On Time Delivery of Projects to Increase Productivity by Designing the Standard Framework

Srinivasa G[1]
Asst.prof, Dept of CSE,
Sri Venkateshwara College of engineering-Bangalore,India

Lokesh M[2]
Asst.prof, Dept of CSE,
Sri Venkateshwara College of engineering-Bangalore,India

Ashwath K[3]
Asst.prof, Dept of ISE,
Sri Venkateshwara College of engineering-Bangalore,India

Ravi Kumar B. N[4]
Asst.prof, Dept of ISE,
Sri Venkateshwara College of engineering-Bangalore,India

Abstract - the aim of this paper is to design and develop a repeatable project management framework to minimize/eliminate some of the key negative factors affecting the project execution and to help in improving the productivity levels of the employees. Study on the current situation within the organization and identification of the key factors affecting overall project execution such as lack of coordination among employees across various departments, inadequate on-the-job training for the employees at critical roles, delayed communication, high amount of rework. SWOT analysis of the organization collecting relevant process data from actual project personnel, interviews, discussions and observations. Studied the executed of different projects to identify the limitations and best practices to be followed. Identify the critical process activities and design the project management framework Deploy the framework for existing and future projects. The framework will provide benefit the customers in saving costs, on time Delivery, Effective project monitoring and Tracking and achieving Quality of services.
Keywords: SWOT Analysis, M S Office, PM Tools.

1. INTRODUCTION

A project is "a unique endeavor to produce a set of deliverables within clearly specified time, cost and quality constraints".

The principles of project management can be applied to any type of project and to any industry. However, the relative degree of importance of these principles can vary from project to project and industry to industry. Table shows a brief comparison of certain industries/projects. For those industries that are project-driven, such as aerospace and large construction, the high dollar value of the projects mandates a much more rigorous project management approach. For non–project-driven industries, projects may be managed more informally than formally, especially if no immediate profit is involved. Informal project management is similar to formal project management but paperwork requirements are kept at a minimum.

2. LITRATURE SURVEY CAUSES OF INEFFECTIVE PROJECT DELIVERY

Dey (1999) concluded that the main reasons of non-achievement of a project were changes in design and scope, changes in Government regulation and policies, unforeseen inflation, under & mis-estimation.

Odeh and Battaineh (2002) presented the findings of a survey aimed at identifying the most important causes of delays in construction projects Findings of the survey indicated it was agreeable that owner interference, inadequate contractor experience, financial, labour productivity, slow decision making, improper planning, and non- performance of subcontractor were among the top ten most important factors.

Assaf and Al-Hejji (2006) conducted a survey on time performance of large construction projects in Saudi Arabia.The survey showed 73 different causes of delay. They studied the importance of various causes from the viewpoint of contractors, consultants, and owners.

3. PROBLEM STATEMENT

"DELAY IN ON TIME DELIVERY OF PROJECTS INORGANIZATION"

All the employees in the organization are involved in multi projects with on different concepts, services and workflow. In order to deliver projects on time it is very much essential to allocate the resources systematically. The organization should have standard frame work is very essential to deliver projects on time. Also, the company is not following the appropriate human resource practices to recruit a right person to the right job. There is a lack of training program for the newly recruited employees.

3.1 OBJECTIVES AND METHODOLOGIES

The methodology of the project involves the study of company background to know the present status of department strength, Weakness, Opportunities and threats. The background of the study is done with the help of supervisors/Managers of the company. The background study of the company followed

with collecting the data about the problems for delivering projects on time. Collection involves data from other projects, Discussions and observations etc.

The collected data is followed with analysis by keeping the two or more different projects data of the time study and the analysis the results some important finding and suggestions need to be adapted. Based on the finding and suggestions these project intendeds to design a standard project management framework.

4. CAUSES FOR DELAY

1. Lack of planning and Work Schedule: The systematic planning process is not in place. And here not using latest project management tools to schedule the work.

2. In adequate training: It is found that the company is not following the appropriate human resource practices to recruit a right person to the right job. Also, there is a lack of training procedure for the newly recruited employees.

3. Delayed response from architecture engineers: As the engineers are involved in multiple projects this leads to delayed response.

4. Delayed inputs form senior engineers: Due to delayed response from engineers, the time for receiving inputs is very high, hence it takes more time for the senior engineers to analyze the inputs and reply back to their subordinates.

5. Revisions: Delays are more common due to frequent changes providing by seniors and architecture engineers.

6. Flow of information is distorted: The drafts mans feel it difficult to understand the instruction given by their superiors due to lack of training, communication, education and involvement.

7. No structured process: No structured process to carrying out the various activities pertaining to a project is in place.
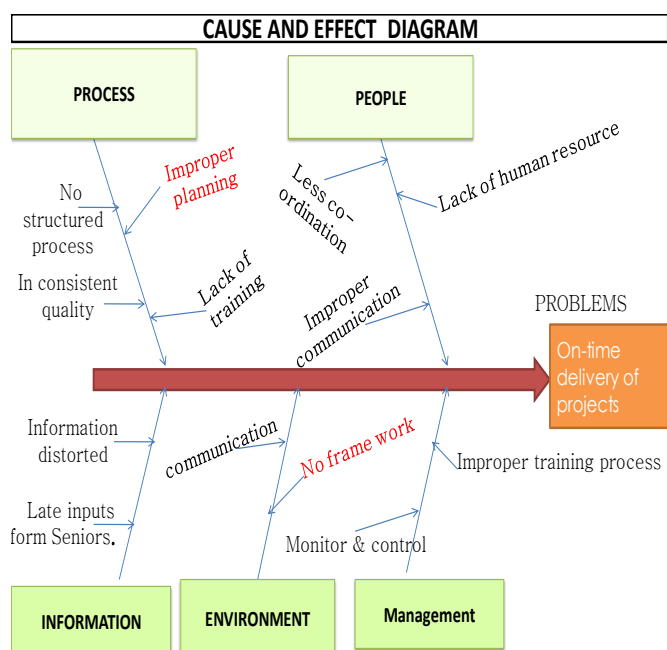

Fig: cause and effect diagram

5. PROPOSED SYSTEM:

The proposed system is going to explain the project management tools used. The main proposed system is project management framework for overcome the existing causes. There are five phases in project management framework: 1.project planning, 2.project scheduling, 3.project design, 4. Project implementation and monitoring, 5.project closeout.

5.1 Remedies On Causes

➢ To follow the planning and work schedule by using Project management tools:

The organization may be not using any project management tools and software to plan the employees work. So this project suggests using the project management tools such as Work breaks down structure, Gantt chart and Prepare milestone to plan the work. Also, plan the work based on the employee activities, roles and responsibilities and time.

➢ Maintain time-card: The time sheet provides the employee in and out record. And the employee's activities in the project area, his/her working time and time used to complete the work. The managers can easily track the employee each and every activity in the project.

➢ Maintain the milestone chart to schedule different activities in each stage. : Every project there will be five stages such as Initiating, Planning, Execution, Monitor and controlling and Closeout. Each project has to main these milestones to schedule the employee activities in different stages.

➢ Providing information through group discussions, meeting and seminars etc.

The Managers and department heads has to provide the information regarding the new technology and new concepts of projects through the group discussions, meeting and outside seminars.

➢ Providing training and Evaluation: The training it is very important for every new employee. The department heads/managers have to train the employees according to the requirement. Also, department heads have to know the employee knowledge and skills.

➢ Weekly review meetings : To monitor and control the project work

➢ Monthly review meetings (MRM).It is monthly once meeting, this meeting about the progress of project, New technologies and new concepts in projects. If any changes in the projects that will discuss in this meetings.

➢ Sunrise meetings: Sun rise meeting is defined as every day morning employees and department heads has to discuss the yester day's problems and today's work.

➢To use M.S project Software.MSP is a project management software program developed and sold by Microsoft which designed to assist project managers in developing plans, assigning resources to tasks, tracking progress, managing budgets and analyzing workloads.

1. MS project develops a schedule automatically when the tasks to be completed are entered and the starting data is assigned.
2. It helps in finding the root causes of delays.
3. Helps in tracking the tasks being performed.

Resources (Man, Machine, Space etc) can be managed.

5.2 Proposal Flowchart For Projects:

This proposal flowchart indicates that how to develop product in step by step or stage by stage, and how to planning and how to deliver the projects by on time.
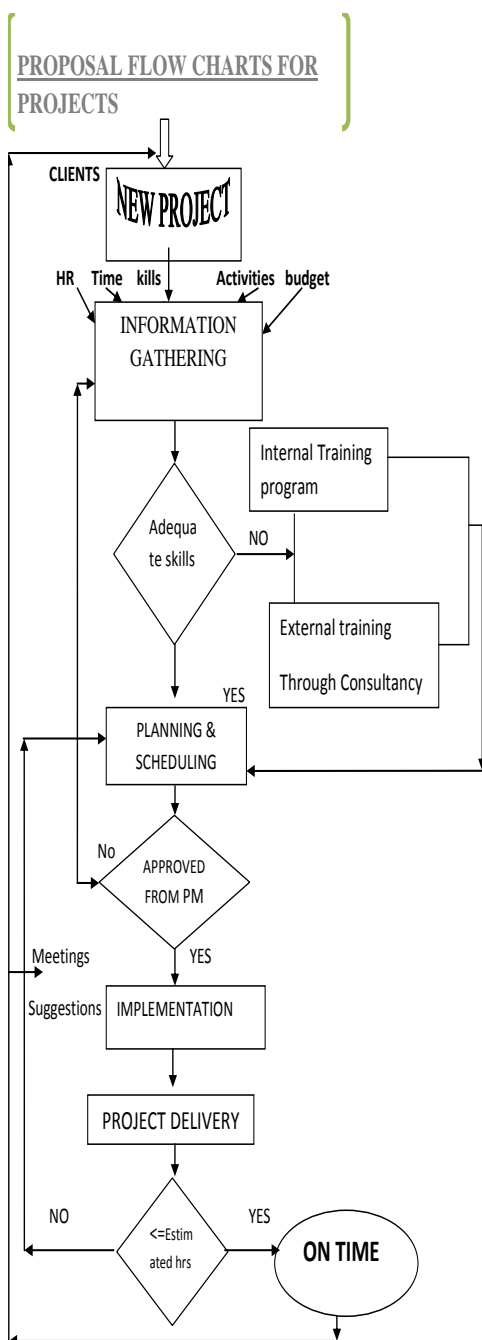

Fig: Proposal flow chart for projects

5.3 The Project Management Framework

The Project Management Framework contains five stages Initiating, Planning and scheduling, Executing\Implementation, Monitoring and controlling and Closure.

The initiation phase essentially involves the project start-up. It is the phase within which the business problem or opportunity is identified, the solution is agreed, a project formed to produce the solution and a project team appointed.

The planning stage the benefits and costs of the project have been clearly documented, the objectives and scope have been defined, the project team have been appointed and a formal project office environment established. It is now time to undertake detailed planning to ensure that the activities performed in the execution phase of the project are properly sequenced, resourced, executed and controlled.

The Execution phase is typically the longest phase of the project (in terms of duration). It is the phase within which the deliverables are physically constructed and presented to the customer for acceptance. To ensure that the customer's requirements are met, the Project Manager monitors and controls the activities, resources and expenditure required to build each deliverable throughout the execution phase. A number of management processes are also undertaken to ensure that the project proceeds as planned.

The Monitoring and Controlling phase explains Project Team are physically producing each deliverable, the Project Manager implements a series of management processes to monitor and control the activities being undertaken.

Project Closure is the last phase in the project and must be conducted formally so that the business benefits delivered by the project are fully realized by the customer.

6. CONCLUSION

This paper focuses on various improvement areas and it helps to understand the bottlenecks in the system. Accordingly the following conclusions are drawn.

❖ Project management planning tools are found to improve efficiency, in terms of on time delivery of projects.

❖ Provide the information to project manager to monitor and control the work which in turn improves efficiency level.

❖ Based on the SWOT results it may be concluded that the Weaknesses can be converted in to Strengths and Threats can be transformed in to opportunities' to design a strategic frame work for an organization.

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