

Risk Qualitative Analysis

Qualitative Risk Rating and Prioritization

Developing a Risk Categorization Scheme

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Risk Qualitative Analysis

Summary

- In this lesson unit, we will explore:
 - Analyzing risk data
 - Categorizing and prioritizing risks

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Risk Qualitative Analysis

Identified Risks (Input)

- Most critical input is the Risk Register
 - List of identified risks.
- Risk identification process is iterative
 - Identifying new risks as part of the Qualitative Risk Analysis process.
- At all times, build upon your risk list!

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Risk Qualitative Analysis

Identified Risks (Input)

- Resist starting subsequent processes too early
- Decide which threats are unacceptable
- Decide how to manage them!
- Probability and Impact Definitions
 - Guidelines in qualifying our threats and opportunities

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Risk Qualitative Analysis

Rating Scheme Development

- Investment of time and experience required by the organization in order to do a “good job” in developing an organization’s rating scheme.
- Inputs include lessons learned and an understanding of organization’s risk tolerances
- Focus in on strategic objectives for the organization when developing impact scales
- Review rating scheme with project stakeholders as a means of understanding risk analysis work


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Risk Qualitative Analysis

Risk Rating Scheme Cost Impact Values

- High
 - More than 25% of total contingency budget
- Medium
 - 5% to 25% of total contingency budget
- Low
 - Less than 5% of the total contingency budget



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Risk Qualitative Analysis

Risk Rating Scheme Schedule Impact Values

- **High**
 - Would delay one of more tasks on the critical path
- **Medium**
 - Would delay tasks within total float time of project
- **Low**
 - Would delay tasks within their available free float of the task

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Risk Qualitative Analysis

Risk Rating Scheme Requirements/Quality Impact Values

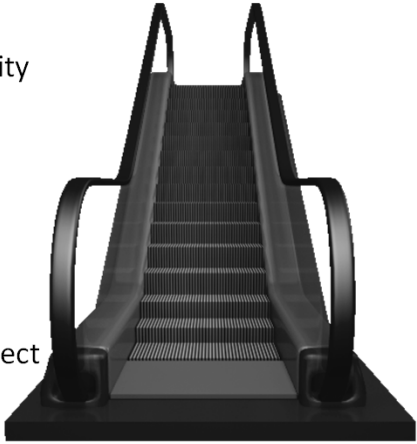
- **High**
 - Would cause deviation from the requirements or specifications
- **Medium**
 - Would cause deviation from the requirements or specifications, which would not be visible to the client or end user but would still constitute a clear deviation from specifications/requirements
- **Low**
 - Would modify the existing approach to requirements but would not constitute deviation from specifications/requirements

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Risk Qualitative Analysis

Risk Rating Scheme Political Impact Values

- High
 - Would prompt issue escalation to client/authority having jurisdiction
- Medium
 - Would prompt issue escalation to principal
- Low
 - Would prompt issue escalation to project architect



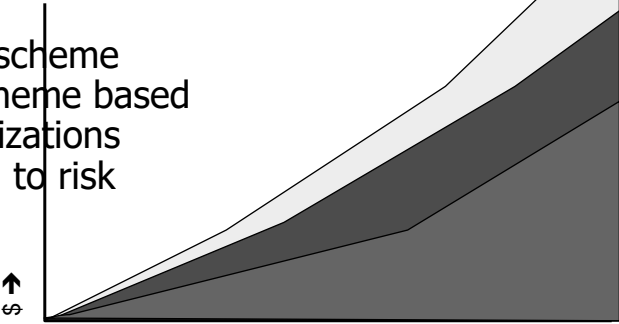
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Risk Qualitative Analysis

Rating Scheme Development

- Percentage of budget rather than absolute monetary value to establish risk impact definitions or risk thresholds
 - Portable between projects
- Develop scheme rating scheme based on organizations approach to risk



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Risk Qualitative Analysis

Rating Scheme Application

- Rating schemes application must be consistent across firm and design team when counting on qualitative risk assessment
- Rating schemes are required when communication risk analysis results

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Risk Qualitative Analysis

Rating Scheme Application – Team Approach

- Reducing the influence of a single individual on assessment
- Rating schemes are required when communication risk analysis results
 - Ensure there is a consensus of the definition of:
 - High, medium and low probability
 - High, medium and low impact.

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Risk Qualitative Analysis

Probability

- What is the likelihood that the bad or good thing will happen?
 - Judgment call based on experience
- Develop a scale of probability of “happening”:
 - Very high probability: > 30%
 - Medium probability: > 5% - <30%
 - Low probability: > 1% - < 5%
 - Very low probability: < 1%

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Risk Qualitative Analysis

Qualitative Risk Assessment

Probability of Happening	Impact	Magnitude of the Risk
High Medium Low	Very bad Bad Not so bad	Biggest Big Not so big

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Risk Qualitative Analysis

Risk Prioritization

- You will not have time to analyze and plan for all risks!
 - Solution? prioritize risks
- When to prioritize? Wait until analysis is complete for all risks

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Risk Qualitative Analysis

Risk Prioritization

Probability increases ↑	Very High			1		
	High			3		
	Medium			6		4,5
	Low				2	
	Very Low					
		Very Low	Low	Medium	High	Very High
	Severity of Impact increases →					

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Prioritization Considerations

Risks are rated in the qualitative process in order to:

1. Identify risks in some type of prioritized order
2. Determine which risks require more analysis.

How to determine risk rating?

- Examine a risk's probability and the risk's impact.
- Consider which value is the most accurate (often impact is)
- Also consider the timing of the potential risk occurrence.

Qualitative Risk Analysis Output

Risk Register (Updates)

- Relative ranking of project risks
- Risks requiring additional analysis or responses
- Watch lists of low priority risks

Risk Qualitative Analysis

Risk Register

Risk Event		Probability	Impact	Trigger
Description	Root cause(s)			
1	Entrance system developed during feasibility study is not compliant with OBC Entrance is not directly visible from reception desk	Moderate	Moderate	Conflict identified at pre-design assessment
	Result: Changes to design may require expansion, however slight, of building envelope beyond existing parapet wall or decreasing functional space in entrance and waiting area.			

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