Analysis on Factors Affecting Dispute in Construction Industry by RII, IMPI

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Abstract— The rising cost, delay and the risk of legal action in construction disputes prompted the construction industry look for efficient ways to prevent and manage these construction disputes. This is because, as construction projects become increasingly complex due to the complex set of contract documents governing parties, cost increases, margins tightens and clients expect perfection in the contractor's performance. The likelihood of disputes arising therefore increases, with their resolution becoming very expensive in terms of time, personnel, finances, project delays and opportunity cost. Prevention of disputes therefore can eliminate unnecessary costs, delays; strained relationships among members of different parties involved and finally save time. This study therefore aimed at developing appropriate strategies for dispute prevention on construction projects.

Key words: construction disputes, claims, causes of dispute

I. INTRODUCTION

Conflict seems to be very synonym with construction projects and giving the impressions of problems that includes increasing project cost, project delays, reduce productivity, loss of profit or damage in business relationships. Construction disputes are fairly common, and they vary in their nature, size, and complexity. Construction dispute arise mainly from confrontations between people attached to the project, from problems related to relations and communications between parties, and from ambiguity, complexity and principality of issues. Conflicts are experienced merely as a negative phenomenon and constructive elements of conflicts are not recognized. Organizations are not prepared to solve conflicts. Resolving of conflicts may pile up to the end of the project.

Construction disputes, when not identify and prevent in a timely manner, become very expensive – in terms of finances, personnel, time, and opportunity costs. The visible expenses (e.g., attorneys, expert witnesses, the dispute resolution process itself) alone are significant. The less visible costs (e.g., company resources assigned to the dispute, lost business opportunities) and the intangible costs (e.g., damage to business relationships, potential value lost due to inefficient dispute resolution) are also considerable, although difficult or impossible to quantify.

The construction sector and the judicial systems are not well prepared to solve conflicts that require special knowledge and deep understanding of the characteristics of civil engineering. Hence, the main goal of this study is to overview, analyze and evaluate the factors of conflict in multi storied constructions in south Gujarat region to identify and mitigate. This study is hoped to be guidance for conflict management in future construction projects in targeted region as preventive, predictive, corrective and organizational measures.

II. SCOPE OF STUDY

- The research work is limited up to construction industry of Surat city and nearby vicinity.
- The data for this study are collected through interview and questionnaire survey from architect, contractor, developers and structural engineers.
- RII, SI, FI and IMPI techniques will be used to identify the most affecting factors for dispute.

III. FACTORS CONTRIBUTING TO DISPUTE

The some of the factors that contributing to dispute is listed below:

No	Factors
1	Errors in drawings
2	Defective specifications
3	Improper Contracting practices such as Contract familiarity/client contracting procedures
4	Bid development errors such as Estimating error
5	Payment and budget
6	Performance
7	Delay and time
8	Lack of Quality
9	Lack of Administration process
10	Misunderstandings between client, contractor, owner etc.
11	Unpredictability
12	Unrealistic expectations by parties
13	Ambiguous contract documents
14	Poor communications between project participants
15	Lack of team spirit
16	Failure of participants to deal promptly with changes
17	unexpected outcomes
18	Bid review of contracting officers
19	Faulty negotiation procedure of contracting officers
20	Knowledge of local statues of contracting officers
21	Scheduling of contracting officers
22	Change order of project management procedure
23	Pre-award design review of project management procedure
24	Pre-construction conference proceedings of management
25	Quality assurance of project management procedure

26	Faulty Scheduling of site management process
27	Improper Project management procedures
28	Lack of quality control

Table 1: Factors Contributing to Dispute

IV. RESULT ANALYSIS

To find out the most important analysis was done through the RII and IMPI. Total 280 questionnaires were distributed to builders, architects, contractors, structure engineers. According to response from the questionnaires find out the top ten factors by using both methods.

NO.	FACTORS	RII
1	Improper scheduling of construction work	1.005952
2	Variations in quantities and specification	0.940476
3	Poor planning of site and ground investigation may lead dispute	0.89881
4	Variations in the scope of project may lead during planning	0.880952
5	Improper project management procedure	0.863095
6	Improper quality of work	0.827381
7	Lack of professionalism of project participant	0.803571
8	Variation and delay in work progress	0.797619
9	Misunderstanding of drawings and specifications	0.779762
10	Gaps between Implementation and the specifications	0.779762

Table 2: Top Ten Factors Contributing To Dispute by RII

NO.	FACTORS	IMPI
1	Variations in the scope of project may lead during planning	51.8424
2	Improper scheduling of construction work	51.27551
3	Unavailability of needed information, code and standards	50.2055
4	Variations in quantities and specification	44.81293
5	Improper quality of work	44.35587
6	Gaps between Implementation and the specifications	44.27083
7	Variation and delay in work progress	44.21769
8	Improper project management procedure	43.94133
9	Poor assessment and evaluation of project options	43.15476
10	Lack of professionalism of project participant	42.37528

Table 3: Top Ten Factors Contributing To Dispute by IMPI

V. CONCLUSION

As per Relative Importance Index and Importance Index techniques, we analyzed the most important factors which may create problem in construction industry. It is difficult, but it is not impossible to completely avoid construction dispute. However, minimizing their impact brings many advantages, such as reducing contractual problems; reduce cost and time overrun, educating and training construction personnel to increase their ability to resolve problems.

REFERENCES

[1] Colin, J., Langford, D. and Kennedy, P. (1996) The relationship between construction procurement strategies and construction disputes, CIB W 92 North meets South, Durban, South Africa.
[2] Dearlove, G. (2000) Court ordered ADR: sanctions for recalcitrant lawyer and party, The Australasian Dispute Resolution Journal, p 12.
[3] Diekmann, J., Girard, M. and Abdul-Hadi, N. (1994) Disputes potential index: a study into the predictability of contract disputes, Construction Industry Institute, Source Document 101
[4] Dispute Causation In Construction Projects, Manvendra Sinha 1, Dr. A. S. Wayal 2
[5] Fenn, P., Lowe, D., and Speck, C. (1997). Conflict and dispute construction. Construction Management and Economics, 15, pp.513-518
[6] IOSR Journal of Mechanical & Civil Engineering (IOSR-JMCE) ISSN: 2278-1684, PP: 54-58.
[7] Love, P.E.D., Irani, Z and Edwards, D. (2003). Learning to reduce rework in projects: analysis of firms learning and quality practices. Project Management Journal 34(3) pp.13-25.
[8] Mayer, J.D. and Salovey, P. (1997). What is emotional intelligence? In P. Salovey, and D. Sluyter (Eds.). Emotional Development and Emotional Intelligence: Educational Implications. Basic Books, NY.
[9] Acharya, N., Lee, Y. and Im, H.(2006) Conflicting factors in construction projects: Korean perspective, Engineering, Construction and Architectural Management, vol. 13, no. 6, pp.543-566.
[10] Bresnen, M. and Marshall, N. (2000) Partnering in construction: a critical review of issues, problems and dilemmas, Construction Management an Economics, vol. 18, pp. 229-237.
[11] Brown, H. J. and Marriott, A. L. (1993) ADR: Principles and Practice, Sweet and Maxwell, London.
[12] Chase, W. H. (1985) Issue Management: Origins of the Future, Issue Action Publications.

