et al., 2002). In different countries the construction industry has attracted many criticisms for the existing relationships between parties due to the defects, poor collaboration, lower customer focus and lack of end user involvement (Egan, 1998). May be due to the criticisms that were there in traditional procurement and project governance, the interest on collaborative relationships (most of the times referred to as partnering) has increased over the recent years as an alternative to traditional approach (Eriksson et al., 2008).

Partnering is identified as a concept which basically provides a solid framework to establish the mutual objectives of parties involved in a project and a better dispute resolution procedure as well as it encourages the concept of continuous improvement (Naoum, 2003). There are mainly two types of partnering. One form basically involves strategic and long-term relationships with commitments and the other form is specifically for a particular project (Cheng et al., 2004). Rameezdeen and Silva (2002) have identified that partnering has just started to emerge within Sri Lankan construction sector. Hence there can be different issues in initiating this concept with construction projects and even if the concept has been initiated the effectiveness of it would be questionable. In such circumstances, carrying out a critical study on effective project partnering in Sri

<sup>\*</sup>Corresponding Author: E-mail – abey92@hotmail.com

Lankan construction industry is timely. Therefore the research is focused to identify why this concept, project partnering, is not being well practiced currently in the construction sector of Sri Lanka and to evaluate how effective the project partnering can be within Sri Lankan construction industry.

The paper structure begins with a literature review on construction project partnering and its benefits, critical success factors and problematic areas. The paper then presents methodology adopted for this study and discuss findings on the reasons behind project partnering not being well practiced and effectives of it within Sri Lanka. Finally, the paper is concluded by summerising the findings.

# 2. LITERATURE REVIEW

A comprehensive literature review was carried out to identify the concept of project partnering, its benefits, partnering process and problematic areas.

#### 2.1. PARTNERING STRATEGY

In between 1970s and 1980s, the whole businesses within the construction industry changed dramatically due to the impact of various economic factors, mainly due to the increasement of inflation rate (Cook & Hancher, 1991). Under these circumstances, the construction industry had to adopt new innovative strategies in order to overcome all these challenges and develop more into the future (Gardiner & Simmons, 1998). Hence to respond these challenges and for the betterment of construction sector, the concept of "partnering" had been introduced as an innovative procurement strategy to mitigate the risks associated with investments and reach to a win-win situation for both contracting organization and the Client (Cook & Hancher, 1991). Various definitions for the concept of partnering can be identified in different literatures (Eriksson, 2010). Basically there is no accepted definition for 'partnering' and it generally refers to different managerial practices as well as different organizational designs that would enhance the relationships (Barlow & Jashapara, 1998). Whereas by referring these various definitions the following can be constructed.

"A commitment of two or more organizations in order to achieve specific mutual objectives and working together to improve performance and establish continuous improvement by sharing the gains (win-win situation)".

Project partnering is one of the main concepts that can be discussed under the partnering concept. This is basically focused on a particular project only (Lu & Yan, 2007). Further, this is the commitment of project team of a particular project in order to achieve the common set of project goals by working together along with established dispute resolving procedures in an effective way (Bygballe et al., 2010). Hence project partnering can be considered as 'result-oriented' mechanism (Cheng et al., 2004). Many organizations will first select project partnering as a means of getting the project done and wait for the positive results before implementing 'strategic partnering' for the future projects (Matthews et al., 1996).

# 2.2. BENEFITS OF PROJECT PARTNERING

Numerous advantages can be seen with the implementation of project partnering strategy. According to the survey results of Black, Akintola and Fitzgerald (2000), some advantages attributable to partnering were identified. These advantages are shown in the following Table 1.

Table 1: Benefits Attributable to Partnering

Benefits	Total	Involvement	Non-	ANOVA	
			involvement	F statistics	Significance level
Less adversarial relationship	4.37	4.49	4.12	2.47	0.37
Increased customer satisfaction	4.19	4.38	3.80	5.94	0.07
Increased understanding of parties	3.99	4.15	3.64	4.78	0.53
Improved time scale	3.92	4.13	3.48	6.08	0.42
Reduced risk exposure	3.91	4.02	3.68	1.60	0.11
Reduced cost	3.81	3.96	3.48	2.88	0.08

Improved administration	3.73	3.81	3.56	1.04	0.33
Quality improvements	3.69	3.74	3.60	0.23	0.98
Improved design	3.55	3.68	3.28	2.43	0.25
Design cycle reduction	3.38	3.47	3.20	1.23	0.21

Source: Adapted From (Black et al., 2000)

According to Black et al. (2000) one of the major features that can be identified from the partnering under a project is the advantage of being able to share the risks as well in a case of partnering with a firm under an international project most of the cultural and language barriers can be overcome successfully.

#### 2.3. PROJECT PARTNERING PROCESS

Adopting the right and accurate project partnering process may be required in order to achieve project objectives and goals. Cheng and Li (2002) have identified a customized model for the project partnering process. According to Cheng and Li (2002) the process comprises of mainly three stages namely partnering formation, partnering application, partnering completion and reactivation. Also each stage requires common and functional success factors in order to achieve the success.

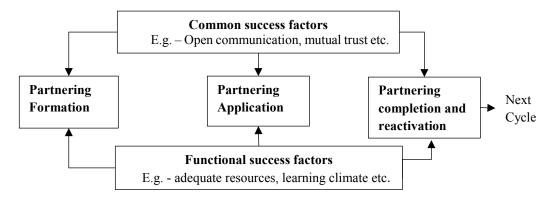


Figure 1: Customized Model for the Project Partnering Process

Source: (Cheng & Li, 2002)

The common success factors mentioned in the above process are common for all three stages. Whereas the functional success factors are unique for each stage. For an example, as identified by Cheng and Li (2002), partnering formation stage requires team building while partnering application stage requires adequate resources, joint problem solving and so on as the functional success factors.

In the *partnering formation stage* explicit or implicit agreements shall be made between key parties to the construction project to accomplish mutually agreed goals and objectives (Cheng & Li, 2002). Also unfreezing of minds of parties may be required to accept the need for change and to identify need for project partnering concept. During the *partnering application stage* execution of partnering concept among parties to the project shall be done (Cheng & Li, 2002). Learning and getting experience regarding the partnering concept implemented will also be done at this stage. *Completion and reactivation* simply means after completing the current project the intention of parties to rerun the informal relationships with same parties in a new project (Cheng & Li, 2002).

#### 2.4. Critical Success Factors for Construction Project Partnering

Many studies have revealed different types of Critical Success Factors (CSFs) and if major parties to the project do not pay a greater attention to these CFSs, painful as well as disruptive results can be visible (Cheng & Li, 2001). Chan et al. (2004) identified main seven significant factors affecting the partnering success. They are adequate resources, support from top management, mutual trust, long term commitment, effective communication, effective co-ordination and productive conflict resolution.

Moreover, based on the data collection and analysis of the studies of Cheng and Li (2002) different common and functional success factors, which are related to each stage of partnering process, could be identified. Top management support, mutual trust, open communication and effective co-ordination are the common factors

highlighted under each stage of project partnering process. Functional critical success factors vary with each stage of the process.

Furthermore, according to the survey data analysis of Black, Akintoye and Fitzgerald (2000), the most important factors that contribute to construction project partnering success are mutual trust, effective communication, commitment from senior management, clear understanding among parties, acting consistent with objectives, dedicated team, flexibility to change and commitment to continuous improvement.

#### 2.5. PROBLEMATIC AREAS OF PROJECT PARTNERING

The following were identified as the problematic areas of construction project partnering.

### 1. Misunderstanding of partnering concept

An unambiguous understanding as well as the knowledge regarding the project partnering concept is vital to achieve success in partnering relationships between parties involved in the project (Chan et al., 2003). Moreover according to Larson and Drexler (1997), it is the limited experience in project partnering that has affected the understanding of partnering concept.

# 2. Relationship problems

One of the basic objectives of project partnering is to encourage the parties involved in the project to shift from traditional adversarial attitude to more co-operative as well as team based approach in order to prevent issues (Loraine, 1994). Further according to Loraine (1994), many parties tend not to trust other parties due to past experience and fear towards the change. Relationship management is considered as an umbrella concept under the partnering and failure to comply with it might cause damages to good business relationships (Manley, 2002).

#### 3. Cultural barriers

Compared to the very traditional culture of construction projects, projects with partnering will have different cultural features (Chan et al., 2003). Further many organizations are generally reluctant to change into a more integrating culture. According to Hellard (1995), it is basically difficult to change the established culture within an organization. Hence compatibility of culture is one key element to be considered when selecting a partner for the project (Eriksson et al., 2009).

# 4. Uneven commitment

Implementing project partnering requires a greater commitment from each party involved in the construction project (Chan et al., 2003). According to the Sanders and Moore (1992), all involved parties in the project should need to have total commitment towards the project partnering process. Whereas it is visible some uneven level of commitment in practice mainly due to different goals among parties in the project (Eriksson, 2010). All these contracting parties should require to have more effort to balance the commitment from each side (Chan et al., 2003).

#### 5. Communication problems

In order to fully understand the client's requirements, effective as well as clear and open communication is mandatory (Chan et al., 2003). According to Larson and Drexler (1997), regardless of the importance of direct open communication in partnering, some parties do not trust other party and not willing to communicate and share important information. Sometimes failure in effective communication can result in less collaboration between parties involved in project (Gardiner & Simmons, 1998).

#### 6. Lack of continuous improvement

According to the Sanders and Moore (1992), traditional effort for the continuous improvement, as a joint effort, is basically required to eliminate waste and barriers. Main barriers found in this effort to improve continuously are approval time and development costs (Chan *et al.*, 2003). Focusing on continuous improvement will enable the parties involved in the project to enhance quality and add more value to the final outcome (Stehbens *et al.*, 1999).

### 7. Insufficient problem solving

Sanders and Moore (1992) mentioned that problems do not disappear automatically just by writing the partnering agreement. Conflicts and disputes among the parties involved in the projects are still possible (Ng *et al.*, 2002). Even if project partnering team is willing to recognize and solve all the issues, still the problems can occur (Albanese, 1994).

#### 8. Insufficient efforts to keep partnering going

Initiating the partnering process requires additional staff, cost as well as resources and project partnering further requires constant effort to maintain good relationships throughout the project (Chan *et al.*, 2003). As identified by Sanders and Moore (1992), parties involved in the project can easily get back to the routine traditional way of working just by ignoring the partnering concept.

#### 9. Discreditable relationship

Partnering procedures will provide various benefits to the construction sector such as better relationships, better performance, innovation and so on (Chan et al., 2003). However according to Newman (2000), these improved relationships can lead to corruption. Moreover Longstaff (2000) identified the importance of having an independent ethics audit in order to define the values and principles of the company as well as involved parties to avoid these issues.

#### 3. RESEARCH METHODOLOGY

Survey method was used for this particular research. Under the survey approach, semi structured interviews and questionnaire survey were conducted for the data collection purpose. Mainly the views regarding reasons behind project partnering not being well practiced and the strategies to be implemented in order to promote the concept within Sri Lankan construction industry were identified during semi structured interviews. Further opinions of experts were taken regarding the suitability and effectiveness of project partnering for the development of construction industry. Five experienced professionals were selected for the interview survey. The questionnaire survey was developed based on the literature findings and mainly based on the data collected via semi-structured interviews. Then findings questionnaire survey were analysed using Relative Importance Index and standard deviation.

Total 44 questionnaires were distributed among selected professionals and only 36 questionnaires had been received which is equal to 81.8% response. Further questionnaires were distributed among contracting organizations and consultancy organizations. Out of all the respondents, 30.6% (11 Nr) of respondents were working in contracting organizations while the rest of 69.4% (25 Nr) were related to consultancy organizations. Service experience level of each respondent to questionnaires was categorized into few sections as below.

The target population for this particular research was the professionals working in the construction sector of Sri Lanka. More consideration had to be given for the fact that the projects which actually involved project partnering concept within Sri Lanka are very minimal. The selection of sample for this study was based on non-probability sampling.

Table 2: Service Experience Level Category of Each Respondent

	Frequency	Percent
0-5 Years	6	16.7
6-10 Years	11	30.6
11-15 Years	11	30.6
16-20 Years	3	8.3
20 Years <	5	13.9
Total	36	100.0

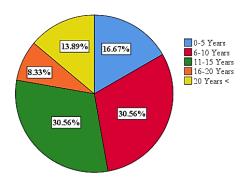


Figure 2: Service Experience Level Category of Each Respondent

# 4. DATA ANALYSIS AND DISCUSSION

Data collected via semi structured interviews and questionnaire survey has been summarized below.

# 4.1. APPLICABILITY AND EFFECTIVENESS OF PROJECT PARTNERING CONCEPT WITHIN SRI LANKAN CONSTRUCTION INDUSTRY

All the views taken under the semi structured interview survey confirmed that this concept is not practicing within Sri Lanka broadly. Whereas in some instances project partnering concept can be seen practicing at very minimal level in an unofficial manner. Partnering concept is still new to the construction industry of Sri Lanka.

This broader concept is very suitable for the construction industry of Sri Lanka even though its application is at very minimal level at present. Considering all the possible benefits from this concept within Sri Lankan construction sector, effectiveness of the outcome is very significant. When the risks and ultimate gains are shared among parties, both the main parties will be working towards achieving each other's goals and thereby final outcomes and processes of achieving the outcomes will be very effective. Whereas the views of the most respondents highlighted that in order for the project partnering concept to be more suitable and its outcomes to be more effective, first the mindset and the attitude of parties working in Sri Lankan construction sector must be altered. Basic foundation must be laid by constructing a more positive mentality, essentially a more spiritual development, within most of the executive level parties involved in the construction industry of Sri Lanka before implementing the concept.

# 4.2. Reasons behind Project Partnering not being Well Practiced within Sri Lankan Construction Sector

Main reasons identified as to why project partnering concept is not well practiced within Sri Lankan construction sector are summarized below. These reasons were mainly identified as part of the semi-structured interviews.

Table 3: Reasons Behind Project Partnering Not Being Well Practiced in Sri Lanka

Number	Reason
1	Contractors are not up to the required level to implement a concept like project partnering (i.e. not willing to share the risks)
2	Clients may approach only few large contracting organizations if they need to go for the project partnering.
3	Clients and contractors in the industry are so much used to conventional approaches (traditional methods) other than partnering.
4	Contractors and clients may not willing to adopt concepts which are new to the industry (i.e. Project partnering)
5	Larger contractors have enough projects using conventional methods and hence they are not bothered to implement a collaborative approach like partnering.
6	Clients and contractors do not see the importance and benefits of project partnering (they see it as just another way of getting the project completed) and hence not focused on this concept.

According to views of interviewees, most of the contractors and clients are so much used to conventional approaches of getting the project done. For an example, most of the times in Sri Lanka, clients tend to use traditional (integrated) procurement path as well as design and build (separated) approach. Further most of the respondents to semi-structured interviews mentioned that contractors also, most of the times, prefer to have these traditional approaches in place when implementing projects. Now these parties are very much used to the traditional approaches and hence they are not interested on involving in this concept. Since the contractors, in Sri Lankan construction sector, are very much familiar with the traditional methods it is easy for them to carry out all the work related to any project under the known circumstances compared to a project in which the project partnering concept is involved.

Further, several interviewees stated by explaining their ideas, fear of adopting the project partnering concept is there within parties involved in construction sector. Clients and contractors might not willing to take any risk by approaching a concept which is new to the Sri Lankan construction sector. Further there is enough risks and disputes involved in construction projects. Hence due to all the risks already exist, specially contractors might not willing to implement a novel concept like project partnering and rather they would continue all the projects using more familiar conventional approaches.

In addition, respondents of semi structured interviews emphasized that most of the contractors might see this concept as just another way of getting the project done. They do not see the importance and benefits that can be gained by all the parties involved in a construction project if the concept of project partnering is implemented. Contractors and clients essentially see this approach as a method of getting the main two parties to a project together and complete the project may be with lesser disputes. Whereas both these main parties may prefer to use the conventional approaches even with lesser additional disputes rather than going for an unfamiliar concept.

Moreover required qualities and appropriate mindset must be there within contractors. In Sri Lankan context (as per the views and ideas of most of the interviewees), some contractors mainly concerned about finishing the job soon, get the money and quickly go for another job. Building up more constructive relationships and adding more value to the work that they are doing is not often seen within Sri Lankan construction sector. Basically the capacity to accept the required risk level and the ability work collaboratively based on a trust-based platform are lacking when looking at some of the contractors working in the industry. The identified (under semi structured interviews) below mentioned reasons were taken into the consideration of professionals working in construction industry via semi-structured interviews and ranking of each reason was done as below.

Table 4: Ranking of Reasons Identified

Reasons	Mean rating	Std. Deviation	RII	Rank
Clients and contractors in the industry are so much used to conventional approaches (traditional methods) other than partnering.	4.64	0.487	0.92	1
Contractors and clients may not willing to adopt concepts which are new to the industry (i.e. Project partnering)	4.50	0.737	0.91	2
Contractors are not up to the required level to implement a concept like project partnering (i.e. not willing to share the risks)	4.06	0.860	0.82	3
Clients and contractors do not see the importance and benefits of project partnering (they see it as just another way of getting the project completed) and hence not focused on this concept.	4.03	0.910	0.81	4
Larger contractors have enough projects using conventional methods and hence they are not bothered to implement a collaborative approach like partnering.	3.89	0.820	0.78	5
Clients may approach only few large contracting organizations if they need to go for the project partnering.	3.75	0.906	0.74	6

#### 4.3. BENEFITS OF PROJECT PARTNERING RELATED TO SRI LANKAN CONSTRUCTION SECTOR

These benefits were identified under the literature review and brought under the consideration of each professional via questionnaires to identify how far each benefit is achievable within Sri Lankan construction sector if this concept is broadly implemented. Following table demonstrates the mean rating and standard

deviation calculated for each benefit. Based on these information RII was calculated and ranking of benefits was done accordingly.

Table 5: Ranking of Benefits of Project Partnering in Sri Lanka

Benefits	Mean rating	Std. Deviation	RII	Rank
Time saving	4.31	0.710	0.86	1
Less adversarial relationships	4.14	0.351	0.83	2
Increases the understanding between parties	4.11	0.747	0.82	3
Increases customer satisfaction	4.00	0.676	0.80	4
Reduces the cost	3.94	0.715	0.79	5
Improves designs	3.92	0.500	0.78	6
Improves the quality	3.78	0.422	0.76	7
Improves project administration	3.75	0.649	0.75	8
Design cycle reduction	3.64	0.723	0.73	9
Reduces the risk exposure	3.50	0.941	0.70	10

The results clearly demonstrate that 'time saving' (with RII of 0.86) is the most possible and achievable benefit within Sri Lankan construction sector if this concept is broadly implemented. Further above analysis highlights that less adversarial relationships (with RII of 0.83), increase in understanding between parties (with RII of 0.82) and increase in customer satisfaction (with RII of 0.80) are some of the other important benefits which are more likely to be achieved when it comes to Sri Lankan context. Moreover the above table 4 further demonstrates that it is quite difficult to reduce the risk exposure (with RII of 0.7) and design cycle (with RII of 0.73) with the implementation of this concept within Sri Lanka. This may be probably due to the inherent features of Sri Lankan construction sector.

# 4.4. POTENTIAL STRATEGIES TO ENHANCE THE SUCCESSFUL IMPLEMENTATION OF PROJECT PARTNERING WITHIN SRI LANKAN CONSTRUCTION SECTOR

Five main strategies were identified from the different views of each respondent of semi-structured interviews to enhance the implementation of project partnering concept within Sri Lankan construction sector.

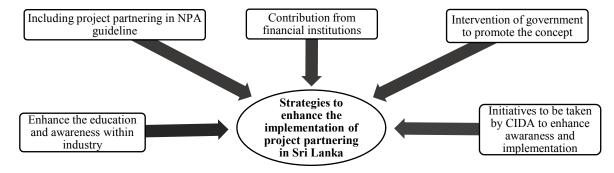


Figure 3: Strategies to Enhance the Implementation of Project Partnering in Sri Lanka

If government takes the initiative to implement this concept in government projects, contractors will also get the opportunity gain experience and it will assist to enhance the awareness within private sector regarding this approach. Further tax reliefs and other concessions can be given by the government for the projects which involved project partnering as the procurement path. As part of the government's initiatives in promoting this strategy within Sri Lanka, it can complete few projects successfully (as the first step) using this concept as the procurement method and demonstrate the effective and positive results to the private sector. This way professionals in private sector will accept the positive side of it and with the concessions given these organizations will tend to adopt this concept within new upcoming projects. Apart from all these steps, government can bring the examples from successfully completed foreign projects (using project partnering)

from different countries and demonstrate how effective and useful this concept can be for the development of Sri Lankan construction sector.

Construction Industry Development Authority (CIDA) is the ideal party to take the initiatives under the government of Sri Lanka to promote and enhance the implementation of project partnering concept. CIDA can provide standard forms and specimens for partnering charter suitable for the projects which involve partnering concept. The concept of project partnering and the specific process that should be followed under this approach can be included in the National Procurement Agency (NPA) guideline. This a better way to make the contractors and clients more familiar with this concept. Currently, in Sri Lanka, one major reason behind partnering not being well practiced is that unfamiliarity or unawareness of this concept. Hence the respondent highlighted that by including the above said areas in NPA guideline, unawareness and unfamiliarity can be eliminated up to a considerable level.

Financial institutions, such as banks, can also contribute to the broader implementation of partnering concept. Basically investors tend to raise the required funding mainly either via equity capital or debt capital. When a potential investor approach a bank to raise the debt capital (mainly by taking a long term loan), basically the financial institution will first look at the risk level involved in lending out huge amount of money as a long term loan. The risk level (with lesser disputes and all the benefits related to this concept as a procurement path) involved, in projects which basically involved project partnering, is comparatively low. Hence banks will have a positive mind in lending more money for these types of investments which basically involves partnering strategy. In order to get the above highlighted point more realistic, it is a must to educate or make the financial institutions aware about this concept and its benefits. Then those institutions will realize that how lesser risky it is to lend money for investors who seeks to invest on projects under the project partnering concept as a procurement method. Further investors will be able to negotiate with banks and raise the debt capital at a comparatively lesser interest rate. Further the respondent emphasized financial newspapers can be used as an important tool to provide good knowledge about this particular concept to the financial institutions.

One of the other important strategies to enhance the implementation of partnering concept is that educate and develop the required mindsets of the parties involved in construction projects in Sri Lanka. As described in previous sections, some reasons behind partnering not being well practiced within Sri Lanka are the unawareness and difficulty in building up required mindset within people. As clarified with the aid of respondents' views, spiritual development in mindsets to work more collaboratively based on a trust-based relationship is vital to enhance the implementation of partnering concept and sustain within that environment.

#### 5. CONCLUSIONS

Disputes and conflicts are some inherent features of construction sector. Building up more effective and positive relationships under these circumstances would result in higher value addition to the final outcome of a project. Project partnering is identified as one of the ideal concepts to build up effective and trust-based relationships between parties involved in construction projects.

Project partnering concept is not broadly practicing (or not practicing at all) within Sri Lankan construction sector. Further six major reasons were identified as to why this concept is not broadly practicing within the country. Sri Lankan construction sector is very much used to conventional or traditional approaches other than concepts like partnering was the main reason identified. In addition, some main strategies were identified in order to enhance implementation of project partnering concept within Sri Lanka. Under this, it was highlighted the essential role of Sri Lankan government and the CIDA to be played in promoting the concept within country. Further important contribution from financial institutions was highlighted in enhancing the implementation of project partnering concept in Sri Lanka.

When it comes to Sri Lankan context time saving, less adversarial relationships and increase in understanding between parties are the most achievable benefits if the concept of project partnering is implemented broadly. Moreover it revealed that uneven commitment from each party involved, relationship problems and failure to understand the partnering concept and what is actually required under this strategy are the most likely issues which could lead partnering to an unsuccessful situation within Sri Lanka.

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