



Increasing Your Win Rate with VE for Alternative Delivery

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Presentation Outline

- **Defining Value Engineering (VE)**
 - What is it
 - 6-Step Job Plan
- **Using VE to Build a More Successful Proposal**
 - It's a team approach
 - What to do within the VE Job Plan
- **Other Proposal Opportunities**



A vertical image on the left side of the slide shows a person's hand pointing at a set of architectural blueprints. The hand is positioned as if highlighting a specific detail on the drawing. The blueprints are filled with technical lines and text, though the details are somewhat blurred.

The Long and the Short of VE

- It is a formal process
- It is not about “cost cutting”
- It is a team approach



A vertical image on the left side of the slide shows a person's hand pointing at a blue-tinted architectural blueprint. The hand is in the foreground, and the blueprint is in the background, showing various lines and text.

Value Methodology

What Is It?

- **Value Methodology**

(Synonyms: value analysis, value engineering and value management)

- *. . . function-oriented, systematic, team approach to add customer value to a program, facility, system, or service. Improvements like performance, quality, initial and life cycle cost are paramount in the value methodology.*



Value Methodology

- **Why is Value Engineering Important to the Client?**
 - Reduced Capital Costs
 - Reduced Life Cycle Costs
 - Reduced Impact to the Environment
 - Reduced Impact to Operations
 - Helping the Client Understand Function/Worth
 - Determine Other Needs, i.e. LEED, Green-built
- **The Key is Adding Value for the Client!**



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Value Methodology

● 6 STEP JOB PLAN

- Information Phase
- Function Analysis
- Creative Phase
- Evaluation Phase
- Development Phase
- Presentation/Implementation





It's All About the VE Team!

**Typically 7-9 Cross Functional,
Experienced Team Members**

- Roadway
- Construction
- Environmental
- Landscape
- Cost Estimating
- Maintenance
- Civil
- MEP
- Structures
- Drainage

Quality Team = Quality Results





It's All About the VE Team!

- Use those you are proposing for the project
- Add others with expertise as needed
- Bring on an expert to help with some technical aspects (workshop only)
 - i.e. Rail expert, Tunnel expert, LEED expert
- Team members need to be willing to be creative – break out of tradition



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A Formal Workshop is Best

- Schedule some quality time to work together as a team (It is a team approach)
 - Should be at least 1 day, may take you 2 depending on the complexity of the project
- Have someone facilitate the various steps of the job plan, a certified individual is best
- Force the team to go through each step in the job plan
- Take advantage of the expertise in the room



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Information Phase

- Understand the scope of the project
 - Pre-work should have already been done
 - Site visit, stakeholder discussions, etc.
- Identify project specific risks
- Evaluate Cost Information
- Identify the owner's performance attributes
 - What is important to the client (project specific)
 - Maintenance of Traffic
 - Environmental
 - Constructability
 - Schedule
 - Maintainability
 - Durability



Performance Attributes

- Determine the importance of the attributes
 - Compared Comparison Evaluation
- Will aid in the selection of ideas that meet the customer's needs/wants
- To be written up and added to your proposal



PERFORMANCE CRITERIA MATRIX

Project Name



RH & Associates, Inc.

													TOTAL	%
LEED		A	a	a	d	e							2.0	18%
Schedule			B	c	d	e							0.0	0%
Maintainability				C	c	c/e							3.5	32%
Constructability					D	2							3.0	27%
Durability						E							2.5	23%
							F							0%
								G						0%
									H					0%
										I				0%
a	More Important										J			0%
a/b	Equal Importance										K			0%
													11.0	100%

A vertical image on the left side of the slide shows a person's hand pointing to a blueprint or technical drawing. The drawing contains various lines, circles, and text, though it is somewhat faded and difficult to read. The hand is positioned as if highlighting a specific area of the drawing.

Function Analysis Phase

- Functions better define the scope
- Expressed in two simple words
 - Active Verb and Measurable Noun
- Analyze the scope of work and define the functions
 - Manage Traffic
 - Mitigate Environment
 - Reduce Noise
 - Accommodate Staff
 - Treat Water
- Assign Cost to Function





Creativity Phase

- Brainstorm potential ideas by ALL Functions
 - Not just your initial ideas on a couple of things
 - Start with the largest dollar impact
- Brainstorm ideas for mitigating risks identified during the Information Phase
- Focus on quantity of ideas not quality
- Think “outside of the box” – innovation and opportunities
- No evaluation of ideas, everything goes





Evaluation Phase

- If there are numerous ideas, use the GFI to short list ideas
 - “Gut Feel Index”
- Use the Performance Attributes, evaluate all ideas
- Select the best possible ideas for further discussion/development (proposal write-ups)
- Focus on cost and schedule impacts separately
 - Still very important, especially to the client



A vertical photograph on the left side of the slide shows a person's hand pointing with their index finger at a set of architectural blueprints. The blueprints are spread out on a surface, and the hand is positioned as if explaining or highlighting a specific detail.

Development Phase

- Develop selected ideas further, understand fully
 - Develop costs
 - Identify schedule impacts
 - Identify special design needs/impacts
 - Identify how these meet performance attributes





Implementation Phase

- Select the ideas to be included in the proposal
- Further develop the idea for the proposal
 - Existing approach
 - New approach
 - Benefits and challenges
 - Implementation considerations
- Provide any design elements required
- Develop more detailed costs for the proposal



Other Proposal Opportunities

- Discuss the process used by the D/B team to develop the proposal outcomes (Show how you used VE)
- Suggest the use of a formal VE session with the client once selected
 - D/B may require a much different approach, as this is not traditional – but now supported by DBIA
 - CMAR perfect opportunity to have a formal VE session that brings together all parties



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Module I Training Opportunity

- **June 2-6, 2011 – SAVE International Annual Conference – Portland, Oregon**
 - www.value-eng.org to register
 - 40-Hour Certification Course
 - AVS Exam Offered
 - 40 PMI Credits & PDH's Offered
- **July 18-22, 2011 – RH & Associates – Seattle, Washington**
 - rhpartnering@earthlink.net to register (see flyer)
 - 40-Hour Certification Course
 - AVS Exam Offered
 - 40 PMI Credits & PDH's Offered





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Questions

