

CHAPTER 1

PROJECT MANAGEMENT

1.1 Meaning of Project

Definition 1: In general, project is a work plan which is scientifically devised with right man for the right work at the right time to achieve a specific objective within a certain set time frame.

OR

Specific activity with specific starting point and specific ending point to achieve specific objective

Project Management Project management is a distinct area of management that helps in handling projects. It has three key features: a project manager, the project team and the project management system. Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. It enables organizations to execute projects effectively and efficiently.

1.2 Features of a Project

1. Unique in nature. No two projects are exactly similar.
2. Have definite objectives (goals) to achieve.
3. Require set of resources.
4. Have a specific time frame for completion with a definite start and finish.
5. Project has a life cycle reflected by growth, maturity and decline.
6. Involves risk and uncertainty.
7. Require cross-functional teams and interdisciplinary approach.
8. Change is an inherent feature

1.3 Types of Projects

1. Normal Projects

- Sufficient time is allowed for implementation.
- All the phases in a project are allowed to take their normal time
- Minimum requirement of capital.
- No sacrifice in terms of quality.

2. Crash Projects

- Shorten time duration
- Increasing resources
- Increase overall cost

3. Disaster Projects

- These are projects, undertaken, due to unexpected nature's calamities like floods.
- Anything needed to gain time is allowed in these projects.
- Round the clock work is done.
- Capital cost will go up very high.
- Project time will get drastically reduced.

1.4 Benefits of Project Management

1. Reduce the need for continuous reporting
2. Auto-pilot work atmosphere.
3. Identification of time limits for scheduling
4. Measurement of accomplishments.
5. It helps to identify problem.



6. Improved estimating capability for future planning, with latest technology.

1.5 Obstacles in Project Management

1. Project difficulties
2. Special requirement from customer take more time
3. Organisation restructuring
4. Project risk
5. Changes in project take more time.
6. Changes in technology
7. Advance planning and pricing.

1.6 Project Management – A Profession

1. Project management professionals are used to monitor and execute project.
2. It requires professional approach in conceiving, implementing and controlling projects.
3. It requires professional approach for efficient management of project.
4. It is having intellectual operation and skilled and mechanical operations.
5. It also has organisation with different assigned roles.
6. Only managers with dedication and dynamism can perform nonstop operations.

1.7 Project Manager and His Role

1. He plays a pivotal role in the entire project team and accelerates its activities.
2. He holds the overall control of the project
3. He is involved in planning the work, monitoring, directing and leading the team members.
4. He should maintain a project diary
5. He should ensure timely availability of the resources

1.8 Project Consultants

1. Consultants provide guidance as well as direction to the projects from the starting to the completion and post project evaluation state.
2. Advantage of expertise.
3. They fill the gap when there is no in-house facility available.
4. They provide the assistance especially for projects with new technology
5. They assist the Project manager or the project team to achieve cost control and time control.
6. They assist to prepare appropriate estimate and effective and efficient management of the resources.

1.9 What is an Operation?

- ✓ Operations are the ongoing execution of activities
- ✓ They follow an organization's procedures to produce the same result or a repetitive service.
- ✓ Operations are permanent in nature.

Example: Production, manufacturing, and accounting.



1.10 Difference between Project and Operation

Operation	Project
Routine process	Process ends with project
Stable team that repeats the process indefinitely	Temporary team that lasts for one process cycle
Repeated work	New, original work
Annual planning applied to continuous process cycles	Time, cost, and scope constraints per process
Budget fixed with no time boundaries	Difficult to estimate time and budget

Project: Car manufacturing facility

Operation: Car manufacturing process

1.11 What is Process in Project Management and Process Groups?

A process is a set of actions and activities that are performed to achieve a pre-specified set of products, results, or services.

Types of project process in project management

Project Management Process	Product Oriented Process
<ul style="list-style-type: none"> ✓ Describe, organise and complete the work of the project ✓ The purpose is to initiate, plan, execute, monitor and control, and close a project ✓ It is common to all projects 	<ul style="list-style-type: none"> ✓ Specify and create the Project's Product ✓ Defined by the product life cycle ✓ It varies by application area

Product Oriented Process: Example: Build 10 feet wall. At the end of project life cycle the result is wall. So all processes you define and follow during the project has to compliment this creation.

1.12 What is Scope? Difference between Project Group Objectives and Project Scope

Project Objectives

- It is detailed description of the desired result of the project
- Your project objectives should be attainable, time-bound, specific goals you can measure at the end of your project.

E.g.: Build a new website

Project Scope

Refers to the amount of effort required to complete a project

E.g.: Build the website using ASP & NET products and Flash media



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