

- Safety Moment



- Introduction

- MEMAEDU – [www.memaedu.com](http://www.memaedu.com)

- Key Role of Risk Management in Project Management

# key role of risk management in project management

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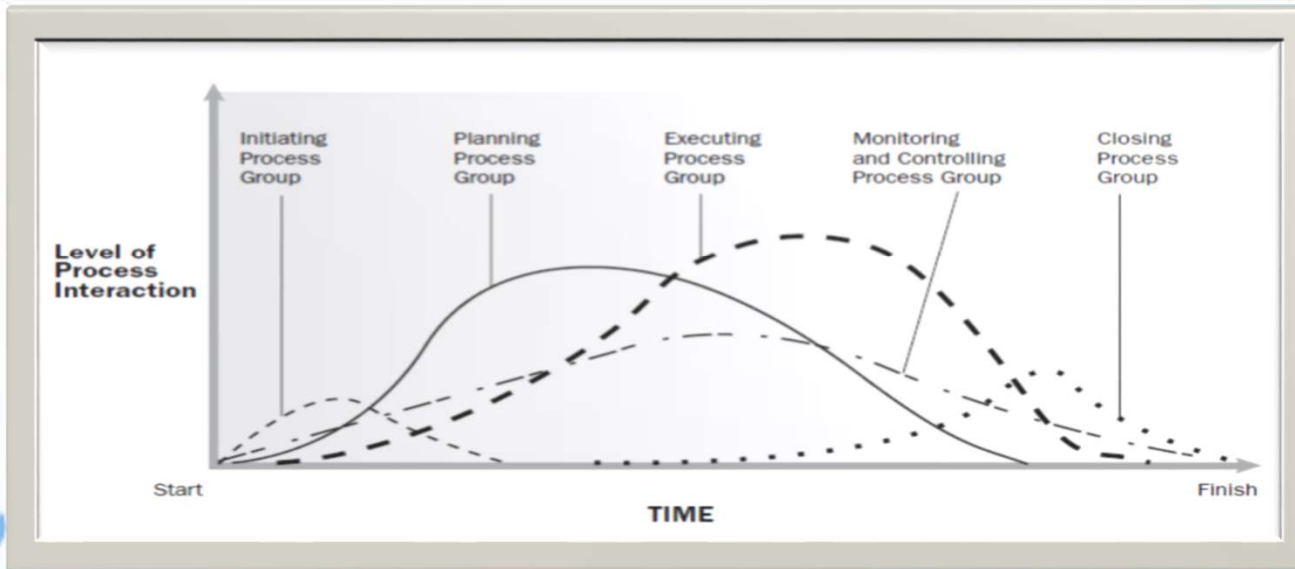
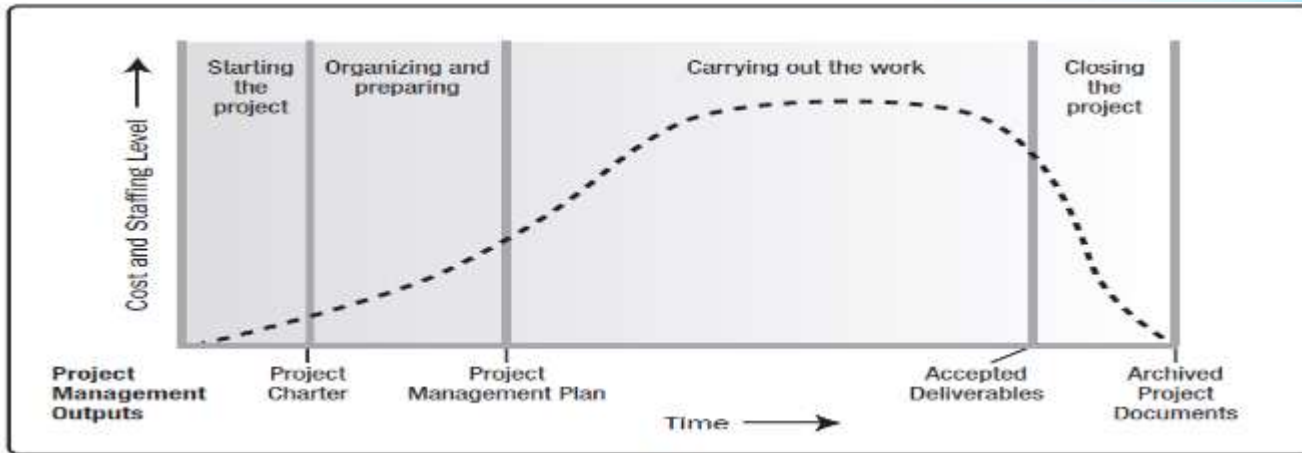
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# What is Project Management?

- A project is a **temporary endeavor**
  - The temporary means that project has a definite beginning and end
  - The end is reached when the project's objectives have been achieved or when the project is terminated because its objectives will not or cannot be met, or when the need for the project no longer exists
  - A project may also be terminated if the client wishes to terminate the project
  - Every project creates a **unique** product, service, or result
- Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.
- A process is a series of actions directed toward a particular result, Project management can be viewed as a number of interlinked processes
- Project management is accomplished through five Process Groups:
  - Initiating
  - Planning
  - Executing
  - Monitoring and Controlling
  - Closing



## Mapping the Process Groups to the Knowledge Areas

- Integration Management
- Scope
- Time
- Cost
- Quality
- **Risk Management**
- Human Resources Management
- Procurement
- Communication Management
- Stake holder Management

# Project Risk Management

- Project risk is defined by PMI as, "an uncertain event or condition that, if it occurs, has a positive or negative effect on a project's objectives."
- Threat and opportunities
- Positive Risk
- Includes the processes of conducting risk management planning, identification, analysis, response planning, and controlling risk on a project.
- To increase the likelihood and impact of positive events, and decrease the likelihood and impact of negative events in the project



# Project Risk Management

- Plan **Risk Management**.
- Identify **Risks**.
- Perform Qualitative **Risk** Analysis.
- Perform Quantitative **Risk** Analysis.
- Plan **Risk** Responses.
- Implement **Risk** Responses.
- Monitor **Risks**.

# Plan Risk Management

- A **risk management plan** is a document
- Project **manager** prepares to foresee **risks**, estimate impacts, and define responses to **risks**.
- Updated with discussion with project team and all stakeholders
- **Risk management plans** should be periodically reviewed by the project team
- Includes risk strategy, methodology, roles and responsibilities, categories, tracking, secondary risk identification etc
- Risk appetite and threshold



# Identify Risks

- Identification and speculation of all direct & indirect risk
- Other project management plan like scope baseline, stakeholder register, Cost management plan etc. is input to this process
- Risk register is created
- Risk owners are defined
- Root causes are defined
- Various process-Brainstorming, interviewing etc

# Identify Risks

- Primary and secondary risks
- Risk report is generated
- Some examples-
  - Hardware may arrive 3 days early, allowing work package XYZ to start three days early
  - If Hardware will arrive 15 days late, we might have to extend lease
  - Our designer may go for long unplanned leave

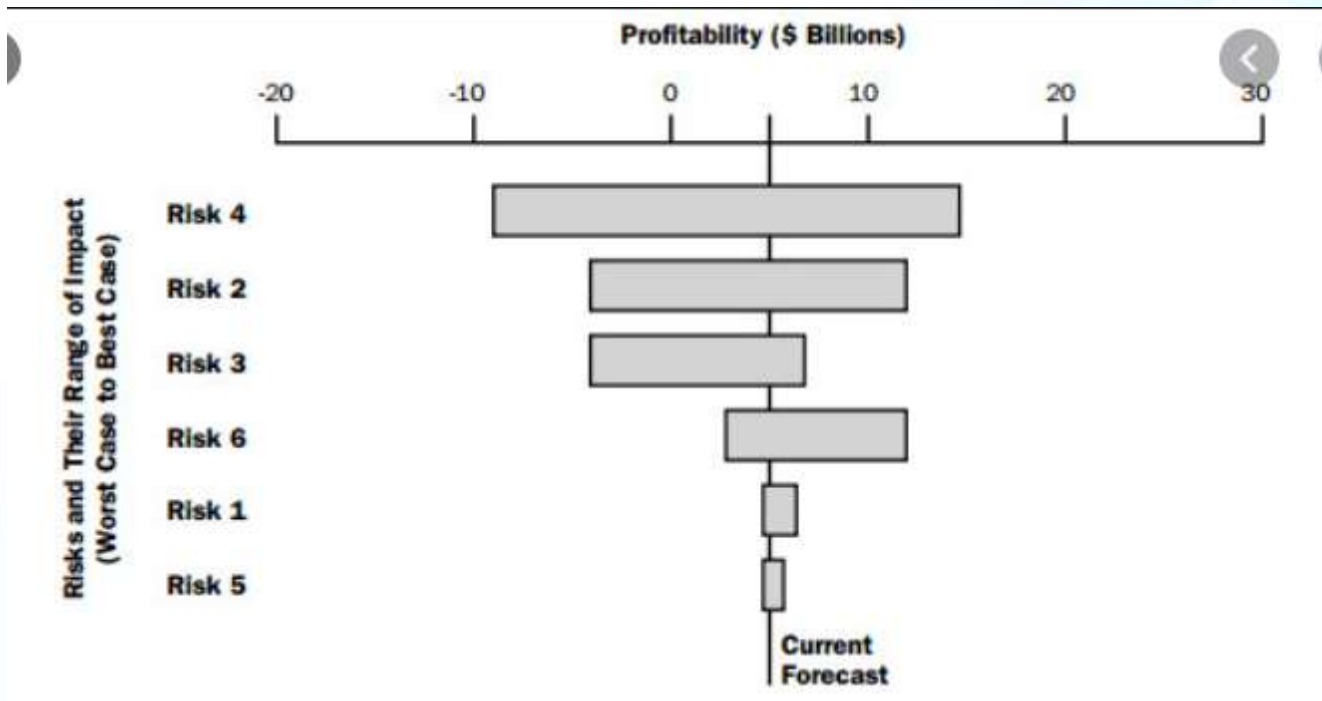
# Perform Qualitative Risk Analysis

- Risk categories and source of risks – Risk breakdown structure (RBS)
- Probability of occurrence and impact
- Scaling for probability (1-10)
- Scaling for impact (1-10)
- Risk parameter assessment
  - Urgency
  - Dormancy
  - Manageability
  - Strategic impact
- Update in risk register, assumption logs, watch list etc

# Perform Quantitative Risk Analysis

- Used for important and high budget projects
- Numerically analyze probability and impact
- Ways:
  - Simulations
  - Sensitive analysis (Tornado analysis)
  - Decision tree analysis
  - Risk register updates
- Provides clear initial contingency needed and cost reserves
- Provides list of quantified individual project risks

# Sensitive analysis example



# Plan Risk Responses

Action plan for positive and negative risks or unknown

For Negative risk-

- Avoid
- Change way of work or remove scope
- Mitigate
- Reduce probability and impact
- Transfer
- Assign work to other-procurement



# Plan Risk Responses

## ➤ For Negative risk -

- Exploit
- Enhance
- Share

## ➤ Response strategy for both threat and opportunities-

- Escalate
- Accept

# Implement Risk Responses

- Happens in execution process group
- On execution of risk (known or unknown)
- Implement response as per plan by risk owner
- Update risk register

# Monitor Risks

- Happens in Monitor and control process group
- Continuous monitor to check positive or negative risk
- Each risk owner monitors allocated risk or unknowns
- Use contingency reserve and adjust for approved changes
- Submit change request
- Workarounds
- Risk reassessments

- Overview of Risk Management
- Risk Assessment Template

Thank you!  
any questions?