

Software Project Management

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Chapter 4: Project Planning

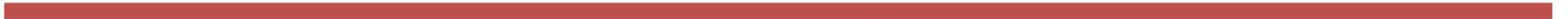
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Learning Objectives

- Understand the purpose of project planning
- Identify key planning activities
- Learn common planning tools
- Explain how planning supports project success

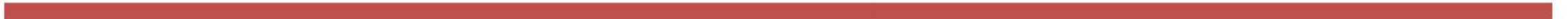




Introduction to Project Planning

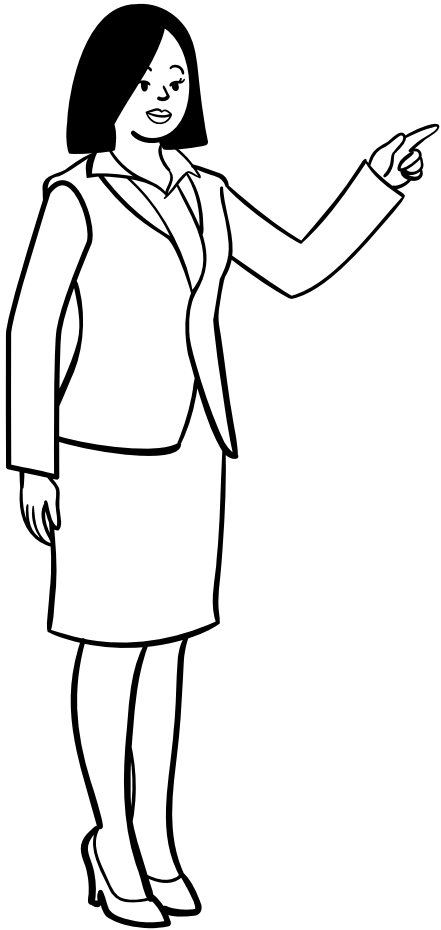
Project planning is the process of defining how a project will be executed. It transforms project goals into actionable steps. Good planning reduces uncertainty and risk.

Example: Deciding whether to build a new university mobile app





Importance of Project Planning



- Provides clear direction for the team.
- Helps estimate time, cost, and resources.
- Improves coordination and communication





Key Planning Areas

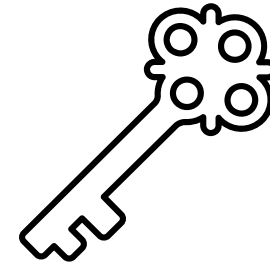
- Scope planning.
- Schedule planning.
- Cost planning.
- Resource planning.
- Risk and communication planning.





Scope Planning

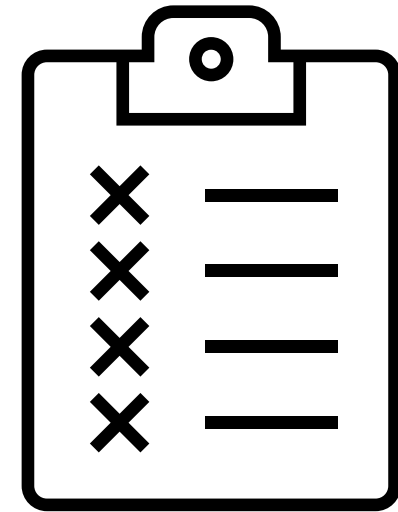
- Defines project boundaries and deliverables.
- Ensures all stakeholders understand what will be delivered.
- Prevents unnecessary work.





Schedule Planning

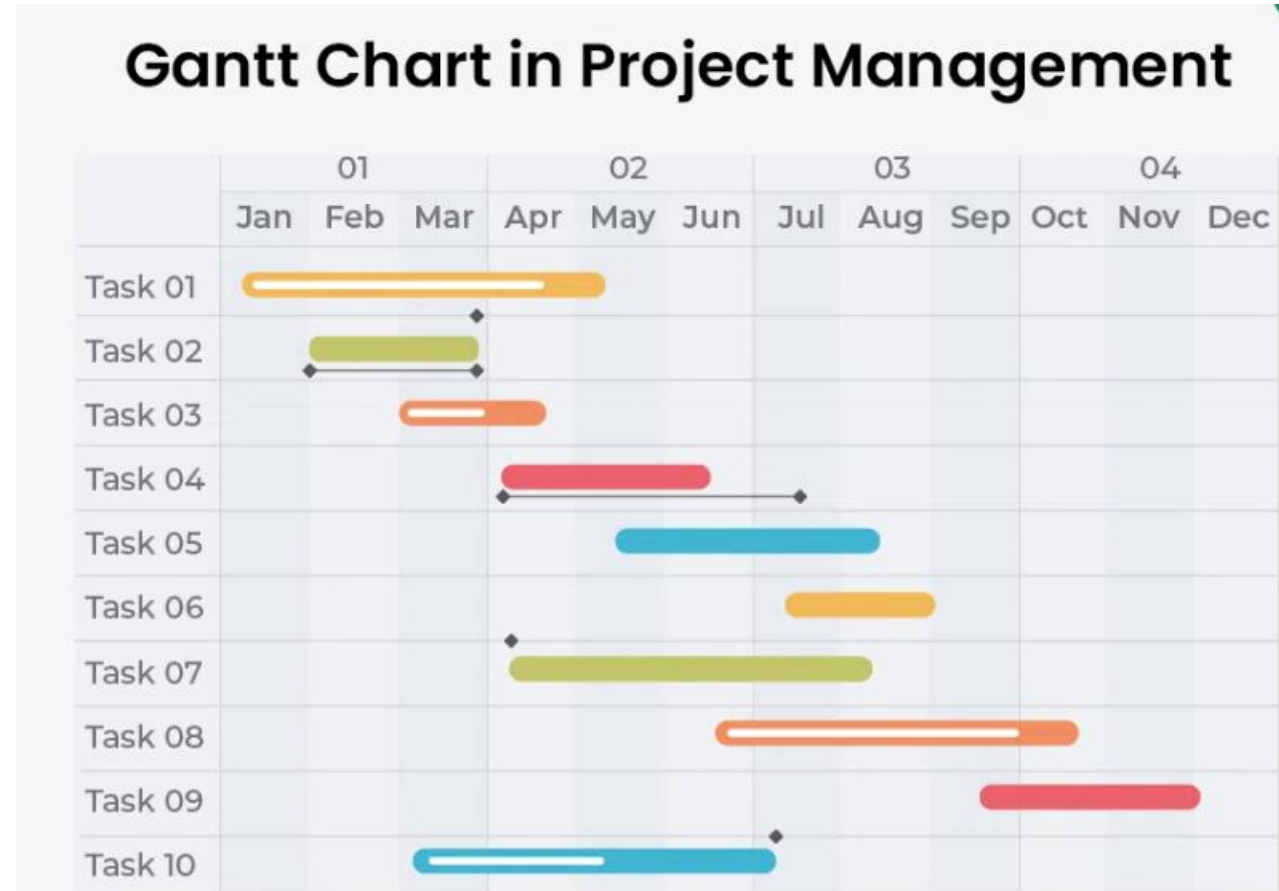
- Determines project timeline.
- Identifies task dependencies.
- Helps ensure timely completion





Scheduling Tools

- Gantt Chart.
- Network Diagram.
- Critical Path Method (CPM).





Cost Planning

- Estimates project budget.
- Includes labor, tools, and operational costs.
- Helps control financial resources.





Resource Planning

- Identifies people, equipment, and materials needed.
- Assigns roles and responsibilities.
- Balances workload among team members





Risk Planning

- Identifies potential project risks.
- Analyzes risk impact and probability.
- Develops mitigation strategies.





Communication Planning

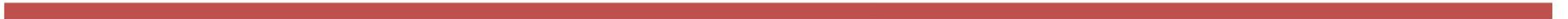
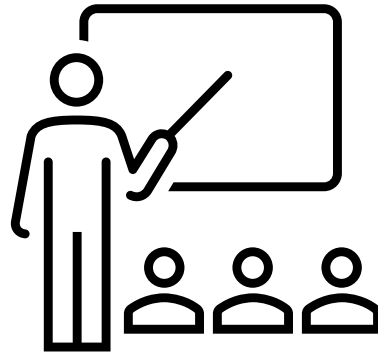
- Defines how information will be shared.
- Specifies communication channels and frequency.
- Ensures stakeholder alignment.





Work Breakdown Structure (WBS)

- Breaks project into manageable tasks.
- Forms the basis for scheduling and budgeting.
- Improves task clarity.





Planning Example

Website Development Project

Example project: Website development

Main tasks:

- Requirements analysis

- Design

- Development

- Testing

- Deployment

Each task has:

- Assigned responsible person

- Defined start and end date



Planning Tools Overview

- MS Project.
- Trello / Jira.
- Spreadsheets and planning templates.





Common Planning Problems

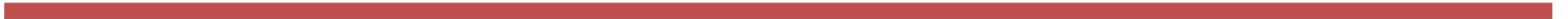
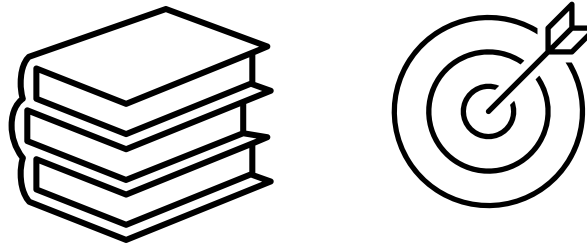
- Unclear requirements.
- Unrealistic schedules.
- Lack of stakeholder involvement





Best Practices in Project Planning

- Involve stakeholders early.
- Review and update plans regularly.
- Use appropriate planning tools





Planning and Project Success

- Well-planned projects are more likely to succeed.
- Planning helps manage change effectively.
- Supports quality and performance.





Summary

- Project planning defines how work will be done.
- It covers scope, time, cost, and resources.
- Effective planning reduces risk and improves success





Review Exercise

1. What is project planning?
 2. Why is planning important?
 3. Name two scheduling tools.
 4. What is WBS used for?
 5. How does planning support project success?
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