



Project Management

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Chapter 6: Project Risk Management

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Learning Objectives

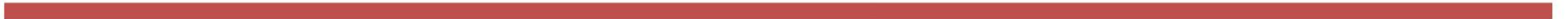
- Understand the concept of project risk
- Identify different types of risks
- Learn the risk management process
- Explain how risks are monitored and controlled





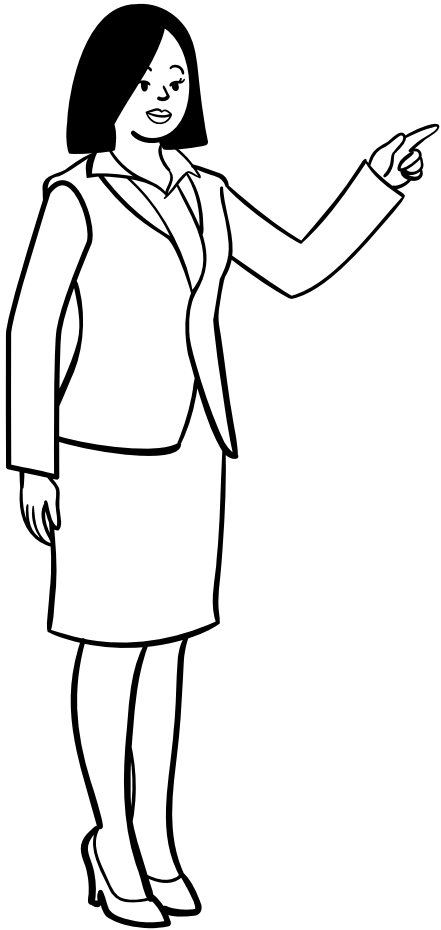
Introduction to Project Risk Management

- Project risk management focuses on identifying and managing uncertainties.
- Risks may affect project objectives such as time, cost, scope, and quality.

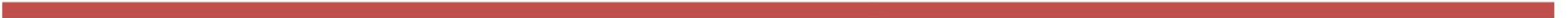




What is Project Risk?



- A project risk is an uncertain event or condition.
- If it occurs, it may have a positive or negative impact on the project.





Importance of Risk Management

- Reduces negative impacts on projects.
- Improves decision-making.
- Increases the chance of project success





Type of Project Risks

- Technical risks
- Schedule risks
- Cost risks
- Resource risks
- External risks

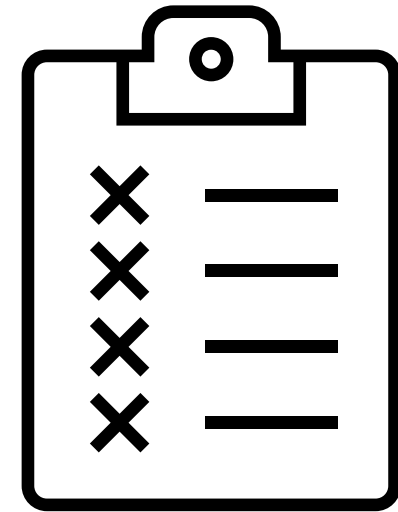




Technical risks

- Related to technology, tools, or system complexity.

Example: Using a new or untested technology





Schedule Risks

Related to project timelines.

Example:

- Delays caused by underestimated tasks.
 - Unexpected technical issues can cause schedule delays.
 - Changes in customer requirements may affect the project timeline.
 - Lack of available resources can lead to missed deadlines.
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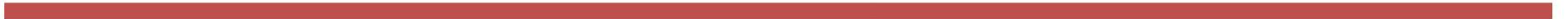
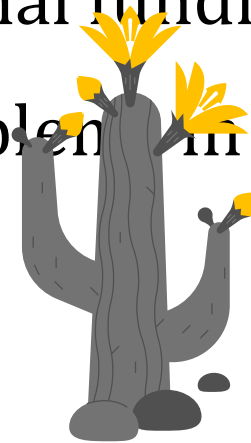


Cost Risks

- Related to budget overruns.

Example:

- Unexpected increase in labor costs can cause budget overruns.
- Changes in project scope may require additional funding.
- Poor cost estimation can lead to financial problem in the project.





External Risks

Risks that come from outside the organization and are beyond the direct control of the project team.

Example

- Economic downturn may reduce the project budget.
 - New data protection laws can require system changes.
 - Market conditions may change and impact project priorities.
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Risk Management Process

- Risk identification.
 - Risk analysis.
 - Risk response planning.
 - Risk monitoring and control.
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Risk Identification

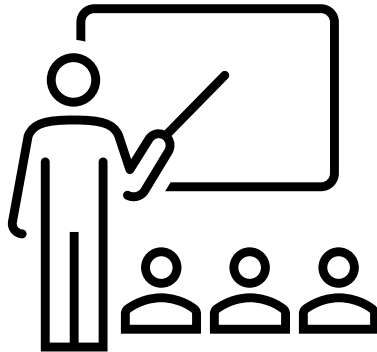
- Identifies potential risks early.
- Uses brainstorming, checklists, and expert judgment.





Risk Response Planning

- Defines actions to address risks.
- Strategies include avoid, mitigate, transfer, or accept.





Risk Monitoring and Control

- Tracks identified risks.
- Monitors new risks.
- Implements response plans.





Risk Register

- A document that records identified risks.
- Includes risk description, impact, probability, and response plan.





Common Risk Management Problems

- Ignoring risks early.
- Poor communication about risks.
- Lack of contingency planning.





Best Practices in Risk Management

- Identify risks early
- Communicate risks clearly
- Update risk plans regularly
- Prepare contingency plans





Summary

- Project risk management reduces uncertainty.
- Identifying and managing risks improves project success.





Review Exercise

1. What is a project risk?
 2. Why is risk management important?
 3. Name two types of project risks.
 4. What are the main steps in risk management?
 5. What is a risk register?
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