International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395 -0056
Volume: 04 Issue: 04 | Apr -2017 www.irjet.net p-ISSN: 2395-0072

Pre-Project Planning

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Abstract - *Pre project planning is the project-development interface between business and engineering in terms of capital expenditures. The importance of pre-project planning in the construction industry and its potential impact on project success has long been recognized by industry practitioners. "Well Planned Is Half Complete" Pre-project planning done right can save your time, money and headaches. Pre-project planning is defined as the "Process of developing sufficient strategic information for owners to address risk and decide to commit resources to maximize the chance for a successful project." By Cost comparison between conventional method and MIVAN technology, It is found that MIVAN technology save time.*

Key Words: **Time management, cost comparison. Pre-planning, Scope definition, Risk factor.**

1.INTRODUCTION

Pre-project planning is defined as "the process encompassing all the tasks between project initiation and the beginning of detailed design. It begins with a project concept to meet a business need and ends with a decision whether to proceed with detailed design of the proposed project" by Gibson et al. (1995). "It supports many of the concepts of concurrent engineering, including bringing together diverse resources to work as a team in early development, being more responsive to customer input, and reducing overall durations and rework" by Shina (1991); Turino (1991). Effective pre-project planning includes both art and science. It is a creative process that marries technical evaluation and resources with subjective understanding of the psychological and political implications of any capital investment. Any such treatise must consider elements as diverse as organizational behaviour, engineering design, project management, and legal concepts and must also be generic enough to be applied to a diverse range of organizations and requirements. However, even given these difficulties, it is important to point out issues that can provide a basis for improvement. Many experts within the construction industry believe that planning efforts conducted during the early stages of a project have a significantly greater effect on project success than effort undertaken after the project is under way.

1.1 Need for study

The development of the project scope definition package is one of the major tasks in the pre-project planning process. It is at this stage where risks associated with the project are analyzed, early preliminary designs are formulated, critical scope decisions are made, and the details of the project execution approach are defined. Inadequate or poor scope definition, which negatively correlates to the project performance, has long been recognized as a significant problem impacting construction projects. As a result of poor scope definition, final project costs tend to be higher because of changes that interrupt project rhythm, cause rework, increase project time, and lower the productivity as well as the morale of the field work force. This emphasizes the need of Pre-project planning.

2. COST COMPARISON

By adopting Mivan technology in the project not only it gives the better quality of construction and but also increases the speed of construction and reduces the cost since some of the construction activities are completely eliminated and others are reduced to a extent . This project includes the cost comparison of conventional construction with Mivan Technology of construction. The name of the project "Namrata Eco-City" a 45 acre integrated township Vadgaon , Pune.

Table -1: cost comparison between construction by conventional and mivan technology and mivan technology

Sr.No	Parameter	Cost By Conventio- nal Technology	Cost by Mivan Technology	Cost Saving
1.	Shuttering after repetitions	Wooden Materials =Rs. 88.50 /sq.m M. S. Material = Rs. 100.00/sq m	Rs. 83.8/ sq.m	Rs. 104.63/sq.m
2.	Concreting	Rs. 1400 / sq.m	Rs. 1505/sq.m	Rs. -105/sq.m
3.	Reinforcement	1,480.00	2,115.20	-635.2/sq.m
4.	Brickwork	484.00	0.00	480/sq.m
5.	Plaster	700.00	0.00	700/sq.m
Total cost saving				Rs. 548.43/sq.m

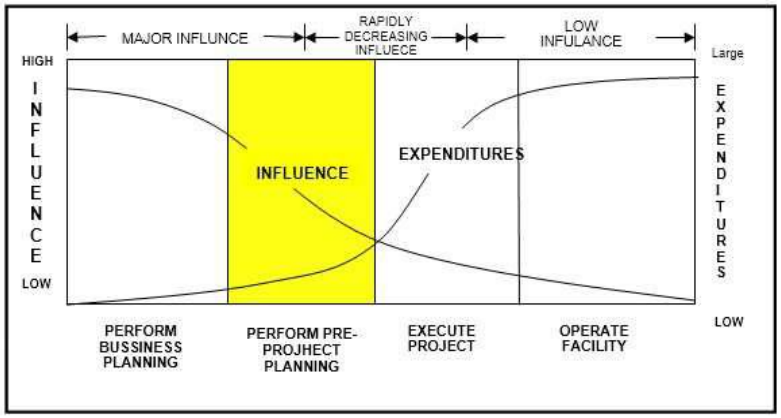

Fig -1: Influence and Expenditure curve for project life cycle.

As shown in fig. the curve labeled "influence" reflects company's ability to affect the outcome of a project during it's various stages. As the diagram shows, it is much easier to influence a project's outcome during the project-planning phase, when expenditures are relatively less, than it is during project execution and facility operation stage when expenditures may be significant. As shown in fig, the four distinct stages of project life cycle are shown. The project planning stage includes both the business planning and pre-project planning functions.

3. CONCLUSIONS

We focused on how well pre-project planning is performed will affect cost and time, schedule performance, working characteristics of the facility, as well as on the whole financial achievement of the project. By using MIVAN system we can achieve cost reduction in less time. By reducing cycle time than conventional method overall financial cost saving can be achieved.

ACKNOWLEDGEMENT

It gives me an immense pleasure and satisfaction to present this Dissertation Stage-I report on "Pre Project Planning", which is the result of unwavering support, expert guidance and focused direction of my guide Prof. Ashish Waghmare and to whom I express my deep sense of gratitude and humble thanks, for his valuable guidance throughout the presentation work.

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