

VM Job Plan Purpose, Activities, and Results

Each of the phases of the SAVE International® Value Methodology Job Plan¹ is sequential, building on the knowledge gained from the analysis completed during its predecessor. While the time spent on the phases of the VM Job Plan may be scaled to fit the size and complexity of the project, completing all eight phases is vital for innovation and value improvement.

Conformance With Agency Standards

BCI VM studies conform to SAVE International® Value Standard² and the pre-2020 “Six-Phase VE Job Plan,” still in use by many federal, state, and municipal government agencies, which is reflected in Phases 2-7.

The SAVE eight-phase VM Job Plan is consistent with the Federal Highway Administration and Federal Transit Administration 2014 Final Rule definition of Value Engineering (VE) Analysis and the VE Job Plan³ and U.S. Army Corps of Engineers Value Standard six-step job plan.⁴

VM Phase, Purpose	Activities	Results
1. Preparation		
Determine VM Study Parameters and Objectives	<ul style="list-style-type: none"> ▪ Identify the subject ▪ Determine how value is defined ▪ Define VM study goals and objectives ▪ Organize effort: <ul style="list-style-type: none"> ▪ identify and recruit participants ▪ determine study durations ▪ coordinate logistics ▪ gather and organize information 	<ul style="list-style-type: none"> ▪ Fosters understanding of VM study priorities ▪ Defines expectations ▪ Organizes the VM study to use workshop time effectively ▪ Provides the VM study facilitator and VM team the latest, most relevant baseline data

¹ SAVE International® VM Guide® ©2020 SAVE International®, Eight-Phase VM Job Plan, pp. 18–20, available at <https://www.value-eng.org/store/viewproduct.aspx?ID=16552923>

² SAVE International® VM Guide® ©2020 SAVE International®, Value Standard Reference, p. 161, available at <https://www.value-eng.org/store/viewproduct.aspx?ID=16552923>

³ Federal Highway Administration Final Rule, Federal Register Vol. 79, No. 172, Rules and Regulations, September 5, 2014, 23 CFR Part 627, § 627.3 (e) Value Engineering (VE) Analysis and (f) VE Job Plan, PDF p. 5, available at <https://www.govinfo.gov/content/pkg/FR-2014-09-05/pdf/2014-21020.pdf>

⁴ U.S. Army Corps of Engineers Engineering Regulation No. 11-1-321, Value Methodology (Standard), 01 Jan 2011, p. 3; COVE #2015-02, USACE VE Workshop Standard and Evaluation Index, 07 May 2015, p. 2., available at [https://www.usace.army.mil/Portals/2/docs/Value%20Engineering/COVE_2015-02-USACE_VE_Standard%20\(no%20attachments%20for%20repub\).pdf](https://www.usace.army.mil/Portals/2/docs/Value%20Engineering/COVE_2015-02-USACE_VE_Standard%20(no%20attachments%20for%20repub).pdf)

VM Phase, Purpose	Activities	Results
2. Information		
Understand Subject Purpose, Scope, Goals, Objectives, and Challenges	<ul style="list-style-type: none"> ▪ Share information ▪ Analyze information: history/need, purpose, cost, time, risk, and quality ▪ Transform information: develop cost models, determine customer needs and value metrics ▪ Orient participants 	<ul style="list-style-type: none"> ▪ Informs VM team and participants with a thorough overview of the current design (baseline), aiding VM workshop productivity ▪ Develops a common understanding of the project from the customers', design consultants', and project team's perspective ▪ Establishes clear evaluation factors for performance, cost, schedule, and risk ▪ Identifies workshop focus areas
3. Function Analysis		
Expand Understanding, Identify Value Improvement Opportunities	<ul style="list-style-type: none"> ▪ Leverage understanding to define functions: identify, classify, and organize via FAST diagram ▪ Allocate resources to functions: performance, schedule, cost, and risk ▪ Prioritize functions for value improvement 	<ul style="list-style-type: none"> ▪ Enhances understanding and develops consensus regarding the subject scope and what its elements must do to satisfy customer needs ▪ Identifies value-mismatched functions—focusing the workshop on functions with the greatest opportunities for value improvement
4. Creativity		
Generate Ideas to Improve Value	<ul style="list-style-type: none"> ▪ Brainstorm a large number of alternative ways to perform the prioritized functions 	<ul style="list-style-type: none"> ▪ Conceptualizes an unfettered variety of approaches and methods to improve value
5. Evaluation		
Determine Which Ideas Offer the Most Value Improvement	<ul style="list-style-type: none"> ▪ Review evaluation factors, including performance, cost, schedule, and risk ▪ Revisit VM study objectives ▪ Discuss, clarify, and refine ideas ▪ Nominate and score ideas relative to evaluation criteria ▪ Prioritize ideas for development ▪ Meet with owners, designers, users, maintenance personnel, and/or other stakeholders to discuss the prioritized ideas; reprioritize as applicable 	<ul style="list-style-type: none"> ▪ Focuses VM team's effort to develop alternatives that <ul style="list-style-type: none"> ▪ have the highest potential for improvement to performance, cost, schedule, and risk ▪ best meet value study objectives

VM Phase, Purpose	Activities	Results
6. Development		
Facilitate Informed Decision-Making	<ul style="list-style-type: none"> ▪ Review VM proposal development guidelines ▪ Develop the best ideas into VM proposals that provide side-by-side analysis of the baseline compared to each proposed alternative relative to <ul style="list-style-type: none"> ▪ scope/technical features ▪ performance and cost ▪ benefits, risks, and challenges ▪ Provide a detailed discussion of the proposed alternative and what will be needed to implement it 	<ul style="list-style-type: none"> ▪ Produces informative, useful, and practical VM proposals that address the range of evaluation factors ▪ Aids decision-makers in identifying VM proposals that best meet the purpose and goals of the subject of the study
7. Presentation		
Promote VM Proposals	<ul style="list-style-type: none"> ▪ Present results of VM workshop to decision-makers <ul style="list-style-type: none"> ▪ Recount VM workshop activities ▪ Present key features and benefits of recommended VM proposals ▪ Issue list of all VM proposals and preliminary cost information ▪ Identify next steps for report development and VM proposal implementation decision-making ▪ Prepare and issue draft VM Study report 	<ul style="list-style-type: none"> ▪ Previews the VM proposals the VM team has determined provide the greatest value improvement ▪ Highlights the information to be included in the VM Study report ▪ Begins the transition from the VM Study toward informed decision-making ▪ Provides the draft report including the detailed information needed for decision-making
8. Implementation		
Realize Value Improvement	<ul style="list-style-type: none"> ▪ Review draft VM Study report ▪ Meet to develop consensus regarding which VM proposals should be accepted for implementation as-is, accepted with conditions or modifications, rejected, or are already being done ▪ Incorporate comments and issue final VM Study report ▪ Implement change ▪ Manage change ▪ Track change 	<ul style="list-style-type: none"> ▪ Determines which proposals best improve value, achieve project purpose, meet project needs, and can feasibly be implemented ▪ Moves the project forward ▪ Verifies whether the accepted VM proposals were implemented and how they may have been further modified to meet project needs