

# Project Management

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# Unit – 1 Project Selection, Initiation and Performance Measurement

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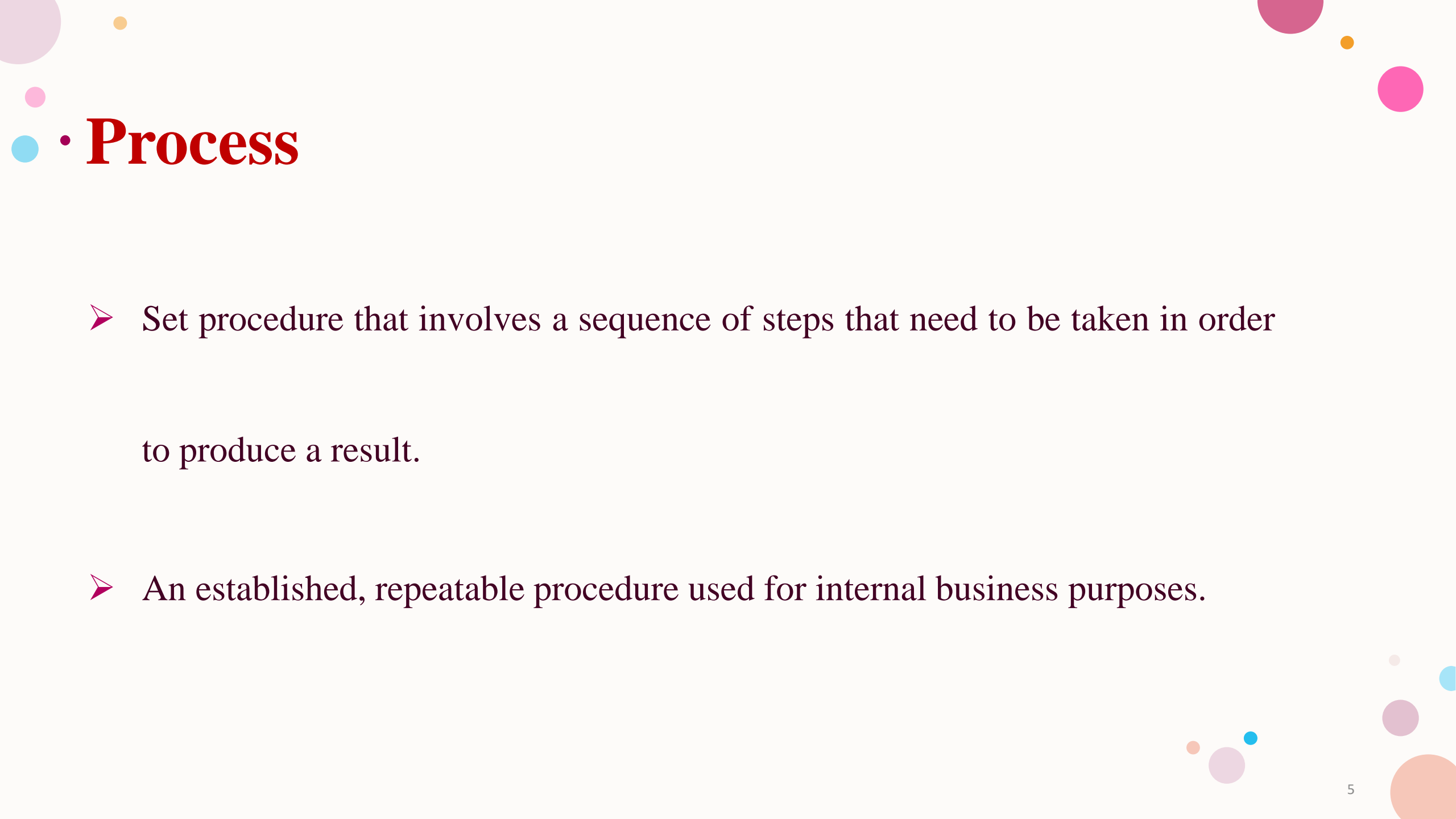
# Project

- Project is a set of interrelated activities undertaken to meet a defined objective, in terms of a product or service.
- It is a collection of tasks that must be accomplished.
- It has a defined timeline and an estimated cost.
- Scope, plan, and resources
- Temporary course of action that aims to deliver a distinctive result.
- Each project is unique in its nature.

# Examples of projects

- Construction of a bridge
- Planning and execution of space shuttle to Mars
- Construct a plant to manufacture ball bearings
- Design and implement a computer system/ android /iOS application
- Development of software for a new business process
- Installation of machinery in a factory





# • Process

- Set procedure that involves a sequence of steps that need to be taken in order to produce a result.
- An established, repeatable procedure used for internal business purposes.

# Examples of process

- Producing items every day in any factory
- Production of food items, chemicals, textiles, cement etc.
- Handlooms, fine arts etc.
- Cleaning a room
- Servicing a car





# Project management

Project management is the practice of organizing and delivering a project.

- a) Initiation
- b) Planning
- c) Execution
- d) Monitoring and controlling
- e) Closure

# Project life cycle

**Project Lifecycle:** sequence of phases through in which a project progresses. Includes typically five phases

1. **Initiation**
2. **Planning**
3. **Execution**
4. **Monitoring and Controlling**
5. **Closure**

- The number of phases and sequence of the cycle may vary based on the **company** and the **type of project undertaken**.
- As part of a project, however, they should have a **definite start and end date**.
- The lifecycle provides the **foundation of the actions** that must be performed in the project.







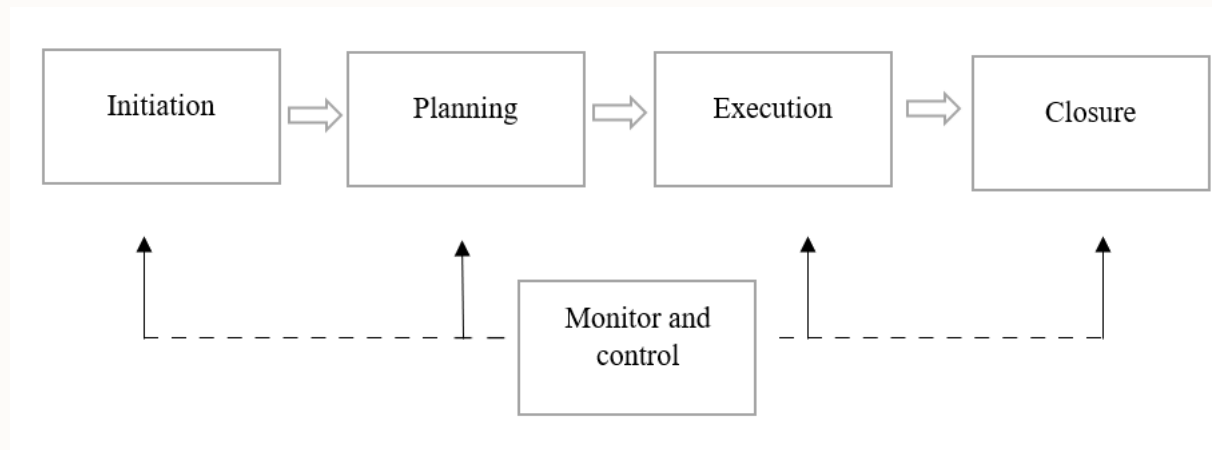
**Project Initiation** – Involves: a feasibility study, identifying the scope, deliverables, project stakeholders, creating a statement of work, and possibly initial costs, price, and timeline for work to be done.

**Project Planning:** Comprises: creating a project plan, including the tasks, schedule, resources, and constraints on the project. This phase also includes preparation of the budget for the project. In addition, risk should be anticipated and identification at this stage including its mitigation plans.

● **Project Execution** – Task owners begin work and the project manager oversee that tasks are done in a timely manner and workflow continues smoothly.

**Monitoring and Controlling** - Consists of the processes used to track, review, and orchestrate project progress, identify areas where changes are required, and implement those changes.

Applies to the entire life-cycle of the project.





**Project Closure** – Once the team has completed all the tasks, and the project owner signs off that all deliverables that are complete, the project is closed.

Any documentation is handed over to the project owner and if required to an ongoing maintenance organization.

The project is then analyzed for performance to determine whether the project's goals were met.

# WHAT IS SPECIAL ABOUT A PROJECT?

The 5'C's are the characteristics of a project management:

- **Communication:** Both internal and external communication between each member in a team and also with other stakeholders
- **Cooperation:** Group effort to reach a common goal.
- **Coordination:** Managing the relationship between different functions or departments in a company and also with other companies or stakeholders.
- **Control:** Monitor and control the project to make sure that you are meeting the project scope, schedule, and budget.
- **Closure:** Performed by personnel not involved in the day-to-day activities of the project so that he can have an objective view of all activities in a project.

# Project management

## Association of Project Managers:

- “Planning, organizing, monitoring and controlling of all aspects of a project and the **motivation of all involved** to achieve project objective safely and with in **well defined time, cost and performance** parameters.”

## Harold Kerzner:

- “Planning, directing and controlling of company resources for a relatively short- term project which has been established for completion of specific goals”

# Objectives of Project management

The main objectives of Project management are:

- (1) Completing the project within estimated budget and specified time.
- (2) Developing a reputation for high quality workmanship.
- (3) Providing safe and satisfactory working conditions for all personnel and workers.
- (4) Taking sound decisions at the lowest practical management level delegation of authority.
- (5) Motivating people to give their best within their capabilities.
- (6) Creating an organisation that works as a team.

# Project identification

- Project identification is a process in the initiating phase of project life cycle for identifying a need, problem, or opportunity.
- Once identified, a project is initially documented objectively defining what was identified.

Step 1: Identify & Meet Stakeholders

Step 2: Set & Prioritize Goals

Step 3: Define Deliverables

Step 4: Create the Project Schedule

Step 5: Identify Issues and Complete a Risk Assessment

Step 6: Present the Project Plan to Stakeholders

## Step 1: Identify & Meet Stakeholders

- Identify all stakeholders and keep their interests while creating project plan.
- Meet key stakeholders to discuss their needs and expectations, and establish baselines for project scope, budget, and timeline.
- Then create a scope statement document to finalize and record project scope details, get everyone on the same page, and reduce the chances of miscommunication.

## Step 2: Set & Prioritize Goals

- With the list of stakeholder needs, prioritize them and set specific project goals.
- These should outline project objectives, and benefits to achieve



### Step 3: Define Deliverables

- Identify the deliverables and project planning steps required to meet the project's goals.

### Step 4: Create the Project Schedule

- Go through the each deliverable and define the series of tasks that must be completed to accomplish each one.
- For each task, determine the amount of time it will take, the resources necessary, and who will be responsible for execution.



## ● Step 5: Identify Issues and Complete a Risk Assessment

- Know how to manage risk in a project and consider the steps you should take to either prevent certain risks from happening, or limit their negative impact.
- Conduct a risk assessment and develop a risk management strategy.

## Step 6: Present the Project Plan to Stakeholders

- Address project plan as per stakeholders' expectations, and present the solutions.
- Have an open discussion with stakeholders. Make project plan clear and accessible to all stakeholders.

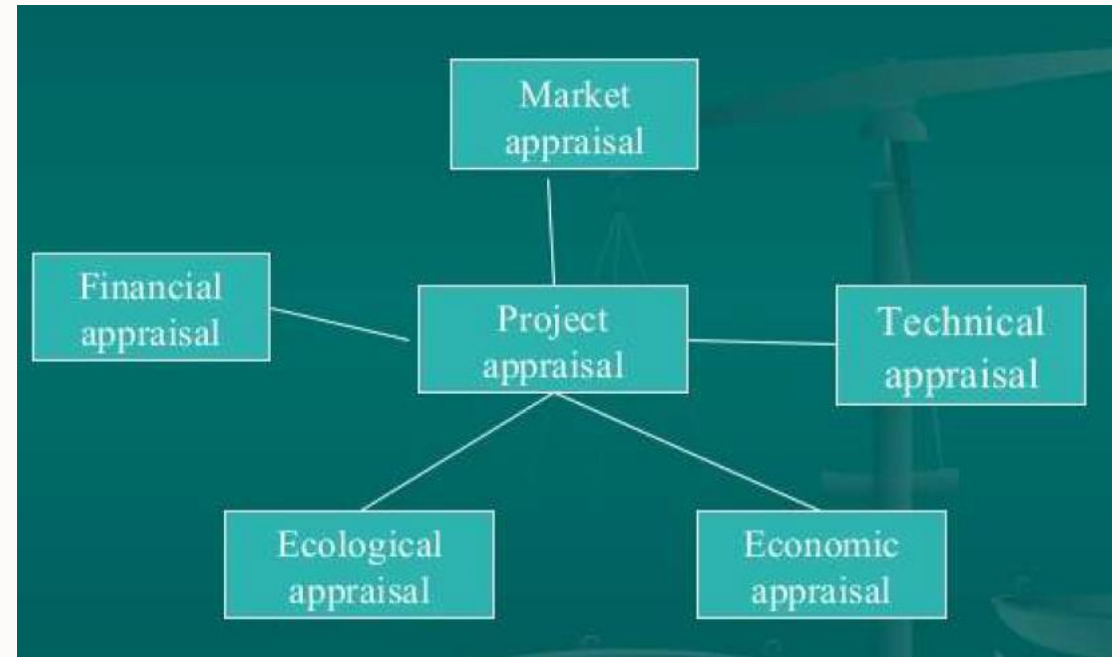
# Project appraisal

- Project appraisal is the process of assessing, in a structured way, the case for proceeding with a project or proposal, or the project's viability.
- Involves comparing various options, using economic appraisal or some other decision analysis technique.
- Pre investment analysis of a project with a view to determine the overall feasibility and measure its investment worth which provides a comprehensive review of all aspects of project that lays the foundation for implementation and evaluation when it is completed.

# Project appraisal

It is categorized into 5 types

- a) Market appraisal
- b) Technical appraisal
- c) Economic appraisal
- d) Ecological appraisal
- e) Financial appraisal



# Market appraisal

- It is one of the major areas of introducing of any product in market.
- Aggregate demand of the proposed product or service
- Estimation of the market share of the project under appraisal

## Issues

- Past and current demand trends
- Past and current supply positions
- Production possibilities and constraints
- Imports and exports
- Nature of competition
- Cost structure
- Consumer behavior  
*Motivation, attitude, preferences, requirements*
- Distribution channels  
*Marketing policies*

# Technical appraisal

- Whether prerequisites for the success of project considered are considered
- Good choices with regard to location, size, process, machines etc.

## Issues

- Preliminary tests and studies
- Availability of raw materials, power and other inputs
- Optimal scale of operations
- Choice of suitable production process
- Choice of appropriate machines and equipment
- Effluents and waste disposal
- Proper layout of plant and buildings
- Realistic work schedules
- Socially acceptable technology

# Economic appraisal

- Social cost – benefit analysis
- Impact on level of savings and investments in society
- Impact on fulfilment of national goals

*Self sufficiency*

*Employment*

*Social order*

# Ecological appraisal

- Impact of project on quality of

- Air

- Water

- Noise

- Vegetation

- Human life

- Following major projects has the potential to cause environmental damage

- a. Power plants

- b. Irrigation schemes

- c. Leather processing, chemicals

- likely damage and cost of restoration



# Financial appraisal

- Check to find out whether the project is financially viable.
- Servicing debts
- Meeting return expectations
- Investment and phasing of total cost
- Means of financing
- Break even point
- Cash flows in the project
- Investment worthwhile
  - a. Net present value
  - b. Internal rate of return
  - c. Pay back period
- Level of risk

# Project appraisal

- This analysis helps the decision maker in making the right choice of the project