

23CE702 : PROJECT MANAGEMENT

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UNIT-I: INTRODUCTION TO PROJECT MANAGEMENT

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- **Slide 1: Title Slide**

- **Project Management**

- **Unit-I: Introduction**

- **Topics Covered**

- Introduction to Project Management
- Project Characteristics
- Project Life Cycle
- Project Identification
- Project Formulation
- Project Implementation
- Project Management in Different Sectors
- Systems Approach to Project Management

Learning Outcomes

- **At the end of this unit, students will be able to:**
- Understand the concept of project management.
- Explain project characteristics.
- Describe different phases of a project life cycle.
- Understand project identification and formulation.
- Explain project implementation process.
- Identify applications of project management in various sectors.
- Understand the systems approach to project management.

Topic 1: Introduction to Project Management

- **Topic 1: Introduction to Project Management**
- **Slide 3: What is a Project?**
- **Definition**
- A **Project** is a temporary endeavor undertaken to create a unique product, service, or result.
- **Examples**
- Construction of a bridge
- Software development
- Hospital establishment
- Launching a new mobile application
- **Characteristics**
- Temporary
- Unique
- Goal-oriented
- Limited resources
- Defined beginning and end

What is Project Management?

- **Definition**
- Project Management is the process of planning, organizing, executing, monitoring, and controlling resources to achieve project objectives within time, cost, and quality constraints.
- **Objectives**
- Complete project on time
- Stay within budget
- Meet quality standards
- Customer satisfaction
- Efficient resource utilization

Importance of Project Management

- **Benefits**
- Better planning
- Cost control
- Risk reduction
- Efficient resource allocation
- Improved communication
- Increased productivity
- Better customer satisfaction

Project Characteristics

- **Characteristics of a Project**
- Projects have the following characteristics:
- Specific objective
- Temporary nature
- Unique output
- Defined scope
- Limited budget
- Time-bound
- Risk and uncertainty
- Multiple stakeholders

Project Life Cycle

Project Life Cycle

- **Phases**
- Initiation
- Planning
- Execution
- Monitoring & Controlling
- Closing

Project Identification

Project Identification

- **Definition**
- Project Identification is the process of selecting feasible and beneficial projects.
- **Sources**
- Market demand
- Customer needs
- Government policies
- Technological innovation
- Business opportunities

Steps in Project Identification

- Identify problem
- Collect information
- Generate alternatives
- Evaluate feasibility
- Select best project

Project Formulation

- **Definition**
- Project Formulation is the process of converting an idea into a detailed project proposal.
- **Includes**
 - Objectives
 - Scope
 - Cost estimation
 - Resource planning
 - Risk analysis
 - Scheduling

Steps in Project Formulation

- Idea Generation
- ↓
- Feasibility Study
- ↓
- Cost Estimation
- ↓
- Project Report
- ↓
- Approval

Project Implementation

- **Definition**
- Implementation is the execution phase where project plans are transformed into actual work.
- **Activities**
 - Resource allocation
 - Team formation
 - Procurement
 - Monitoring
 - Quality control

Challenges During Implementation

- Cost overruns
- Delays
- Scope changes
- Resource shortages
- Poor communication
- Technical issues

Project Management in Different Sectors

Construction Sector

- Examples
- Roads
- Bridges
- Buildings
- Airports
- Focus Areas
- Safety
- Scheduling
- Cost control
- Quality

Service Sector

- Examples
 - Banking
 - Healthcare
 - IT Services
 - Hospitality
- Focus
 - Customer satisfaction
 - Service quality
 - Process improvement

Public Sector Projects

- Examples
 - Metro Rail
 - Schools
 - Hospitals
 - Water Supply
- Objectives
 - Public welfare
 - Infrastructure development
 - Social development

Government Projects

- Examples
 - Smart Cities
 - Digital India
 - PMGSY Roads
 - Swachh Bharat Mission
- Key Features
 - Large budget
 - Public accountability
 - Regulatory compliance

Systems Approach to Project Management

- **Definition**
- A Systems Approach views a project as an integrated system where different components work together to achieve common objectives.
- **Components of a System**
- Inputs
- ↓
- Process
- ↓
- Outputs
- ↓
- Feedback

Systems Approach to Project Management

- **Inputs**
- Money
- Materials
- Manpower
- Machines
- Information
- **Outputs**
- Product
- Service
- Customer Satisfaction

Advantages of Systems Approach

- **Advantages of Systems Approach**
- Better coordination
- Improved decision making
- Efficient resource utilization
- Continuous monitoring
- Better quality
- Risk reduction

Summary

- **We Learned**
- ✓ Project Management
- ✓ Project Characteristics
- ✓ Project Life Cycle
- ✓ Project Identification
- ✓ Project Formulation
- ✓ Project Implementation
- ✓ Project Management in Different Sectors
- ✓ Systems Approach