



UNIT-1

Introduction to Project Management

Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Describe what is meant by a project
- ✓ Explain what project management means
- ✓ Identify benefits of projects

Unit 1

Introduction to Project Management

Defining Projects and Project Management

What is a Project?

If we understand what projects are, hopefully we will be more successful. It's important for us to understand how projects differ from other kinds of work.

A project is an effort that involves a series of activities and resources with the aim of achieving a certain output, considering constraints such as time, quality and cost, which often require changes.

Source: Lake (1997)

Projects have a limited duration, while operations are carried out constantly. Projects have well defined start and end dates. When the goals and objectives of a project are accomplished, it is said to have been completed. Sometimes, when it becomes evident that the goals and objectives cannot be accomplished, the project is cancelled and it ends. Operations involve continuous work without an ending date and often the same process is repeated.

A project is considered a success if it meets the expectations of the stakeholders. Stakeholders are people who have something to gain or lose from the project. A stakeholder is a person who sponsors a project and is usually an executive in the organization, who has the power to assign resources and make decisions related to the project. The customer is also a stakeholder, as are contractors and suppliers. The manager of the project, as well as managers from other departments in the organization, is also a stakeholder. It is very important for the project manager to identify all the stakeholders at the very start of the project.

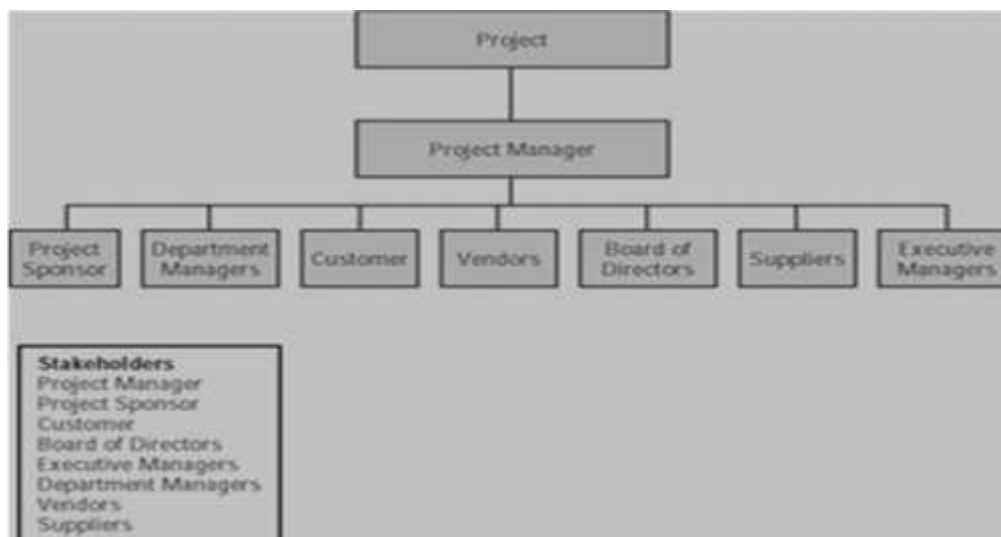


Fig: 1.1

The various stakeholders usually have conflicting interests. The project manager must understand these conflicts and try to resolve them, identifying and meeting with all key stakeholders early in the project to understand all their needs and constraints. When the matter is in doubt, stakeholder conflicts should always be resolved in favour of the customer.

Test Your Knowledge

How do projects differ from other kinds of work?

What is a project?

What is not a project?

What is Project Management?

A project uses the same skills that are used in everyday life: routine work, planning, working with others, managing different resources, reporting and so on.

It is not desirable to define a project according to its size because this can vary hugely. Some projects take a month or two to complete while others may be completed in years.

Project management is officially defined by the Project Management Institute as “the application of knowledge, skills, tools and techniques to project activities to meet project requirements.”

Projects can involve various types of activity. Investigating a particular problem, researching a new product or service, or implementing the results of a previously completed project are some examples of the activities and aims of a project. These activities might be carried out entirely by the organization’s own staff, or external consultants might be called in to provide assistance. Several companies may be working together in a group. On the other hand, conventional routine work is a known and recurring task that has no clearly defined end point or deliverables. It is best carried out in a stable environment – mostly within a single function. Calling work ‘a project’ means that it has a unique outcome, which can be calculated in terms of time, cost and quality. For example, calling the building and launching of London’s Millennium Dome a project would be accurate, as would sending a man to the moon. Hence, projects may differ in their relative sizes, but they have a common feature in that they are all a series of activities that are plotted and coordinated in a way that enables clients or sponsors to eventually assess whether or not they have received value for their investment.

A **project** is different from routine work because it is a one-time effort with the aim of changing things in a specific way. Thus, it might be said that creating a new website would be a project, whereas its maintenance and updating would not.

Managing a project may include the following:

Pointing out the requirements;

- Fulfilling various needs, concerns and expectations of the stakeholders while the project is being planned and carried out;
- Balancing the constraints involved in completing the project, which include (but are not limited to) the following:

- I. Budget
- II. Scope
- III. Quality
- IV. Schedule
- V. Resources
- VI. Risk

Time and **budget** are known terms—for example, a project might be expected to take six weeks and have a budget of £20,000. **Scope** refers to an agreed list of deliverables or features. The scale of the required solution is identified here. For example, creating a new website for the company may be possible to complete in six weeks, but rewriting accounting software may not. **Quality** is ‘exactly what it says on the tin’, but a project’s quality includes not only the quality of the finished product but also the approach. Some industries require particular quality management approaches to be used; for instance, particular international standards have to be met by factories producing automotive parts.

A particular project influences the limitations on which the project manager needs to focus. These factors are related to one another in such a way that, should any one factor change, at least one other factor is likely to be affected. For example, shortening the schedule often results in increased budget, thereby enabling additional resources to be deployed to complete the same amount of work in a shorter time. If the budget cannot be increased, the scope or quality may be reduced.

An even greater challenge is the possibility of project stakeholders having different ideas on which factors are the most important. Challenging the requirements of the project may create additional risks. The project team must have the capability to understand the situation and balance the demands in order that a successful project might be delivered.



Fig 1.2

These four features - time, budget, scope, and quality - are known collectively as the **balance quadrant**. The balance quadrant shows the interrelationship between the four aspects and demonstrates how a change in any one feature will disturb the quadrant. For instance, an increase in the project’s scope will have an impact on the time, cost and quality of the project. In reality, any project decision will have an effect on these four aspects.

Project management is therefore a set of skills and tools that help to ensure that the project is satisfactory in every way.

Test Your Knowledge**What is project management?**

What is not project management?

We often discuss project management in terms of several components. If you pick up practically any book on the subject, they usually agree on five process groups:

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

With the exception of Monitoring and Controlling, all of these processes correspond to the project life cycle, which we will discuss later on. (Controlling takes place during all phases.)

Processes can also be placed into nine knowledge areas:

- Integration
- Scope
- Time
- Cost
- Quality
- Human resources
- Communications
- Risk management
- Procurement

Test Your Knowledge

Project management requires resources. Can you think of some examples?

Who Are the Key Players?

There are typically seven key players in a project, although the roles may overlap.

The Sponsor

This person is the most senior team member. They typically initiate the project and provide the authority within the organization.

Their responsibilities can include:

- Representing the interests of the organization, ensuring goals, objectives, and the project itself benefits the company as a whole.
- Providing resources.
- Making the team aware of constraints. (Constraints are factors that may interfere with things getting done on time, such as other projects, construction, labor disputes, budgets, etc.)
- Helping to inspire and motivate the team.

The Project Manager

This is the team leader who is responsible for making sure the project is completed and the goals and objectives are achieved.

This team member has some of the more hands-on responsibilities, including:

- Producing documents such as the plan of action, vision statement, target chart, planning tools. Some of these projects will be done by the manager; others will be done by the team and led by the manager.
- Keeping an eye on the big picture to ensure the progress is on track.
- Motivating the project team and helping them grow.
- Communicating with sponsors, stakeholders, and team members to ensure everyone is on the same page.
- Acting as representative for the customers of the project.

Stakeholders

The name says it all: this team member is someone who has a stake in the project. They may be affected by the outcome of the project, or they may simply have an interest in the project. This person is often involved only at particular stages. Their main responsibilities include providing feedback and guidance.

Key Team Members

This is a team member who has expertise in a particular area. They typically assist the project manager directly, contributing their expertise when necessary.

Their responsibilities include:

- Helping to determine whether or not the project is feasible
- Helping to plan the project
- Ensuring that the project comes in on time and on budget

Team Members

These people are the ones doing the work. Typically, each member focuses on a few tasks (or perhaps just even one task), as assigned by the project manager. They may also act in a consulting capacity if specialized expertise is needed.

The major responsibilities include completing the task(s) as laid out in the project plan.

Customers

Believe it or not, customers are a part of your project plan, too. These are the people internal or external to your company who are affected by the project.

Although the customer may not have a direct role on the project team, the customer should influence some decisions made by the project manager, including the objectives, how success is measured, and the direction for the project.

Suppliers

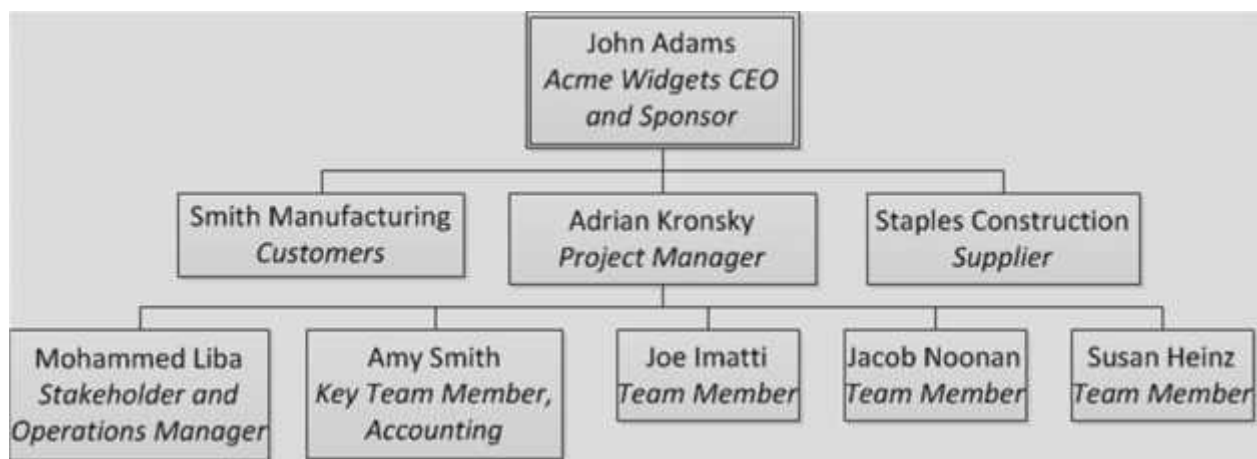
These are the people who provide the resources for your project. These resources can include services, materials, or products. These people are crucial to the success of the project.

Their sole responsibility is to work with the project manager to deliver the promised items or services on time and at the agreed cost.

Example

Acme Widgets Inc. has just received a contract to build 10,000 special widgets for Smith Manufacturing. However, they need to build a separate area in the factory for this new product. This has been assigned to Adrian Kronsky as a project.

The project team looks like this:



The Role of a Project Manager

Setting Your Sights

A project can be extremely rewarding work. Because projects are usually set up to accomplish an important purpose, the success of a project can do wonders for anyone's career.

As a project manager, you need a clear idea of what you are to accomplish. So what do you do?

First of all, sit down with your supervisor to discuss their expectations. Try to put down on paper exactly what your goal is, what the project is to accomplish, how long you have to complete it, how many staff

members are to be involved, to whom you must report, and so forth. We have included a sample proposal form on the following pages.

Improvement Proposal Form

Part 1 – To Be Completed By Proposer

Date: _____

From (Proposer): _____

Department: _____

To (Manager): _____

Idea, Problem, Opportunity for Improvement:	Measure(s) of Success:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Anticipated Benefits from Tackling This Project:

From (proposer): _____

Date: _____

To (manager): _____

Department: _____

Part 2 – To Be Completed By Manager

	Yes	No
This proposal is within my authority:	☐	☐
This proposal is approved:	☐	☐

Agreed Sponsor: _____

Agreed Team Leader: _____

Agreed Facilitator: _____

This proposal is declined because:

This proposal is not within my authority and is hereby forwarded to:

Signed: _____

Bringing the Team Together

If the project team is to be made up of members of your department, hold a meeting to discuss the upcoming effort and define the objectives. Give project assignments based on what your staff members are capable of handling. If you are charged with the task of selecting a project team, you should consider exactly what skills will be needed before making any team assignments.

Key Skill Areas

There are four specific skill areas that a project manager needs to develop.

Problem Solving

- Diagnostic thinking
- Systematic
- Conceptual
- Monitoring
- Information gathering

Achievement

- Concern for achievement
- Results orientation
- Initiative
- Business orientation

Resource Management

- Time management
- Cost management
- HR management
- Risk management
- Quality management

Influence

- Team building
- Developing others
- Client/user orientation
- Self-control

Eight Aspects of a Project**Scope**

Clearly define what the project will and will not encompass. What is the expected outcome and final product?

Time

Time required to see this project through to completion.

Money

Costs: equipment, materials, labor or staffing needs, financing, or real estate.

Quality

Is there a need as outlined by the organization or the clients for the outcomes to meet certain standards?

Communication

Who needs to be told of project progress? Why must they be told? What should they be told? How or what medium will be used to communicate?

Human Resources

Who will be involved? Why those individuals? Is there a need on the project for special skills/needs or qualifications? How will they be motivated?

Contracts

Are there contracts? With whom? Are they third party (outside of the supplier and customer, such as subcontractors)? Is there a requirement for training and development?

Risk

How much risk is associated with the project? How much can be risked? Who decides the level of risk?

How Can Projects Help Me?**The Benefits of Projects**

There are really only two types of projects: those that have been assigned to you, and those you want to take on because they interest you or because you see a special need for them.

Those assigned to you are often projects that you manage for your boss. They have been given this project, or they want to take it on, and they look to you for help. You are the de facto project manager.

Often, people placed in this situation have little or no training or understanding of what it is they are trying to achieve, and usually have no understanding of the components involved. Therefore, it is vital to set the stage by identifying some benefits of taking on a project.

Test your Knowledge

What is the advantage to taking on an extra project when we already feel worked to the max?

However, sometimes we feel overwhelmed by the thought of taking on one more project and we feel like we are sinking. What do you do when that happens? This case study is about that very thing: learning how to handle another project when you are already carrying more work than you can do.

Further Reading:

Introduction to Project Management, Second Edition, By Kathy Schwalbe,(2008)