Study of the Factors affecting Success of Construction Project in Gujarat

Karan Patel1, Prof. J D Raol2

1 M.E (Civil) Infrastructure Engineering, L.D.R.P Institute of Technology and Research, Gandhinagar
2 Faculty, Civil Department, L.D.R.P Institute of Technology and Research, Gandhinagar

Abstract- The development and growth, particularly for developing countries depends on successful implementation of new projects. The construction industry in India is the second largest industry next to agriculture in terms of providing employment. The construction industry is dynamic in nature due to the increasing uncertainties in technology, budgets, and development processes. Unfortunately, some projects were completed successfully but some were not completed on time, over budget or being cancelled. Nowadays, building projects are becoming much more complex and difficult. The project team is facing unprecedented changes. The study of project success and the critical success factors (CSFs) are considered to be a means to improve the effectiveness of project.

Index terms- Survey Questionnairy, Data analysis, Ranking Method

AIMS & OBJECTIVES

- Identification of the critical factors that lead to project success in the Gujarat construction industry.
- Investigation of the most important critical success factors for Gujarat construction industry, based on accumulative knowledge and judgment of experts (owner/owner representative, consultant, and contractor) in the construction industry.

Problem Summary

The study of the project success and the CSF is considered to be a mean for improving the effectiveness of project. Thus the project managers need proper understanding of critical success factors and how to mitigate them. The purpose of this study is to systematically investigate the causes for project success. Constructions projects are frequently influenced by success factors. It can help construction companies to reach their intended goals with greater efficiency. Most of the critical success factors such as factors related to project manager’s performance, factors related to organisation, factors related to project, factors related to external environment are likely to apparent from this study. This study ful to identify factors that influence project success.

Frame Work of Critical Success Factors
SUMMARY OF EXPERT REVIEW

METHODOLOGY

Relative importance index:
The Factors Affecting Success of Construction Project relative importance index method (RII) was used here in to determine owners, consultants, and contractors perceptions of the relative importance of the identified success factors.

$$RII = \sum w \times A \times N$$

RII = relative importance index
W = weight given by the respondents (1 – 5)
A= highest weight (5)
N = total number of respondents

Frequency index:
The Factors Affecting Success of Construction Project of occurrence index method (FI) was used here to determine owners, consultants, and contractors perceptions of the frequency of the identified success factor.

$$FI = \sum a \times (n/N) \times 100$$

FI = frequency index
a1, a2, a3, a4 = frequency occurrence
n1, n2, n3, n4 = No. of times factor repeat

CONCLUSION

Based on value of RII & FI we can rank the factor as per their importance and frequency of occurrence for completion of project successfully.

In accordance with the most important factors contractors should recommend the availability of material, equipment's and also quality of materials should be of a greater interest for contractors in order to improve cost, time, and quality performance. This can be done by applying quality training and meetings that are necessary for performing an improvement. Apparently the least important factors can prove to be guidelines for its consideration and effects on project success rate.

REFERENCE

