

# PROJECT MANAGEMENT FUNDAMENTALS

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## What is a Project?

Project is a **temporary** endeavor undertaken to create a **unique** product or service.

- Projects are unique.
- Projects are temporary in nature and have a definite beginning and end date.
- Projects are completed when the project goals are achieved or it is determined the project is no longer viable.
- A successful project is one that meets or exceeds the expectations of your stakeholders.

## How Unique?

- Product characteristics are progressively elaborated.
- The product or service is different in some way from other product or services.

## How Temporary?

- It has a definite beginning and end. effort.
- It is not an ongoing effort such as in operations.
- It ceases when objective has been attained.
- The team is disbanded upon project completion.

## Example

Building a road is an example of a project. The process of building a road takes a finite amount of time, and produces a unique product.

**Operations**, on the other hand, are repetitive. Generating bills every month, and broadcasting news everyday are examples of operations.

**Subprojects** are components of a project that often contracted out.

## What is Project Management?

Project Management is the application of knowledge, skills, tools and techniques to project activities to meet project requirements.

Project management is accomplished through the use of the processes such as:

- Initiating
- Planning
- Executng
- Monitor and Controlling
- Closing

Project managers or the organization can divide projects into above phases to provide better management control with appropriate links to the ongoing operations of the performing organization. Collectively, these phases are known as the project life cycle.

Project managers deliver projects while balancing the following constraints:

- Scope
- Schedule

- Quality
- Resources
- Customer Satisfaction
- Risk

These all are so intertwined that a change in one will most often cause a change in at least one of the others

**For example:**

- If time is extended, the cost of the project will increase.
- If time extended with the same cost then quality of the product will reduce.
- If scope is extended then cost and time will also extend.

Changes to any of these legs sets off a series of activities that are needed to integrate the change across the project.

## **What is Program Management?**

A program consists of a group of related projects and Program management is the process of managing multiple on going projects. An example would be that of designing, manufacturing and providing support infrastructure for an automobile make.

Program management involves centrally managing and coordinating groups of related projects to meet the objectives of the program.

In some cases Project Management is a subset of Program Management. The project manager may report to the program manager in such cases. A portfolio consists of multiple programs.

## **What is Portfolio Management?**

A portfolio is a collection of projects, programs subportfolios, and operations that are grouped together to facilitate effective management of that work to meet strategic business objectives. Organizations manage their portfolios based on specific goals.

Senior managers or senior management teams typically take on the responsibility of portfolio management for an organization.

Portfolio management encompasses managing the collections of programs and projects in the portfolio. This includes weighing the value of each project, or potential project, against the portfolio's strategic objectives.

Portfolio management also concerns monitoring active projects for adherence to objectives, balancing the portfolio among the other investments of the organization, and assuring the efficient use of resources.

## **Why do we need Project Management?**

We need project management to manage projects effectively and drive them to success. Project Management starts with the decision to start a project upon weighing its need and viability. Once a project starts, it is crucial to watch the project progress at every step so as to ensure it delivers what all is required, in the stipulated time, within the allocated budget. Other drivers influencing the need of project management are:

- Exponential expansion of human knowledge
- Global demand for goods and services
- Global competition
- Team is required to meet the demand with quality and standard.
- Improved control over the project
- Improved performance

- Improved budget and quality

## Project Management Skills:

Many of the tools and techniques for managing projects are specific to project management. However, effective project management requires that the project management team acquire the following three dimensions of project management competencies:

- **Project Management Knowledge Competency:** This refers to what the project management team knows about project management.
- **Project Management Performance Competency:** This refers to what the project management team is able to do or accomplish while applying their project management knowledge.
- **Personal Competency:** This refers to how the project management team behaves when performing the project or activity.

## Interpersonal Skills Management:

The management of interpersonal relationships includes:

- **Effective communication:** The exchange of information
- **Influencing the organization:** The ability to "get things done"
- **Leadership:** Developing a vision and strategy, and motivating people to achieve that vision and strategy
- **Motivation:** Energizing people to achieve high levels of performance and to overcome barriers to change
- **Negotiation and conflict management:** Conferring with others to come to terms with them or to reach an agreement
- **Decision Making:** Ability to take decision independently.
- **Political and cultural awareness:** Important to handle various personal and professional issues.
- **Team Building:** Ability to create a productive team.

## What is PMBOK Guide?

PMBOK Guide is the bible for Project Management. PMBOK stands for Project Management Body of Knowledge. There are ten knowledge areas defined in PMBOK Guide, which are as follows:

- Project Integration Management
- Project Scope Management
- Project Cost Management
- Project Time Management
- Project Risk Management
- Project Quality Management
- Project HR Management
- Project Communication Management
- Project Procurement Management
- Project Stakeholder Management

Each Knowledge area has certain processes. There are a total of 47 processes in PMBOK 5. Each process has following three important parts.

- **Inputs**

- **Tools & Techniques**
- **Outputs**

The PMBOK covers each of the 10 knowledge areas and 47 processes with their inputs, outputs, and tools & techniques.

Further the discipline of Project Management has five process groups.

These are:

- Initiating
- Planning
- Executing
- Monitoring and Controlling
- Closing

Each process is part of one of these five project phases. It is important to know the process group for each of the 47 processes.