



**Everyone's Smart
University**

Project Feasibility Study

Lecture 4

PMG201

THE WORLD OF PROJECT MANAGEMENT

LEARNING OUTCOMES

- **What Is a Project?**
- **Project Management vs. General Management**
- **What Is Managed? The Three Goals of a Project**
- **The Life Cycles of Projects**
- **Selecting Projects to Meet Organizational Objectives**
- **Confronting Uncertainty—the Management of Risk**
- **The Project Portfolio Process**

What Is a Project?

- **Project, Defined**

At first A project is an endeavor to accomplish a specific objective through a unique set of interrelated tasks and the effective utilization of resources.

Project, Defined

- A secondary effect of using multidisciplinary teams to deal with complex problems is conflict. Projects are characterized by conflict. As we will see in later chapters, the project schedule, budget, and specifications conflict with each other.
- The needs and desires of the client conflict with those of the project team, the senior management of the organization conducting the project and others who may have a less direct stake in the project. Some of the most intense conflicts are those between members of the project team.
- Much more will be said about this in later chapters. For the moment, it is sufficient to recognize that projects and conflict are inseparable companions, an environment that is unsuitable and uncomfortable for conflict avoiders.

Project, Defined

- Finally, it is appropriate to ask, “ Why projects? ” The reason is simple. We form projects in order to fix the responsibility and authority for the achievement of an organizational goal on an individual or small group when the job does not clearly fall within the definition of routine work.

Attributes of a Project

- **Has a well-defined objective**
- **Composed of a series of interdependent tasks**
- **Utilizes various resources**
- **Has a specific time frame**
- **Has a customer**
- **Involves a degree of uncertainty**

Constraints

- **Scope**
- **Cost**
- **Schedule**
- **Customer satisfaction**

Unforeseen Circumstances

- **Unforeseen circumstances may jeopardize achievement of the project objective.**
- **The challenge facing the project manager is to prevent, anticipate, and/or overcome such circumstances.**

The Project Management Process

- **The project management process means planning the work and then working the plan.**

The Project Management Process (Cont.)

- **Clearly define the project objective.**
- **Divide and subdivide the project.**
- **Define the specific activities that need to be performed.**
- **Graphically portray the activities in a network diagram.**

The Project Management Process (Cont.)

- **Make a time estimate.**
- **Make a cost estimate.**
- **Calculate a project schedule and budget.**

Controlling Projects

- **Establish a baseline plan.**
- **Monitor progress.**
- **Measure actual progress and compare it to planned progress.**
- **Take corrective action if the project is behind schedule, overrunning the budget, or not meeting technical specifications.**

Benefits of Project Management

- **Satisfied customers**
- **Additional business**
- **Expansion of career opportunities**
- **Satisfaction of being on a winning team**
- **Improved knowledge and skills**

When projects are successful, everybody WINS

Trends in Project Management

- ❑ Many recent developments in project management are being driven by quickly changing global markets, technology, and education.
- ❑ Global competition is putting pressure on prices, response times, and product/service innovation. Computer and telecommunication technology, along with rapidly expanding higher education across the world allows the use of project management for types of projects and in regions where these sophisticated tools had never been considered before.

Trends in Project Management

- *Achieving Strategic Goals*
- *Achieving Routine Goals*
- *Improving Project Effectiveness*
- *Virtual Projects*
- *Quasi - Projects*

Trends in Project Management

- A project, then, is a temporary endeavor undertaken to create a unique product or service. It is specific, timely, usually multidisciplinary, and always conflict ridden. Projects are parts of overall programs and may be broken down into tasks, subtasks, and further if desired. Current trends in project management are noted.
- Portfolio → Program → project → task → subtask

PROJECT MANAGEMENT VS. GENERAL MANAGEMENT

- **Project management differs from general management largely because projects differ from what we have referred to as “ non projects. ” The naturally high level of conflict present in projects means that the project manager (PM) must have special skills in conflict resolution.**
- **The fact that projects are unique means that the PM must be creative and flexible, and have the ability to adjust rapidly to changes. When managing no projects, the general manager tries to “ manage by exception. ” In other words, for non projects almost everything is routine and is handled routinely by subordinates. The manager deals only with the exceptions. For the PM, almost everything is an exception.**

Major Differences

1- Project management differs greatly from general management. Every project is planned, budgeted, scheduled, and controlled as a unique task. Unlike non projects, projects are often multidisciplinary and usually have considerable need to cross departmental boundaries for technology, information, resources, and personnel. Crossing these boundaries tends to lead to intergroup conflict. The development of a detailed project plan based on the scope and due date of the project is critical to the project ' s success.

2- Unlike their general management counterparts, project managers have responsibility for accomplishing a project, but little or no legitimate authority to command the required resources from the functional departments. The PM must be skilled at win - win negotiation to obtain these resources.

WHAT IS MANAGED? THE THREE GOALS OF A PROJECT

- **The performance of a project is measured by three criteria. Is the project on time or early? Is the project on or under budget? Does the project deliver the agreed - upon outputs to the satisfaction of the customer? Figure 1-1 shows the three goals of a project. The performance of the project and the PM is measured by the degree to which these goals are achieved.**

- **One of these goals, scope, is set primarily by the client (although the client agrees to all three when contracting for the project). It is the client who must decide what capabilities are required of the project's deliverables — and this is what makes the project unique. Some writers insist that “ quality ” is a separate and distinct goal of the project along with time, cost, and scope. We do not agree because we consider quality an inherent part of the project specifications. If we did not live in an uncertain world in which**

The Project Life Cycle

- There are two different paths (life cycles) along which projects progress from start to completion. One is S - shaped and the other is J - shaped. It is an important distinction because identifying the different life cycles helps the PM to focus attention on appropriate matters to ensure successful project completion.
- S-Shaped :They start slowly, develop momentum, and then finish slowly.
- J-Shaped :They start slowly, proceed slowly, and then finish rapidly.

The Project Life Cycle

- **Projects are “born” when a need is identified by the customer.**
- **Project life cycles vary in length, from a few weeks to several years.**
- **Not all projects formally go through all four phases of the project life cycle.**

Phases of the Project Life Cycle 1

- **The first phase involves the identification of a need, problem, or opportunity.**
 - **The need and requirements are usually written by the customer into a document called a request for proposal (RFP).**

Phases of the Project Life Cycle 2

- **The second phase is the development of a proposed solution to the need or problem.**
 - **This phase results in the submission of a proposal.**
 - **The customer and the winning contractor negotiate and sign a contract (agreement).**

Phases of the Project Life Cycle 3

- The third phase is performing the project.
 - Different types of resources are utilized
 - Results in the accomplishment of the project objective

Phases of the Project Life Cycle 4

- **The final phase is terminating the project.**
 - **Perform close-out activities**
 - **Evaluate performance**
 - **Invite customer feedback**

SELECTING PROJECTS TO MEET ORGANIZATIONAL OBJECTIVES

- **The accomplishment of important tasks and goals in organizations today is being achieved increasingly through the use of projects. A new kind of organization has emerged recently to deal with the accelerating growth in the number of multiple, simultaneously ongoing, and often interrelated projects in organizations.**

methods for selecting projects

- **There are many different methods for selecting projects, but they may be grouped into two fundamental types, nonnumeric and numeric.**
- 1. Nonnumeric Selection Methods**
 - 2. Numeric Selection Methods**

1.Nonnumeric Selection Methods

- 1. The Sacred Cow***
- 2. The Operating/Competitive Necessity***
- 3. Comparative Benefits***

2- Numeric Selection Methods

- 1. Financial Assessment Methods***
- 2. Financial Options and Opportunity Costs***
- 3. Scoring Methods***

CONFRONTING UNCERTAINTY — THE MANAGEMENT OF RISK

- **As we note throughout this book, projects are all about uncertainty, and effective project management requires an ability to deal with uncertainty.**
- **The time required to complete a project, the availability and costs of key resources, the timing of solutions to technological problems, a wide variety of macroeconomic variables, the whims of a client, the actions taken by competitors, even the likelihood that the output of a project will perform as expected,**

❑ all these exemplify the uncertainties encountered when managing projects. While there are actions that may be taken to reduce the uncertainty, no actions of a PM can ever eliminate it.

- Considering Uncertainty in Project Selection Decisions**
- Considering Disaster**

THE PROJECT PORTFOLIO PROCESS

- **The Project Portfolio Process (PPP) attempts to link the organization 's projects directly to the goals and strategy of the organization. This occurs not only in the project 's initiation and planning phases, but also throughout the life cycle of the projects as they are managed and eventually brought to completion.**
- **Thus, the PPP is also a means for monitoring and controlling the organization 's strategic projects,**

THE PROJECT PORTFOLIO PROCESS

- Step 1: Establish a Project Council
- Step 2: Identify Project Categories and Criteria
- Step 3: Collect Project Data
- Step 4: Assess Resource Availability
- Step 5: Reduce the Project and Criteria Set
- Step 6: Prioritize the Projects within Categories
- Step 7: Select the Projects to Be Funded and Held in Reserve
- Step 8: Implement the Process

THE PROJECT PORTFOLIO PROCESS

➤ **Projects are often subdivisions of major programs. Long - run success is determined by the organization ' s portfolio of projects. Classified by the extent of innovation in product and process, there are four types of projects:**

derivative, breakthrough, platform, and R & D projects. The actual mix of projects is a direct expression of the organization ' s competitive strategy. A proper mix of project categories can help ensure its long - run competitive position. It is important for the Project Council or PMO to preplan project portfolio adjustments to respond to significant changes in the state of competition and other industrial crises.