



Developing a Project Execution Plan on the guidelines of Pmbok for a Real Estate Project

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ABSTRACT — Construction is the second largest economic activity in India after agriculture and remains with the continuation of development process. These Construction activities require lot of pre and post planning. Construction Project Manager has the overall responsibility for the successful initiation, planning, design, execution, monitoring, controlling and closure of a project. This study focuses on developing a project execution plan with the guidelines of Project Management Body of Knowledge (PMBOK). The nine knowledge areas of project management which control deflect or mitigate the efforts of any occurrence or situation that could affect the project success. The Project Execution Plan (PEP) may be a development of the business case and the strategic brief. Any project can only be successful if all aspects of Project Management are well thought of in advance and an executable plan is prepared that express identified risks, uncertainties, key success factors, resource availability etc. Project Execution Plan is a key document that can act as a warning during project execution if drafted properly complying with the triple constraints. For developing a better and improved execution plan, a detailed survey was conducted on the “Project Execution Plan” with different companies. Through the survey analysis, development of improvised Project Execution Plan for a Real Estate Project was successfully established.

Keywords — Project planning/ monitoring/ control, Project Management, Execution Plan

1, INTRODUCTION

The project execution plan sets out the strategy for managing the project, describes the policies, procedures and priorities that will be adopted. It may also define strategies in relation to items outside of the scope of the main contract - as the client's overall project might include multiple contracts for the supply of goods and services, both from external organizations and from within the client organization itself such as operational and maintenance contracts, the supply of equipment and so on. It is prepared by the project director, although it is often developed on their behalf by a project manager (or on a construction management contract or a management contract it may be taken on and developed by the construction manager or management contractor). The progress of the project should be assessed against the project execution plan throughout the project and the project execution plan should be amended and developed as necessary.



2, SCOPE OF THE STUDY

The Project Execution Plan is the primary document which defines how the project will be undertaken. It is a companion document to the Field Development Plan, which defines what the companies are trying to achieve. The Project Execution Plan details the specific activities, resources and organizations to be applied, demonstrates how the project quality and HSE requirements will be achieved and how the project objectives will be met by the proposed method of execution.

3, NEED OF THE EXECUTION PLAN

Projects involves uncertainty

- ✓ Difficult to clearly defined objectives (Scope)
- ✓ Difficult to estimate how long to completion (Schedule)
- ✓ Difficult to estimate how much it will cost (Cost)
- ✓ The Product is not fit (or will not be fit) for use (Quality)

4, PROJECT CONSTRAINTS

Every project is constrained in different ways. Some project managers focus on scope, time, and cost constraints. These limitations are sometimes referred to in project management as the triple constraint. To create a successful project, a project manager must consider scope, time, and cost and balance these three often-competing goals.

Scope: What work will be done as part of the project? What unique product, service, or result does the customer or sponsor expect from the project?

Time: How long should it take to complete the project? What is the project's schedule?

Cost: What should it cost to complete the project? What is the project's Budget? What resources are needed?

5, STUDY ON KNOWLEDGE AREAS & PROCESS GROUPS

There are nine knowledge areas and each one covers its own important part of the project. A knowledge area can cover several phases or process groups of the project. This knowledge area is concerned with identifying defining the work of the project and then combining and integrating with the appropriate processes. It also includes managing issues and change, and replanning if required.

5.1 PROJECT MANAGEMENT KNOWLEDGE AREAS

Project Management is one of the most important aspects of the entire construction process. Without effective project management, projects are often running into troubles and risking failures. The Project Management Body of Knowledge (PMBOK) is an internationally recognized standard that deals with the application of knowledge, skills, tools, and techniques to meet project requirements. It is generally accepted as best practice



within the project management discipline. Project Management is “the application of knowledge, skills, tools and techniques to project activities in order to meet or exceed needs and stakeholder expectations from a project”.



Figure.1 PMBOK's Nine Knowledge Areas

5.2 DEFINING THE PROCESS GROUPS

Project management is mapped into process groups and knowledge areas. .Project managers must not only strive to meet specific scope, time, cost, and quality requirements of projects, they must also facilitate the entire process to meet the needs and expectations of the people involved in or affected by project activities. A successful project manager will need to demonstrate the knowledge areas consistently throughout the five phases of project management.

5 PROCESS GROUPS

- Initiation
- Planning
- Execution
- Monitoring & Control
- Finishing

PROJECT MANAGEMENT - COMPONENTS & CONCEPTS

Project Planning: Planning is determining what needs to be done by whom, by when, in order to fulfill one's assigned responsibility. It includes the following aspects to be considered:



Planning focus:

- ✓ To be forecasters to determine future needs during the course of a project.
- ✓ To establish objectives and their priorities.
- ✓ To determine activities necessary to reach those objectives.
- ✓ To budget those activities and scheduling.
- ✓ To develop policies that will direct those activities towards those objectives.

Monitoring Evaluation and Control:

Monitoring: Monitoring is the systematic collection, analysis and use of information from projects and programs for three basic purposes: learning from the experiences acquired (learning function); accounting internally and externally for the resources used and the results obtained (monitoring function); taking decisions (steering function)

Evaluation: Evaluation is assessing as systematically and objectively as possible an ongoing or completed project, program or policy. The object is to be able to make statements about their relevance, effectiveness, efficiency, impact and sustainability. Based on this information, it can be determined whether any changes need to be made at a project, program or policy level, and if so, what they are. What went well, where is there room for improvement?

Controlling: A control system is a device or a mechanism to manage, command, direct or regulate the behavior and performance of other mechanisms or systems. Controlling is observation and measurement of performance against standards for achieving the plan; and correction of performance deviations if required. It is observation of significant trends within and without the manager's activity so that goals and programs may be modified as necessary.

5.3 INTERACTION OF PROCESS GROUPS IN A PROJECT

Project Management Process Groups are linked by the outputs they produce. The Process Groups are one-time events; they are overlapping activities that occur throughout the project. If the project is divided into phases, the Process Groups interact within each phase.

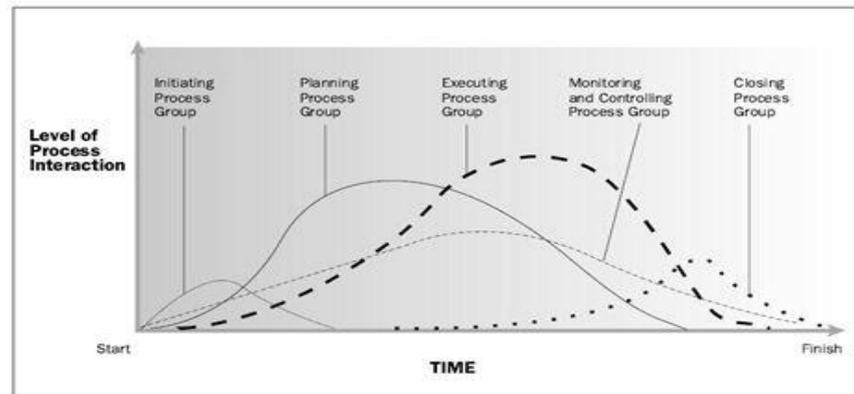


Figure.2 Process Groups Interaction in a Phase or a Project

6, PROJECT EXECUTION PLAN

Project success depends on many factors both within and outside the control of the project team. One of the aspects that is within the control of the project team is the planning. Projects may be millions/billions of dollars in cost, years in development/construction and need a plan of how they are to be executed. There are many reasons why projects fail to meet their objectives. Some external events may render a project unneeded. Internal events may cause a project to be delayed or cost more than expected. Almost all events that bear on project success can be anticipated and plans can be made accordingly. Projects do not succeed only because of a project execution plan but their potential success is ensured if there is an appropriate plan, effectively utilized.

7, EXECUTING PROCESS

The Executing Process Group consists of those processes performed to complete the work defined in the project management plan to satisfy the project specifications. This Process Group involves coordinating people and resources, as well as integrating and performing the activities of the project in accordance with the project management plan. During project execution, results may require planning updates and re-baselining. This can include changes to expected activity durations, changes in resource productivity and availability, and unanticipated risks. A large portion of the project's budget will be expended in performing the Executing Process Group processes. The Executing Process includes the following project management processes.

8, CONCLUSION & FUTURE WORK

Based on the study, a detailed questionnaire survey was conducted on developing a project execution plan under nine knowledge areas of project management to find out the



managerial problems in Real Estate projects and to find the influence of these areas in the successful implementation of the project.

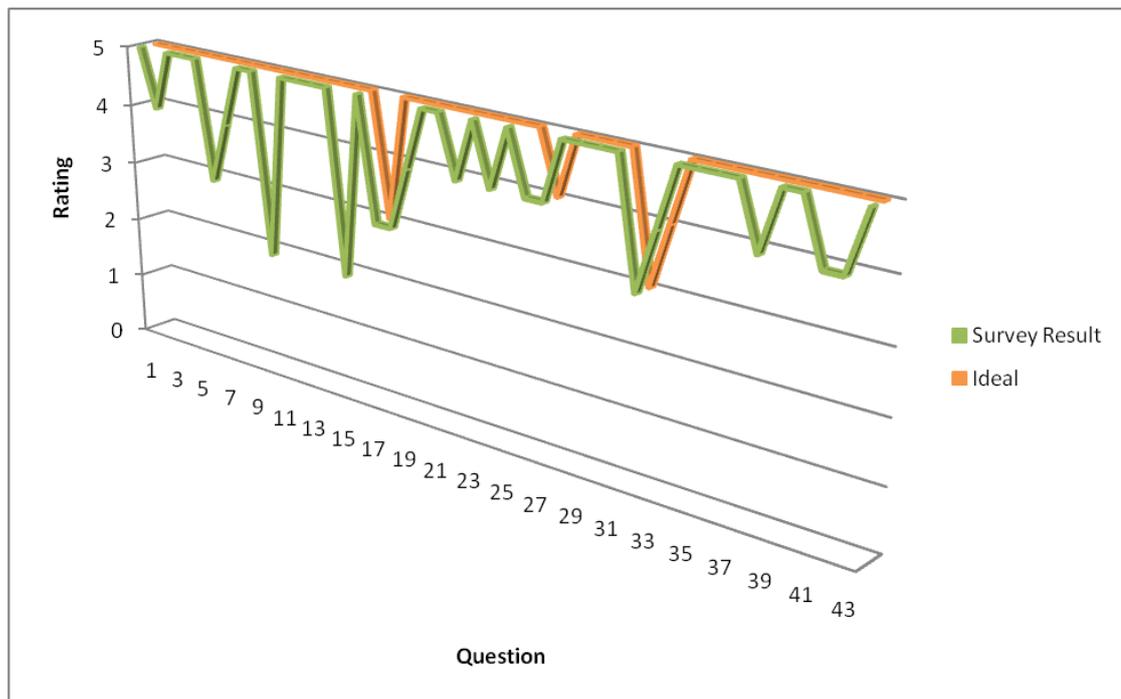


Figure.3 Comparison b/w Ideal and Survey Result

From the data collected, a comparison on performance level, profit achieved, timely completion, and risk involved will be made if required. As a future work, a better project execution plan using software “PRIMAVERA” will be developed & suggested for the required companies for their successful completion of a project.

REFERENCES

- [1].Andrea Caputo,”Systemic Stakeholders’ Management for Real Estate Development Projects” An International Journal (2013) ,Vol. 5, No. 1
- [2]. Bhushanam. S.S, “Project management for execution and implementation”, International Journal of Earth Sciences and Engineering ISSN 0974-5904, Volume 04, No 06 SPL, October 2011, pp. 785-788
- [3]. Lauri Koskela and Greg Howell “Reforming Project Management: The Role of Planning, Execution and Controlling “Project Management Journal, Volume 24, No. 3, pp. 23-33.



- [4]. Olusegun Emmanuel Akinsiku and Akintunde Akinsulire, “Stakeholders’ Perception of the Causes and Effects of Construction Delays on Project Delivery”, KICEM Journal of Construction Engineering and Project Management, November16, 2012
- [5]. “A Guide to the Project Management Body of Knowledge PMBOK” (Body of Knowledge) Project Management Institute, (2004).
- [6]. Qun Gao “Research on Cost Control and Management of Real Estate Project” An International Journal of Business & Management, December 2009, Vol. 4, No. 12
- [7]. Thooyavan K.R., “Urban Planning and Real Estate Development” Institute of Town Planners, India Journal 8 - 1, 90 - 94, January - March 2011
- [8]. Mohanty Ashok, Satpathy Biswajit, Mishra Jibitesh, “Structured Approach to Project Execution, Monitoring and Control at Operational Level”, Journal on Management Science & Engineering - Vol 5, No 1 (2011)
- [9]. Crispin (Kik) Piney “PMI’s Models of Project Management Knowledge – Life Cycles, Process Groups and Knowledge Areas” International Journal of Models of Project Management
- [10]. Yang J.B, Wei P.R, “Causes of delay in the planning and design phases for construction projects”, Journal of Architectural Engineering, vol. 16, no. 2, pp. 80-83, 2010.