

Using Risk in Evaluating Alternatives

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Overview

- *Value Engineering weakness*
- *Benefits of Risk Assessments*
- *How does RA relate to VE*
- *In what context can Risk Assessment be used in evaluating alternatives*

VE is Awesome...

- Very powerful tool
- VE owns the evaluation of alternatives
- Strong evaluation process
- Better outcome

...but let's be honest

- Limitations
- What are we doing to the project?
- 3-5 days vs. 1-3 years!
- Risks?

A nice Risk Register

- As part of VE, develop a risk register
- Feed into functional analysis
- Apply to the performance
- Evaluate alternatives
- ...but then what?

Risk Workshops

- Big Wig of Risks
- Strong expertise
- Detailed
- Expensive
- What to do with it
- Value?

RW before VE

- Take preferred plan
- Determine risks
- Output:
 - Modeling
 - Range of costs
 - Range of times

RW before VE

- Very focused approach
- Uses risks as inputs to VE
- Minimize risks
- Evaluation
- Excellent specific outcome

...but what about this new and improved option?

RW before VE

- RW loses value the more changes we make to the preferred plan
- Should update the risks
- Do we need another workshop?

RW after VE

- VE focused on new alternatives
- Best value
- Lack of risk inputs
- Did we make the right changes?

RW after VE

- Risk Workshop focuses on the new modified preferred plan
- Very targeted on risks
- Continue working on minimizing risks
- What if the risks of the VE option are too high?

Costs from Risk

- Cost increase for a variety of risks for each alternative
- \$500M project
- Alternative 1: \$400-600M
- Alternative 2: \$100-900M
- What do those factors say about performance?

Costs from Risk

- Apply to VE
- Apply to project
- 80%ile
- Refine

Is there a right way?

- If risks are high for your preferred plan
- If risks are average for your preferred plan

What are we doing...and is it helping?

- Minimize potential cost increases
- Scope our next work

Thank You

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