Qualitative Risk Analysis Is Not Enough
Objectives

- Complete a quantitative risk analysis of an example schedule
  - Conduct a Quantitative Risk Analysis Session with attendees as the Subject Matter Experts (SMEs)
  - Input Identified Risks into Risk Analysis Tool
  - Run Monte Carlo Analysis (Risk Analysis Tool)
  - Review/Discuss results & implications of Analysis
Agenda

- Introduction
- Ground Rules
- Scenario
- Review PMI Risk Management
- Review Project Plan/Budget
- Quantitative Risk Analysis
- Input Risks
- Run Monte Carlo Analysis
- Review/Discuss Results
- Q&A
Introductions

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- Independent Contractor
  - Project Manager
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  - Sessional Instructor Haskayne School of Business
  - BSEN 719 Projects, External Issues

Simon Kerney-Beadle

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Ground rules

- We only have 1 hour
  - Keep an open mind, stay focused on the “broad brush” and not on specific details or multiple what-ifs
- The tool demonstrated in this presentation is one of many available
  - This presentation is not an endorsement of the tool, it is just faster to use an off the shelf product than build something during the presentation
  - We are happy to share the details of the tool, but please recognize that this presentation is about the technique of quantitative risk management, not the tool used.
Focus of this presentation

Project Risk Management

11.1 Plan Risk Management
11.2 Identify Risks
11.3 Perform Qualitative Risk Analysis
11.4 Perform Quantitative Risk Analysis
11.5 Plan Risk Response
11.6 Control Risks
The scenario

- We have a Project Plan/Budget for Building a Garage Gate House
- See handout for a copy of the schedule
- Objective – to complete a quantitative risk analysis of the plan
- This is a Quantitative Risk Session with various Subject Matter Experts to capture risks on the supplied risk register.
The schedule
Risk capture and definition

- Break-out in SME Groups (5 Tables of 10)
  - Electricians
  - Carpenters
  - Construction Labour
  - Supply Chain
  - Human Resources

- Each group must identify and discuss risks
  - 3 Point Estimates
  - Discreet Risk Events
    - Identify Probability of occurrence
    - Identify Impact if occurs
Subject matter experts

- Electricians
  - Wiring
  - Switches/Outlets
  - Lighting
  - Security
- Carpenters
  - Framing
  - Roofing
  - Windows/Doors
  - Siding
- Construction Labour
  - Foundation
  - Cement Finishing
- Supply Chain
  - Purchasing
  - Vendor/Contract Management
- Human Resources
  - Sourcing Resources
  - Scheduling Resources
  - Skills/Competencies management
Our risk register

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Example 1 – analysis of uncertainty
Example 2 – analysis of uncertainty
Example 3 – analysis of uncertainty
Example 4 – example risks
Example 4 – example risks applied
Outcome of Monte Carlo simulation

- Review of outcome of simulation
- Effects
  - Planning
  - Risk Response
  - Budget
- Implications
- Next Steps