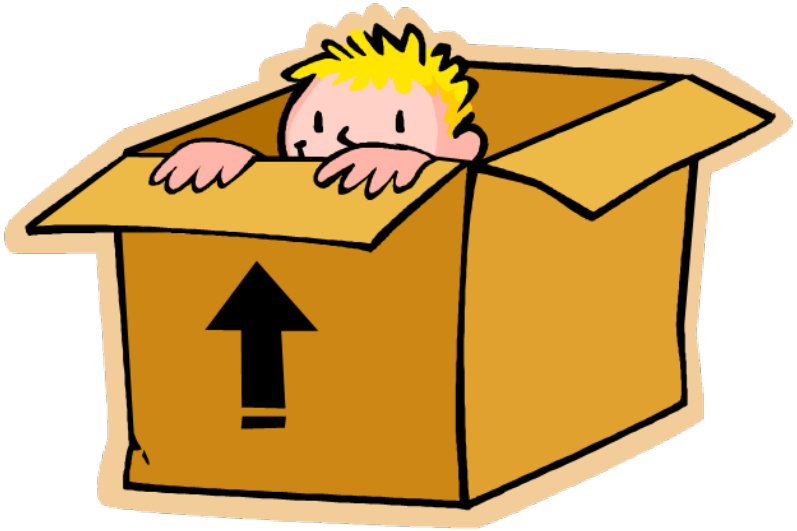
Getting the best value

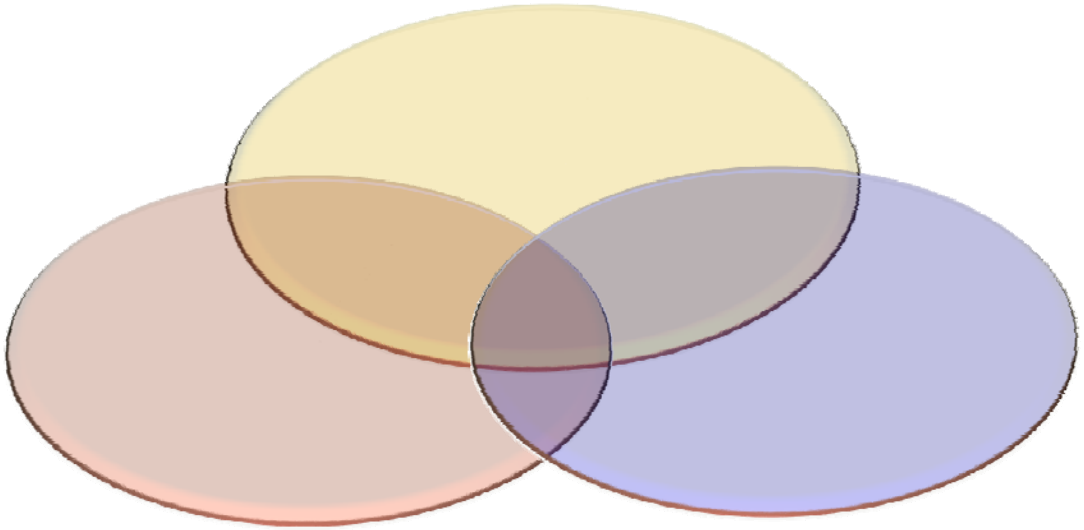
Introduction to the Value Methodology

The Value Methodology aka…

- Value engineering
- Value analysis
- Value management
- VECP/CRIP - construction
- “Thinking outside the box”



The Value Methodology



Optimizing function, performance, and costs for project, products, and processes

Markets

- Manufacturing
- Construction
- Civil works
- Process Improvement
- Healthcare
- Business

How does VM work?

- Structured, team approach
- Reducing complicated elements into basic functional components
- Creates opportunities to review alternative concepts to meet functional requirements

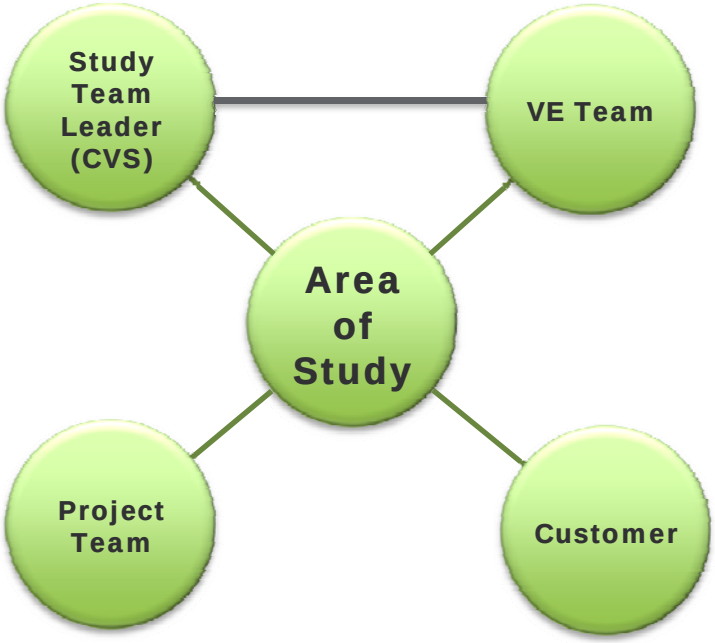
How does VM work?

- Relationships
  - Function
  - Resource allocation
  - Quality
  - Needs
  - Requirements

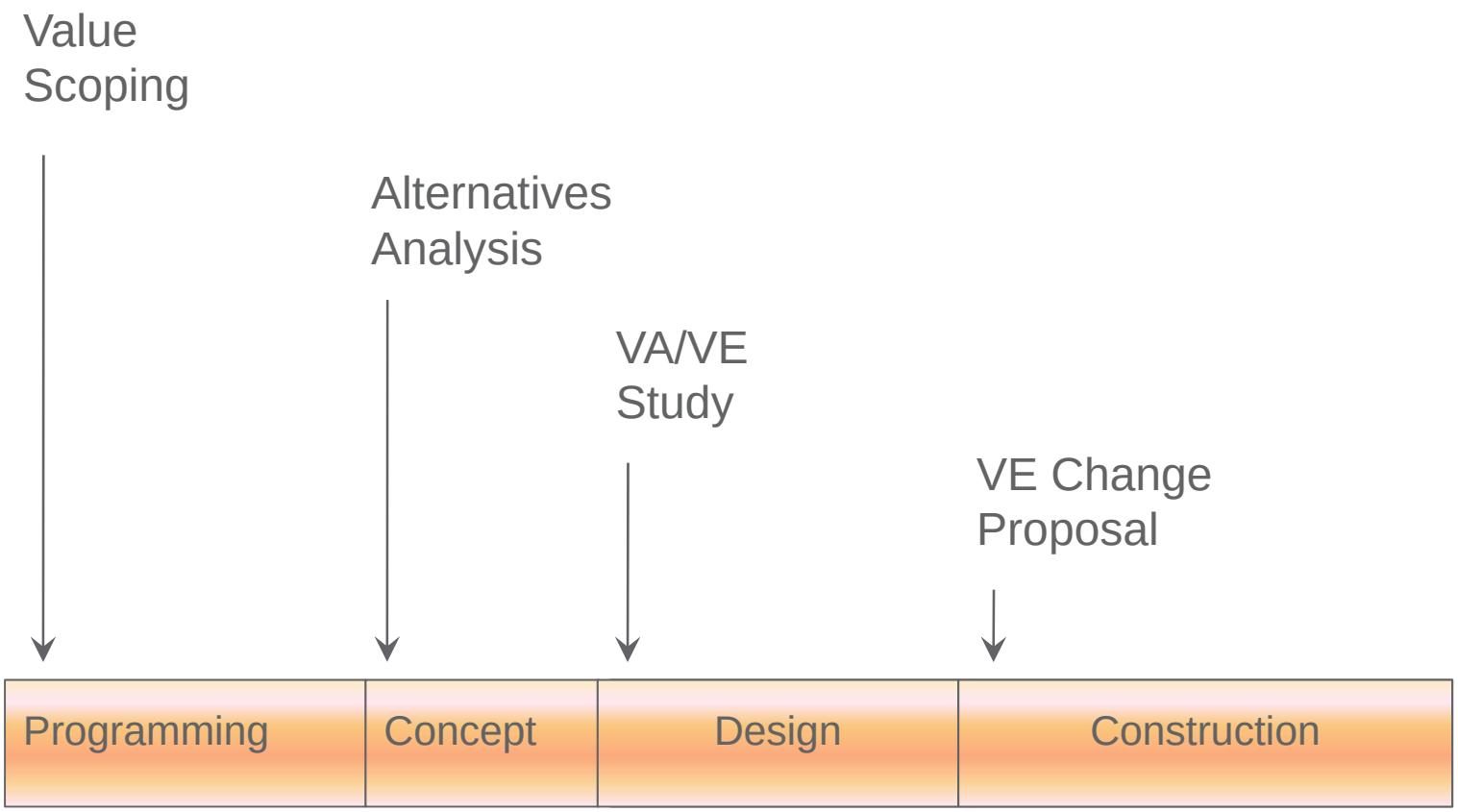
What differentiates VM?

- Focus on <u>function</u>
  - The primary or intended propose that a product, project or process is expected to perform - *What must it do?*
- Review and analysis of function to optimize performance - *How else can you accomplish that function?*

VM Team Structure



VM Timing Options



Benefits of value studies

- Identify or confirm program requirements
- Identify and confirm functional requirements
- Generate alternative solutions
- Identify process improvements
- Review and establish cost targets early
- Stakeholder buy-in on design and cost

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The VM Job Plan

1. Information
2. Function Analysis
3. Creative Idea / Brainstorming

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The VM Job Plan cont'd

4
- Evaluation

5
- Development

6
- Presentation / Implementation

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VM Results

- Process/Product/Project Improvement
  - Effective use of resources
  - Efficient use of resources
  - Reliable use of resources
  - Return on investment

Case Study - South Bend & Raymond

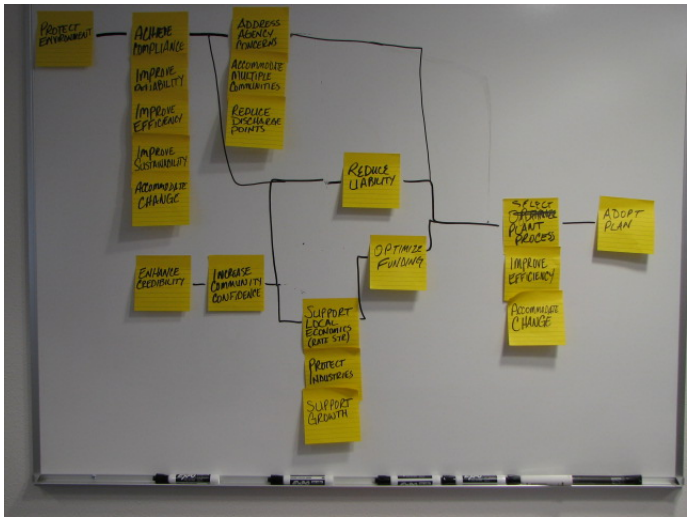
- Purpose
  - Review of the General Sewer Plan developed for the region
  - Questions to be addressed
    - Does the concept make practical sense for the region
    - Have issues with the Department of Ecology been adequately addressed?
    - Are the estimated costs adequately addressed?

Case Study - South Bend & Raymond

- Process
  - Met with stakeholders
    - Define objectives
    - Define success factors
    - Define schedules
  - Assembled multi-disciplinary team
    - Engineers, financial analyst, ecologist
    - Reviewed plan assumptions, analysis, conclusions
    - Reviewed funding options
    - Reviewed alternate solutions

Case Study - South Bend & Raymond

- Results
  - Identified political and technical issues to be addressed
  - Highlighted cost and financial/funding issues to be addressed



Case Study – Croton Falls Pump Station

- Purpose
  - Review of the schematic design for a new pump station
  - Questions to be addressed
    - Is the selected capacity of the pump station practical
    - Is the selected equipment appropriate for the functional need
    - Are the estimated costs adequately addressed?

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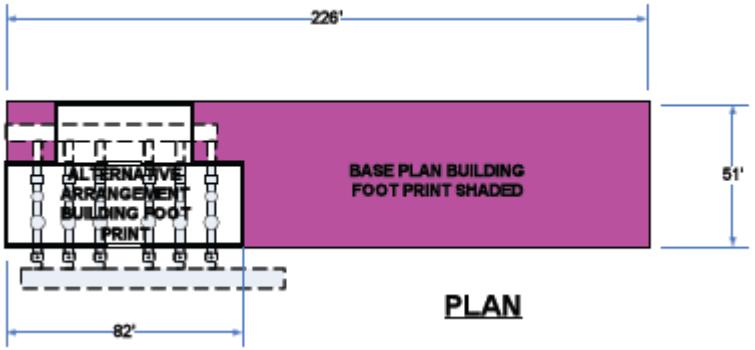
Case Study – Croton Falls Pump Station

- Results
  - Questioned design criteria
  - Offered an alternative approach to the project to optimize resource utilization
  - Provided recommendations for dealing with review and approval municipal entities



The Value Methodology

- Questions?

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