Project Management

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Chapter 8: Project Cost Management

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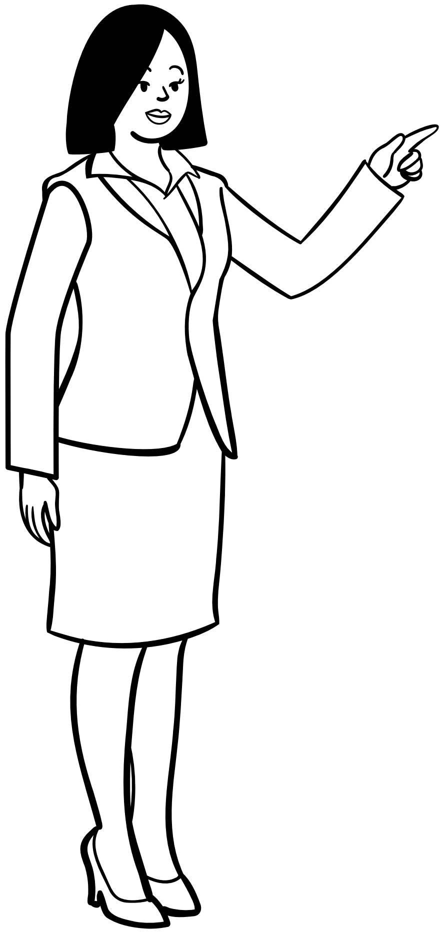
Learning Objectives

- Understand the concept of project cost management
- Identify key processes in cost management
- Learn cost estimation and budgeting concepts
- Explain cost control and monitoring
- Understand the role of cost management in project success

Introduction to Project Cost Management

- Focuses on planning, estimating, budgeting, and controlling project costs
- Ensures project is completed within approved budget
- Links financial planning with project activities

Importance of Cost Management



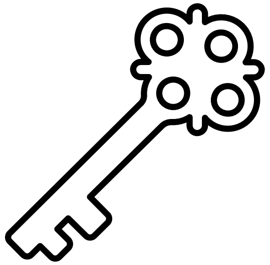
- Prevents budget overruns
- Supports financial decision-making
- Improves profitability
- Increases transparency and accountability
- Builds stakeholder confidence.

Key Processes in Cost Management

- Cost estimation
- Cost budgeting
- Cost control
- Cost reporting

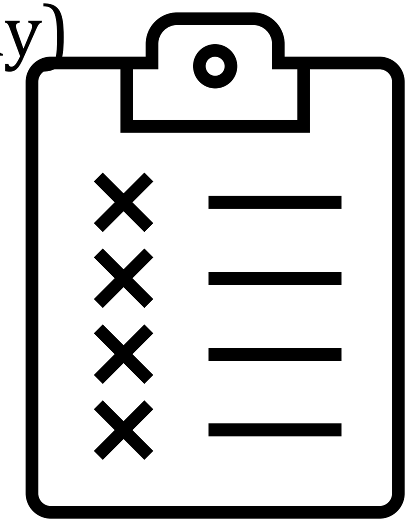
Cost Estimation

- Predicts cost of each project activity
- Includes:
  - Labor cost
  - Hardware & software
  - Materials
  - Overhead cost
- Basis for budget planning



Cost Estimation Techniques

- Analogous estimation (compare with similar projects)
- Parametric estimation (use formulas & rates)
- Bottom-up estimation (estimate each task separately)
- Expert judgment



Example of Cost Estimation

Example:

- 5 developers
- Salary = 40,000 THB / month
- Duration = 3 months
- Labor Cost = 5 × 40,000 × 3 = 600,000 THB

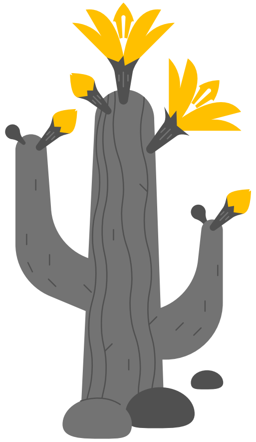
Cost Budgeting

- Aggregates all estimated activity costs
- Allocates budget to project phases or work packages
- Establishes cost baseline for performance measurement
- Includes contingency reserves

Example:

- Design Phase: $5,000
- Development Phase: $25,000
- Testing Phase: $8,000
- Contingency: $2,000

Total Project Budget = $40,000



Project Budget

- Represents total approved funds for the project
- Serves as baseline for cost control
- Includes:
  - Direct costs
  - Indirect costs
  - Contingency reserve

Cost Control

- Monitors actual cost against planned cost
- Identifies cost variances early
- Implements corrective actions
- Updates cost forecasts

Earned Value Management (EVM)

- Integrates scope, schedule, and cost
- Measures real project performance
- Predicts final cost and schedule outcomes

Benefits

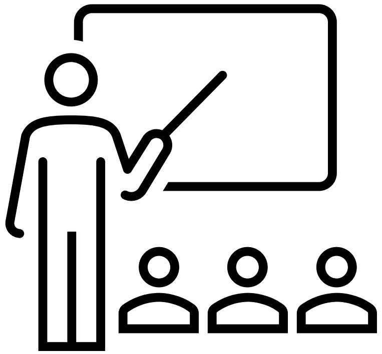
- Early problem detection
- Objective performance measurement

Common Cost Problems

- Underestimated costs
- Scope creep
- Poor tracking
- Price changes
- Lack of contingency planning

Managing Cost Changes

- Evaluate impact on budget and schedule
- Update cost baseline
- Obtain approval
- Communicate changes



Tools for Cost Management

- Spreadsheets (Excel, Google Sheets)
- MS Project
- Jira
- Trello / Asana
- Accounting software

Best Practices in Cost Management

- Estimate realistically
- Review budget regularly
- Track expenses frequently
- Control scope changes
- Maintain documentation

Summary

- Project cost management ensures budget control
- Estimation, budgeting, and control are essential
- Effective cost management improves project success

Review Exercise

1. What is project cost management?
2. Name two cost estimation techniques.
3. What is a project budget?
4. What does cost variance indicate?
5. Why is cost control important?