

# PMI PMBOK Risk Methodology

VA Forum for Excellence

September 17, 2013

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# PMI PMBOK Risk Methodology

- “Project risk is an uncertain event or condition that, if it occurs has a positive or negative impact on one or more project objectives such as scope, schedule, cost, and quality.” *PMBOK, 5th edition, 2013*

# PMI PMBOK Risk Methodology

- Project Management Institute (PMI) Project Management Body of Knowledge (PMBOK) is a validated generally accepted practice with five cycles of improvement
- Best practice in Baldrige world

# PMI PMBOK Risk Methodology

- Start With Risk Management Plan
  - Plan the work, work the plan
- Risk Management Plan – How Risks are Managed
- Defines items such as:
  - Methodology
  - Participants
  - Formats
  - Reviews
  - Etc.

# PMI PMBOK Risk Methodology

- Risk Management Process Steps:
  - Identify Risks
  - Qualitative Risk Analysis
  - Quantitative Risk Analysis
  - Plan Risk Responses
  - Control Risks

# PMI PMBOK Risk Methodology

- Identify Risks
  - Use prior documentation such as charter; budgets; schedules; plans; etc.
  - Have right people involved who know risks, have risk owner
  - Use methods such as brainstorming; interviews; Delphi technique; root cause analysis
  - Document (risk register)

# PMI PMBOK Risk Methodology

- *What were some of the risks of driving to the Forum?*

# PMI PMBOK Risk Methodology

- Qualitative risk analysis
  - Analyze Probability and impact
  - Calculate and rank risk score



# PMI PMBOK Risk Methodology

- Qualitative Risk Analysis (continued)
  - Probability of risk occurring
  - Probability of .9 or higher treated as certainty – not a risk

	.9	↑	5	
Probability	.5		3	Probability Score
	.1		1	

# PMI PMBOK Risk Methodology

- Qualitative Risk Analysis (continued)
  - *What are the probabilities of the risks of driving to the Forum?*

# PMI PMBOK Risk Methodology

- Qualitative Risk Analysis (continued)
  - Impact of risk occurring
    - Areas such as cost; schedule; performance; etc



# PMI PMBOK Risk Methodology

- Qualitative Risk Analysis (continued)
  - *What are the impacts of the risks of driving to the Forum?*

# PMI PMBOK Risk Methodology

- Qualitative Risk Analysis (continued)
  - Risk Score
    - = Probability Score X Impact Score
    - Shows importance of risks
    - Rank by score to show most to least important

# PMI PMBOK Risk Methodology

- Qualitative Risk Analysis (continued)
  - *What are the risk scores of the risks of driving to the Forum?*

# PMI PMBOK Risk Methodology

- Quantitative Risk Analysis
  - Used for important risks which can be quantified (limited or no number of risks)
  - Quantitative models (not covered here)
    - Sensitivity analysis
    - Monte Carlo analysis
    - Expected monetary value
  - Think computers
    - Often spreadsheet and tool such as Crystal Ball or Risk Watch (1000s of runs)

# PMI PMBOK Risk Methodology

- Risk Response Planning
  - Strategies
    - Avoid – don't do risky action
    - Transfer – somebody else
      - Insurance
      - Contracts
    - Mitigate – make changes to reduce probability
    - Accept – let it happen
      - Contingency reserve (cost; schedule; performance; etc.)



# PMI PMBOK Risk Methodology

- Risk Response Planning (continued)
  - *What risk response strategies can be used for the risks of driving to the Forum?*

# PMI PMBOK Risk Methodology

- Control Risks
  - Reassess new and existing risks
  - Audits
  - Variance and trend Analysis
  - Reserve analysis
- Keep your eye on the risks!

