

Project Risk Management

Project Risk

- Project risk is an uncertain event or condition that, if it occurs, has a *positive* or *negative* effect on a project objective.
- A risk has a *cause* and, if it occurs, an *impact*. For example, the cause may be requiring a permit or having limited personnel assigned to the project. The risk event is that the permit may take longer than planned or the personnel may not be adequate for the task.

Risk Presents Threats & Opportunities

- Project risk includes both *threats* to the project's objectives and *opportunities* to improve on those objectives.
- The general objectives of any project are:
 - Scope
 - Cost
 - Time
 - Quality

Risk & Reward

- Risk should be related to reward.
- Risks accepted should be in balance with the reward that may be gained by taking the risk.
- For example, a fast-track schedule is a risk taken to achieve the benefit of a shortened schedule.

Risk Management

- Risk management is the *systematic application of the risk management processes on a project. The processes consist of risk management planning, identification, analysis, responding, and monitoring & control.*
- The objective of risk management is to maximize the probability and impact of positive events and minimize the probability and consequences of events adverse to project objectives.
- The processes of risk management are updated throughout the project life.

Risk management Processes

1. **Risk Management Planning**—deciding how to approach and plan the risk management activities for a project.
2. **Risk Identification**—determining which risks might affect the project and documenting their characteristics.
3. **Qualitative Risk Analysis**—prioritizing risk by their effects on project objectives through assessment of their probability, impact, and the combination of both.
4. **Quantitative Risk Analysis**—quantitatively analyzing the effect of identified risks on project objectives.
5. **Risk Response Planning**—developing options and ways to enhance opportunities and to reduce threats to the project's objectives.
6. **Risk Monitoring and Control**—monitoring identified and residual risks, identifying new risks, executing risk response plans and evaluating their effectiveness throughout the project life cycle.

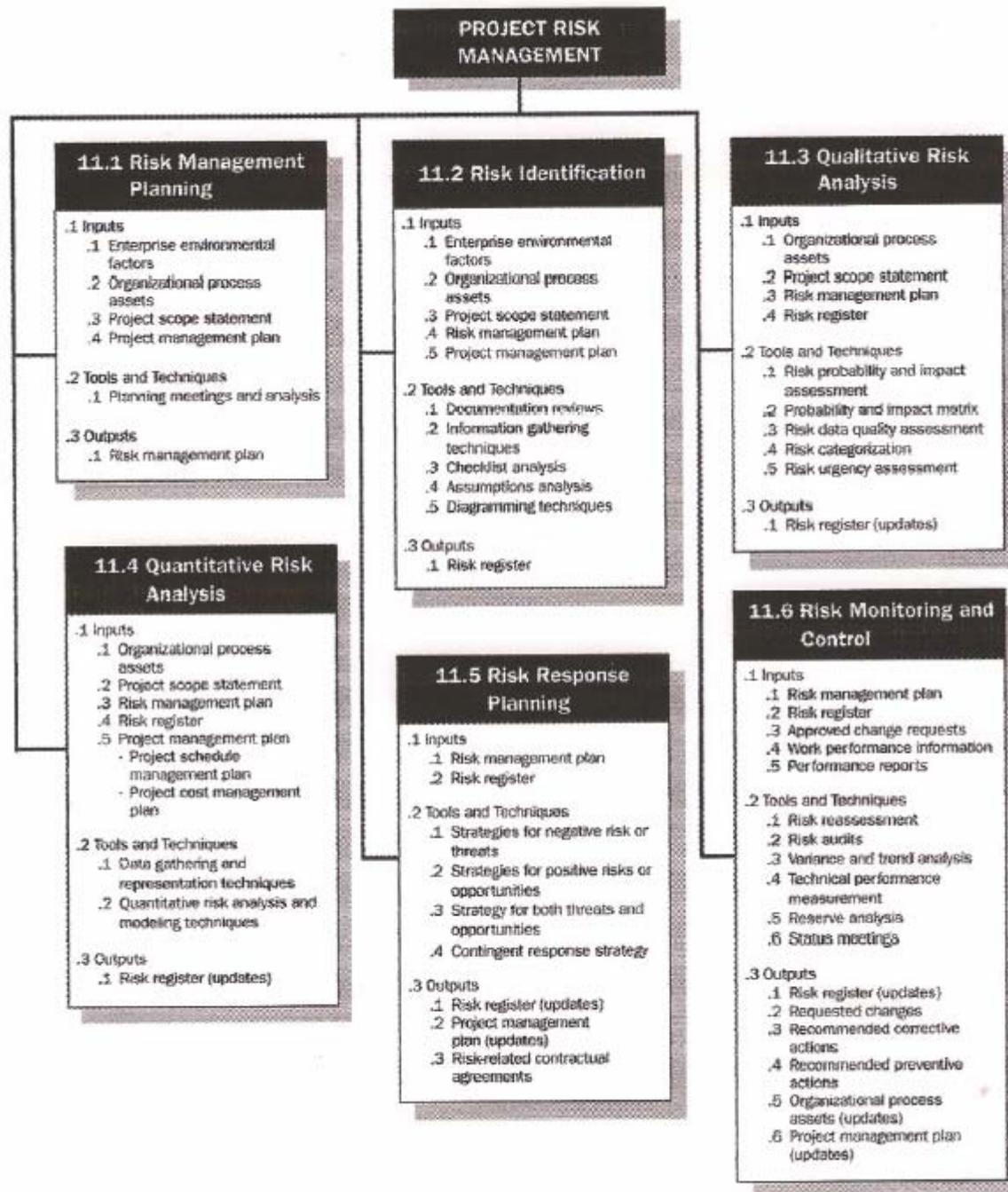


Figure 11-1. Project Risk Management Overview

PMBOK Presentation Format

Processes in the PMBOK are explained in a specific format. The format includes:

- Input: The requirement necessary for performing the process.
- Tools & Techniques: The method (s) that can be utilized to perform the process.
- Output: The results obtained from performing the process.