

The following definitions are an interim reference for use in examination study until the updated SAVE International Value Methodology Body of Knowledge (VMBOK) is released in 2019.

VM Term	SAVE International® Certification Board Definition
Baseline	<p>The current state of a project, product, or process that acts as the basis from which alternatives can be compared and measured against.</p> <p><i>Discussion: In project value studies, the baseline is typically a design that has progressed to the point in time of the study.</i></p>
Breakeven Period	<p>For a project, the amount of time in years required to recoup the cost of an additional investment in a higher initial cost (IC) alternative to a lower IC baseline via recurrent annual cost (RAC) savings.</p> <p><i>Discussion: It is expressed by the formula Breakeven Period (BP) = [IC of Baseline - IC of Alternative] ÷ [RAC of Baseline - RAC of Alternative].</i></p> <p><i>For products, see Breakeven Point. See also Simple Payback Period.</i></p>
Breakeven Point	<p>For a product, the cost level or production quantity at which revenue is equal to expenditure.</p> <p><i>Discussion: It is expressed by the following formula: Breakeven (BE) is when Revenue [R] – [Expense (E)] = 0, where E = [Fixed Cost (FC)] + [Variable Cost (VC)]. For competing products, the production quantity at which the sum of FC and VC for one alternative is equal to that of another alternative.</i></p> <p><i>For projects, see Breakeven Period.</i></p>
Certification, Certified Value Specialist®—Life (CVS®-Life)	<p>A designation of SAVE International® granted upon request prior to June 30, 2015, when a CVS® had been recertified three (3) times. The CVS®-Life designation may be used only by individuals who were granted their CVS-Life prior to June 30, 2015.</p>
Certification, Certified Value Specialist® (CVS®)	<p>A professional certification of SAVE International® that recognizes individuals who have demonstrated a level of knowledge of and competency in the application of the Value Methodology sufficient to lead value studies. “Certified Value Specialist®” and “CVS®” are registered trademarks of SAVE International®. The CVS® designation may be used only by individuals who have successfully completed the requirements of the CVS®, received their certification, and continue to maintain their CVS® certification. The requirements to achieve the CVS® designation can be found in the SAVE International® Certification Program Manual.</p>
Certification, Value Methodology Associate <sup>SM</sup> (VMA <sup>SM</sup> )	<p>A professional certification of SAVE International® that recognizes individuals who have demonstrated a fundamental level of knowledge of the Value Methodology sufficient to participate in a value study as a value team member. SAVE does <b>not</b> consider a VMA<sup>SM</sup> qualified to lead a value study. The VMA<sup>SM</sup> designation may be used only by individuals who have successfully met the requirements of the VMA<sup>SM</sup>, received their certificate, and continue to maintain their VMA<sup>SM</sup> certification. The requirements to achieve the VMA<sup>SM</sup> designation can be found in the SAVE International® Certification Program Manual.</p>

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Cost	<p>The expenditure of resources expressed as a monetary valuation of effort, material, time and utilities consumed, risks incurred, and opportunity forgone in production and/or delivery of a project, product, or process.</p> <p><i>Discussion: Cost is a specific measurement of resources.</i></p>
Cost, Disposal	<p>The expenditure required to discard a used, worn, obsolete, or non-operational component of a project, product, or process.</p> <p><i>Discussion: When such a component has a worth greater than the cost of disposal, it is said to have “salvage value.”</i></p>
Cost, Initial	<p>The initial expenditure of resources to develop, acquire, produce, or construct a project, product, or process.</p> <p><i>Discussion: This term is interchangeable with the term “Capital Cost.”</i></p>
Cost, Life-Cycle (LCC)	<p>The sum of initial cost, recurrent annual cost, single expenditures, and disposal cost or salvage value for a product or project over a specified period of time.</p> <p><i>Discussion: Costs are adjusted based on the time value of money to determine the total life-cycle cost.</i></p> <p><i>See Also Initial Cost, Recurrent Annual Cost, Single Expenditures, and Salvage Value.</i></p> <p><i>See also Present Worth Method and Present Worth Annuity (Annualized) Method, which are used in life-cycle cost analysis (LCCA) to calculate LCC.</i></p>
Cost, Recurrent Annual	<p>The expenditure of resources necessary for the operation and maintenance (O&amp;M) of a project, product, or processes, which occurs throughout each year of its service life.</p>
Cost, Single-Expenditure	<p>The future outlay of resources to replace a component of a project, product, or process, which occurs at a discrete time (or at discrete times) during its service life.</p>
Critical Function Logic Path	<p>The organization of higher-order, basic, required secondary, and lower-order functions aligned horizontally on a FAST diagram that reconciles the “How-Why” logic, forming a relationship between functions necessary to the performance of a project, product, or process.</p>
Discount Rate	<p>The nominal rate of increase in the value of money over time.</p> <p><i>Discussion: For public organizations, this includes the forecast of nominal or market interest rates set by the U.S. Federal Reserve for lending to other banks, which varies relative to the term of the loan and is based on economic assumptions often encountered in lease-purchase analysis. This discount rate can be found in the Office of Management and Budget (OMB) Circular A-94 Appendix C, which is updated annually. For private organizations, the discount rate includes additional considerations of risk and profit that result in higher discount rates. The discount rate is applied in LCCA by correlating the service life of the project, product, or process to the nominal interest rate associated with the loan term.</i></p>
Facilitator	<p>One who is substantively neutral and has no substantive decision-making authority, who enables a group to improve how it identifies and solves problems, makes decisions, and increases the group’s effectiveness.</p>

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	<p><i>Discussion: In the context of the Value Methodology, the term is used interchangeably with “Value Team Leader”—one who leads a group through the Value Methodology Job Plan, who is recognized by SAVE International® as a Certified Value Specialist® (CVS®).</i></p>
FAST Diagram	<p>A graphical representation of the dependent relationships of functions within a project, product, or process.</p> <p><i>Discussion: The components of a FAST diagram consist of the scope lines; the labeled “How,” “Why,” “When,” and “Subject Scope” arrows; the classified functions, including basic functions, required secondary functions, secondary functions, unwanted secondary functions, higher-order functions, lower-order functions, design objectives, one-time functions, and all-the-time functions; the critical function logic path lines connecting higher-order, basic, required secondary, and lower-order functions by their “how” and “why” relationships; and the vertical lines connecting secondary functions to required secondary functions by their “When” relationships.</i></p> <p><i>See also Function Analysis System Technique and Function Classifications.</i></p>
Function	<p>That which a project, product, or process must do to make it work and meet the customer's needs.</p> <p><i>Discussion: A function identifies “what it does” independent of “what it is,” or “how” it is to be accomplished. It is expressed in a two-word active verb and measurable noun structure. The verb answers the question, “What does it do?” and the noun answers the question, “What does it do it to?”</i></p>
Function Analysis	<p>A detailed examination of the elements of a project, product, or process to identify, classify, and organize its functions; allocate resources; and prioritize functions for value improvement.</p> <p><i>Discussion: The term “function analysis” should <b>not</b> to be confused with “functional analysis,” which is a mathematical technique, but is sometimes mistakenly used instead of “function analysis.”</i></p>
Function Analysis System Technique (FAST)	<p>Analysis of the dependent relationships of functions within a project, product, or process, which helps to identify and analyze functions to stimulate creativity and innovative thinking.</p> <p><i>Discussion: FAST was developed by Charles W. Bytheway.</i></p> <p><i>See also FAST Diagram.</i></p>
Function Classifications	<p>The overall categories of functions that are included on FAST diagrams, including Basic, Required Secondary, Secondary, Unwanted Secondary, Higher Order, Lower Order, Design Objective, One-Time, and All-the-Time.</p>
Function Cost (FC)	<p>The portion of directly related resources allocated to a function performed by a project, product, or process.</p> <p><i>Discussion: For example, the cost of a project or product component happens to be calculated based on weight. The resource related to the component that is allocated to various functions can be represented by either cost or weight. Whether the resource is represented by cost or weight, the proportional percentage of the cost or weight allocated to the various functions is the same. (A steel column weighs 350 lbs. at \$4 per lb., costing \$1,400. The resource allocation</i></p>

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	<p><i>shows 23% “supports occupants,” 34% “supports furniture,” and 43% “supports sculpture. Whether the resource is represented by cost or weight, 23% is allocated to “support occupants.” Therefore, the proportion of cost allocated to “support occupants” would be \$320 and proportion of weight allocated would be 80 lbs.).</i></p> <p><i>See also Resources and Value Index.</i></p>
Function Worth (FW)	<p>The lowest overall cost to perform a function without regard to criteria or code.</p> <p><i>Discussion: A measure of value received, resources expended, satisfaction derived, or perceived importance of something tangible or intangible. It may be expressed either in monetary or in non-price terms.</i></p> <p><i>See also Value Index.</i></p>
Function, All-the-Time	<p>A secondary function that happens continuously, anywhere in the performance of the project, product, or process.</p>
Function, Basic	<p>The specific purpose(s) for which a project, product, or process exists. It answers the question, “What must it do?”</p>
(Function), Design Objective	<p>A function that expresses specific compulsory requirements of the project, product, or process.</p> <p><i>Discussion: Similar and interchangeable with “subject objective” and “project objectives.”</i></p>
Function, Higher-Order	<p>The specific goal or need for which the basic function exists and is outside the scope of the subject under study.</p>
Function, Lower-Order	<p>The function that is selected to initiate the project, product, or process (an input) and is outside the scope of the subject under study.</p>
Function, One-Time	<p>A secondary function that occurs only once during the performance of the project, product, or process.</p>
Function, Required Secondary	<p>A function that is necessary in a project, product, or process to perform the basic function.</p> <p><i>Discussion: Required secondary functions fall on the Critical Function Logic Path within a FAST diagram.</i></p>
Function, Secondary	<p>A function that supports the basic function or required secondary functions and results from the specific design approach to achieve the basic function.</p>
Function, Unwanted	<p>A negative function caused by the method used to achieve the basic function, e.g., heat generated from lighting, which often must be cooled.</p>
Need	<p>A condition marked by the lack of something requisite, wanted, or deemed necessary.</p> <p><i>Discussion: Need is the problem statement. The fulfillment of the need is expressed in the result of a project, product, or process—in its Higher-Order function(s). See also Purpose.</i></p>
Pareto Principle	<p>The 80/20 rule developed by economist Vilfredo Pareto states, “roughly 80% of the effects come from 20% of the causes.” Applied to value studies during the Information Phase, the majority of the resources, roughly 80% of the project, product, or process resources, will be</p>

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	expended in 20% of its <i>components</i> . Applied to value workshops during the Function Analysis Phase, the majority of the resources, roughly 80% of the project, product, or process resources, will be expended in 20% of its <i>functions</i> .
Performance	The capacity of a project, product, or process to fulfill its intended function. <i>Discussion: Factors such as reliability, maintainability, quality, safety, and appearance contribute to performance.</i>
Performance Metrics	The weighted performance attributes or performance criteria that are used to quantitatively evaluate alternatives for the purpose of selecting those that best optimize the project, product, or process.
Present Worth (PW) Method	An economic technique used to express future cost in present-day values by applying the present worth (PW) factor to <i>single-expenditure costs and disposal cost</i> (or salvage value), which adjusts for inflation and interest on borrowed funds, <i>based on the year in which the expenditure occurs</i> . PW Factor < 1.0.
Present Worth Annuity (PWA); Annualized Method	An economic technique used to express future cost in present-day values by applying the present worth annuity (PWA) factor to <i>recurrent annual cost</i> , which adjusts for inflation and interest on borrowed funds, <i>based on service life</i> . PWA Factor > 1.0.
Price	An amount of money that will purchase a finite quantity or other measure of a good or service. <i>Discussion: As the consideration given in exchange for transfer of ownership, price forms the essential basis of commercial transactions. Examples include selling price, acquisition cost, and purchase price.</i>
Process	A sequence of activities that delivers a project, product, or an outcome.
Product	A good, service, idea, method, information, or object created as a result of a process or project, which serves a need or satisfies a want. <i>Discussion: In the context of the Value Methodology, a product is usually a manufactured item.</i>
Project	A set of interrelated tasks to be executed over a fixed period of time and within certain cost and other limitations. <i>Discussion: For the purpose of a value study, a project may be a facility, physical product, system, or process.</i>
Purpose	The essential functions that a project, product, or process must accomplish to achieve its required performance. <i>Discussion: Purpose is the solution statement and/or mission statement. The fulfillment of the purpose is expressed in the intent of the project, product, or process—in its Basic function(s), supported by its Required Secondary functions. See also Need.</i>
Resource	The cost, time, energy, area, volume, materials, labor, etc. required to accomplish a function.

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Resource Model	A representation, such as a spreadsheet, bar chart, pie chart, or diagram indicating resources such as cost, space, time, and energy; associated performance or risk; etc. allocated to each component of a project, product, or process.
Return on Investment (ROI)	<p>For projects, the benefit realized from an initial (capital) cost expenditure measured in the amount of cost savings or cost avoidance represented by recurrent annual, single expenditure, and disposal costs.</p> <p><i>Discussion: ROI may be expressed as <math>[savings] \div [capital\ expenditure]</math> or as <math>[income] \div [investment]</math>.</i></p>
Risk	<p>An uncertain event that could have a significant impact on the cost, schedule, or performance of a project, product, or process.</p> <p><i>Discussion: Risk can either be positive (opportunities) or negative (threats). A value study must consider the impact of risk on value.</i></p>
Salvage Value	<p>The estimated monetary or material worth of an asset at the end of its service life, useful life, or analysis period.</p> <p><i>Discussion: In the Life-Cycle Cost formula, if an asset still has material worth at the end of its service life, it has salvage value and is therefore a negative cost.</i></p>
SAVE International®	<p>The premier international professional society devoted to advancing and promoting the Value Methodology.</p> <p><i>Discussion: SAVE provides its members with education and training, publications, promotional tools, certification, networking, and recognition.</i></p>
Service Life	<p>The expected lifespan of a project, product, or process, during which it can be used economically.</p> <p><i>Discussion: The term “useful life” is typically used in accounting to calculate depreciation.</i></p>
Simple Payback Period	<p>The amount of time in years required to recoup the cost of an investment.</p> <p><i>Discussion: It is expressed by the following formula: <math>Simple\ Payback\ Period = [Investment] \div [Annual\ Return\ or\ Annual\ Savings]</math>.</i></p> <p><i>See Breakeven Period for comparing an alternative to the baseline for a project.</i></p>
Subject Scope	<p>The portion of the overall project, product, or process that is selected as the focus of the value study.</p> <p><i>Discussion: The analysis accepts everything within the defined scope in order to focus attention on the functions within those limits. In a FAST diagram, the subject scope is everything between the Higher-Order and Lower-Order functions.</i></p>
Value	<p>An expression of the relationship between function and resources where function is measured by the reliable performance of the functional requirements of the customer and resources are measured in the cost, time, energy, space, materials, labor, etc. required to accomplish the function.</p>

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	<p><i>Discussion: This relationship is expressed equivalently by the following equations: <math>Value \approx Function \div Cost</math>, <math>Value \approx Function \div Resources</math>, and <math>Value \approx Performance \div Resources</math>.</i></p> <p><i>See also Performance and Performance Metrics.</i></p>
Value Analysis (VA)	The application of the Value Methodology to an existing project, product, or process to achieve value improvement.
Value Engineering (VE)	<p>The application of the Value Methodology to a planned or conceptual project, product, or process to achieve value improvement.</p> <p><i>Discussion: VE is <b>not</b> the practice of professional engineering.</i></p>
Value Engineering Change Proposal (VECP)	A change submitted by a contractor, pursuant to a contract provision, for the purpose of reducing the contract price or life-cycle cost of the product under contract.
Value Enhancing Methods (VEMs)	Formal, repeatable, best practices that are properly documented by SAVE International® and utilized to improve the value of projects, products, or processes.
Value Index (VI)	<p>The monetary relationship of function cost (FC) to function worth (FW).</p> <p><i>Discussion: It is expressed by the following formula: <math>VI = FC \div FW</math>, where good value is <math>VI \leq 1.0</math>, e.g., <math>VI = 0.8</math>.</i></p>
Value Management	The application of the Value Methodology by an organization to achieve strategic value improvement.
Value Methodology (VM)	A systematic process used by a multidisciplinary team to improve the value of a project, product, or process through the analysis of functions and resources. The value methodology is applied during the three stages of a value study: 1. Pre-Workshop, 2. Workshop (using the six-phase VM Job Plan), and 3. Post-Workshop.
Value Methodology Core Competencies	<p>The minimum knowledge and skill set acquired through Value Methodology education and experience required to successfully apply the Value Methodology in the context of a value study. SAVE International® recognizes nine Core Competencies, including (1.) Value Methodology (2.) Transform Information, (3.) Team Facilitation, (4.) Function Analysis, (5.) Cost Analysis, (6.) Pre-Workshop Stage, (7.) Workshop Stage (Six-Phase VM Job Plan), (8.) Post-Workshop Stage, and (9.) Value Program.</p> <ul style="list-style-type: none"> <li>▪ A CVS® is recognized by SAVE International® to have demonstrated knowledge of all components contained within all nine Core Competencies, sufficient to lead value studies.</li> <li>▪ A VMA is recognized by SAVE International® to have demonstrated knowledge of (1.) Value Methodology, and knowledge of some components contained within (2.) Transform Information, (4.) Function Analysis, (5.) Cost Analysis, and (7.) Workshop Stage (Six-Phase VM Job Plan) sufficient to participate effectively in value studies.</li> </ul>
Value Methodology Fundamentals 1 (VMF 1)	The SAVE International® accredited course that covers the SAVE International® Core Competencies expected of a Value Methodology Associate (VMA), which must be completed in order to sit for the VMA exam.

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Value Methodology Fundamentals 2 (VMF 2)	The SAVE International® accredited course that covers the SAVE International® Core Competencies expected of a Certified Value Specialist® (CVS®), which must be completed, in addition to the Value Methodology Fundamentals 1 course, in order to sit for the CVS® exam.
Value Methodology Job Plan (VM Job Plan)	A sequential approach for conducting a value workshop used during the workshop stage of the Value Methodology, consisting of the following six sequential phases: (1.) Information, (2.) Function Analysis, (3.) Creative, (4.) Evaluation, (5.) Development, and (6.) Presentation.
Value Mismatch	A condition in which function cost is greater than function worth; when function cost does not match user or customer attitude for a given function. <i>See also Value Index (VI).</i>
Value Planning (VP)	The application of the Value Methodology at the earliest stages of the conceptual planning of a project, product, or process to validate business and economic decisions and achieve value improvement.
Value Proposal	A recommendation, resulting from the application of the VM Job Plan during a value workshop, to increase the value of a project, product, or process so as to improve function and/or decrease the resources required. <i>Discussion: It is a deliverable of the Development Phase of the VM Job Plan.</i>
Value Study	The application of the three stages of the Value Methodology [pre-workshop, workshop (using the six-phase VM Job Plan), and post-workshop] in a structured effort led by a CVS® to improve the value of a project, product, or process. <i>Discussion: The purpose of a value study is to achieve performance that meets the purpose and need of the project, product, or process at the lowest possible life-cycle cost.</i>
Value Workshop	The application of the six phases of the VM Job Plan [(1.) Information, (2.) Function Analysis, (3.) Creativity, (4.) Evaluation, (5.) Development, and (6.) Presentation] to a project, product, or process by a multidisciplinary team led or facilitated by a Certified Value Specialist® (CVS®).