

Influence of Stakeholder Management on the Success Construction Projects

Asma P¹, Rosemary Sunny²

¹Department of civil engineering, Cochin College of Engineering and Technology, Valanchery, Malappuram, Kerala, India

²Assistant Professor, Department of civil engineering, Cochin College of Engineering and Technology, Valanchery, Malappuram, Kerala, India

Abstract - One of the major concerns coming forth in the management of construction projects is the recognition and management of project stakeholders since the stakeholders are a major source of uncertainty in construction project. The construction industries involved a diverse range of stakeholders. Stakeholder management has got a pivotal role in implementation of project successfully. Stakeholders such as owners, construction management consultants, design consultants, contractors, and subcontractors/ suppliers have influence on project success. The client and donor are the main key stakeholders, who have the most influence in the construction projects. In this study evaluate the influence of stakeholder management on the success of construction project by analyzing the current practice of stakeholder management in construction project. Questionnaire survey and personnel interviews are used for collecting the required data and the data can be analysed by percentiles and relative importance index. Stakeholders play a significant role in project success or failure. Stakeholders are the back bone of a project and without them a project can never come into existence. The effective management of stakeholders in construction projects has a great contribution to the project success.

Key Words: Stakeholder, Stakeholder Management, Questionnaire Survey, Relative Importance Index, Project Success

1. INTRODUCTION

Construction project management, as a discipline, has focused on the process of planning, and managing the complex array of activities required to deliver a construction project. Stakeholders are persons or organizations (eg: owners, sponsors, the performing organization, or the public), who are actively involved in the project or whose interests may be positively or negatively affected by the performance or completion of the project. Different stakeholders have different levels and types of investments and interests in projects in which they are involved. Its professionals need to be capable of coordinating relationships with diversified stakeholders, especially with the growing tendency of stakeholder groups to try to influence the implementation of construction projects according to their individual concerns and need.

Poor stakeholder management can lead to many serious problems in construction projects, such as: poor scope and work definition, inadequate resources assigned to the project, poor communication, changes in the scope of work and unforeseen regulatory changes, all of which may be the major source of delays and cost overruns. Stakeholder incorporation within quality management planning and proceeding will facilitate greatly in solving large numbers of quality problems in building projects. To ensure a successful project, the project team must identify the stakeholders, determine their requirements and expectations, and manage their influence in relation to the requirements.

However, the construction industry has a poor record of stakeholder management during the past decades owing to the complexity and uncertainty of projects. Many problems of stakeholder management in construction projects proposed by previous scholars include inadequate engagement of stakeholders, project managers having unclear objectives of stakeholder management, difficulty to identify the "invisible" stakeholder, and inadequate communication with stakeholders. In order to solve these problems, project teams need to know what the essentials are for managing stakeholders.

1.1 Objectives of the study

To empirically investigate the current practice of stakeholder management within the construction industry.

1.2 Scope of the study

- By doing this study it is hoped that the delivery of the projects will be improved
- To know how to manage stakeholder properly and fulfil their needs and expectations.
- It gives some basic guidelines on how to handle stakeholder issues in the future.

2. METHODOLOGY

To evaluate the current practice approaches of stakeholder management in the construction project. So, the previous studies were used to build a comprehensive list of practical approaches of stakeholder management. Then questionnaire

survey and personnel interviews are conducted among construction professionals. The obtained data can be analyzed by using percentiles and relative importance index. The survey respondents were asked to respond to these questions based on their most recently completed project.

2.1 Relative Importance Index (RII)

Likert scaling was used for ranking questions that have an agreed level. The respondents were required to rate the importance of each factor on a 5-point Likert scale using 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and 5 for strongly agree. Then, the Relative Importance Index was computed using the following equation:

$$\text{Relative Importance Index} = \sum w / AN$$

Where W is the weighting given to each factor by the respondent, ranging from 1 to 5, "A" is the highest weight and N is the total number of samples. The relative importance index ranges from 0 to 1

3. RESULT AND DISCUSSION

The analysis of survey results on the current practice of stakeholder management in construction projects. Data obtained from the questionnaire about experience of respondent; stakeholder management decisions and responsibilities; change in stakeholder interests/disposition towards the project; techniques for stakeholder engagement/management and response strategy.

3.1 Experience of the Respondent

Table - 1:1 experience of the respondent

SI NO	EXPERIENCE (YEARS)	%
1	1-5	26.92
2	6-10	23.08
3	11-15	30.77
4	16-20	15.38
5	Above 21	3.84

The respondent used for the study having following years of experience. 26.92% having 1-5 year experience, 23.08% having 6-10 year experience, 30.77% having 11-15 year experience, 15.38% having 16-20 year experience and 3.84% having above 21 year experience. So the respondent group covering experienced persons.

3.2 Stakeholder Management Decisions and Responsibilities

In order to investigate the current practice of stakeholder management in the construction industry; survey respondents were asked to respond to the questions based

on their experience on a recently completed project in which they were involved. Asked whether stakeholder management was carried out on the project; 47.7% of the respondents said they carried out stakeholder management and 52.3% said they did not carry out stakeholder management. 71% said no funding was provided on the projects for stakeholder management and 29% said funding was provided mainly it depends on project and somebody did not say how much or what percentage of the project sum was committed for carrying out stakeholder management. Asked whether stakeholder management responsibility was assigned on the project, 30% said yes and 70% said no stakeholder management responsibility was assigned on the project.

3.3 Change of Stakeholders' Interests/Disposition towards Projects

The respondents were asked to indicate whether or not they noticed any changes in stakeholders' interests/disposition towards the project. The result indicates that 73.8% of the respondents said they noticed some changes in stakeholder interests during the project whereas 26.2% said they did not notice any change in stakeholder interests. The respondents were also asked to indicate from a list of causes identified from the literature of changes in stakeholder interests during the project. This question was intended to find out the most likely causes of change in stakeholder interests/disposition in projects. Their responses indicate that "acquisition of information previously not available to them" is the most common reason why stakeholders' interests changed.

Table-1:2 Change of Stakeholders' Interests/Disposition towards Projects

SI NO	Change of Stakeholders' Interests/Disposition towards Projects	%
1	Change in project mission	32.69
2	Perceived non involvement	38.46
3	Loss of confidence and trust in the project team	44.23
4	Loss of confidence and trust in the project	36.54
5	Gaining confidence and trust in the project	23.08
6	Acquisition of information previously not available to them	55.76

3.4 Techniques for Stakeholder Engagement/Management

Table- 1:3 Techniques for stakeholder engagement/management

SI NO	TECHNIQUES	RII	RANK
1	Design charrette	0.815	1
2	Delphi technique	0.804	2
3	Stakeholder cycle	0.780	3
4	Strategic needs analysis	0.704	4
5	Contingent valuation method	0.692	5
6	Public hearing	0.634	6

The choice of which techniques to use would depend on the prevailing circumstances and knowledge of the techniques by the project team. It could also depend on their reason for engaging the stakeholders and the stage of project at which the stakeholders are engaged.

3.5 Response Strategy

Table-1:4 Effective response strategy to deal with the stakeholder

SI NO	RESPONSE STRATEGY	RII	RANK
1	Compromising strategy	0.873	1
2	Avoidance strategy	0.573	2
3	Adaptation strategy	0.55	3
4	Influence strategy	0.48	4
5	Dismissal strategy	0.473	5

Compromising strategy is the first position because everyone use this strategy. Avoidance strategy is come in the second position, since sometimes project manager found it is better to focus on achieving the objectives of the project. Adaptation strategy is listed in the third positions, accept the demand when it is possible and there is no major change will be happening. Influence strategy is fallen in forth position, this means that project manager does not like to deal with strategy in general since his time is limited and may he used this type of strategy. Dismissal strategy is listed in last position, most of the respondents disagreed with this strategy 'do nothing and let the situation take care of itself'.

4. CONCLUSIONS

Stakeholder management is yet to be fully embraced as a deliberate strategy in the management of construction projects. Construction professionals perceive dynamics in stakeholder position as important and gaining new information is explanatory for that, but not loss of

confidence in the project team. It is necessary for all stakeholders to be adequately briefed about the project including telling them both the positive and negative aspects of the project. 47.7% of the respondents carried out stakeholder management and 52.3% did not carry out stakeholder management on their works. 71% no funding was provided on the projects for stakeholder management and 29% funding was provided for their project.30% stakeholder management responsibility was assigned on the project, and 70% no stakeholder management responsibility was assigned on the project. Stakeholders have direct influence on project objective also it will affect the success of construction projects. Stakeholder management have direct influence on the cost, time and quality of the construction projects.

REFERENCES

- [1] Antônio Carlos Pacagnella Júnior, Geciane Silveira Porto, Ornella Pacífico and Alexandre Pereira Salgado Júnior, "Project Stakeholder Management: A Case Study of a Brazilian Science Park", Journal of Technology Management & Innovation, 2015, Volume 10, Issue 1,pp.39-49
- [2] Charles G. Kamau and Humam Bin Mohamed, "Efficacy of Monitoring and Evaluation Function in Achieving Project Success in Kenya: A Conceptual Framework", Science Journal of Business and Management 2015, 3(3): 82-94
- [3] Mahmoud Rajablu, Govindan Marthandan & Wan Fadzilah Wan Yusoff, "Managing for Stakeholders: The Role of Stakeholder-Based Management in Project Success", Asian Social Science; Vol. 11, No. 3; 2015,pp.111-125
- [4] Samuel Muli, Henry Bwisa and John Kihoro," Role Of Stakeholder Management On The Performance Of Projects Funded By Constituency Development Fund In Kenya" ,International Journal of Economics, Commerce and management, Vol. IV, Issue 12, December 2016,pp.343-361
- [5] Seyed Mahmood Zanjirchi and Mehrdad Moradi, "Construction project success analysis from stakeholders' theory perspective", African Journal of Business Management Vol. 6(15), 18 April, 2012, pp. 5218-5225,
- [6] Yitmen, "The influence of cross-cultural communication on stakeholder management process in international construction projects: turkish stakeholders' perspective", International Journal of Civil Engineering, Vol. 13, No. 2, June 2015,pp.179-190