

Value Analysis & Value Engineering
3-Day Workshop
CIE 2031

Value Analysis (VA) is a discipline for reducing cost. This comes from a simple fact of life: waste is present in almost any business. Creating improved value through lower costs and greater function is the cornerstone of value analysis.

Purpose of the Training

This program provides the skills and knowledge needed to increase value through systematic control of function and cost.

Who Should Attend

Anyone involved in the planning, design, or operation of a product, service, or manufacturing process.

Prerequisite

A background in engineering or a related technical field is recommended.

Course material

Handouts provided by the instructors.

Value Analysis Process Background

The Value Analysis (VA) Process provides businesses with tools to enhance profits.

VA develops the concept of value-management in your organization. This rests on the idea that the market determines the final sales price, while *costs* are largely dependent on design, supply, & production activities. In general, design requirements have a dominant effect on the final price that suppliers charge. Profits result from cooperation between buyer and seller, design and production--not just one-sided actions.

The requirements that generate the cost **do not** have to result in a win-lose situation. In most cases, suppliers see not only written requirements, such as drawings and specifications, but also see *many other requirements*. These include interpretation of the written materials, plus a substantial number of activities and tasks that are part of "our way" of doing things. Design engineers see these same items but have their own interpretation of what the specifications mean and what unwritten expectations are important.

Each element—both written and unwritten—should provide **value** to customers. Customers see this concept of *value* as a ratio of *function* to *cost*. They have little or no interest in the details. They only care about what they get in the final product and what they have to pay.

However, it's inevitable that many complicated activities creep into this system over time. Some of these practices provide value, but many do not. Creating function that has no value for customers merely adds cost, much of which may be unnecessary. What are some of the sources of these unnecessary costs? The list is long, but typical examples include:

- Using the first idea when a problem arises and then making the "quick fix" into a standard practice.

- Lack of information about what the end customer really wants, resulting in something that saves money at Process Step A, but costs twice as much to overcome at Process Step C.
- Honest wrong beliefs—ideas that were once correct, but are now out of date.
- Temporary and changing circumstances, such as a specification that was devised to overcome a once-serious problem—a problem whose root cause was subsequently eliminated by other activities—but the cost of the specification remains today.

Systematic examinations of such costs have been carried out in many businesses over the last twenty years. By most estimates, savings can be substantial. It is not unusual for a specific workshop to identify as much as 10-15% of the cost in a project can be reduced or eliminated.

In a *Three-Day Workshop*, details of implementation, and, in many cases, the first steps of implementation can be concluded. In a "best practices" scenario, this can (and really should) include a review of team-based findings with management—an important, even critical first-step in any action plan. In addition, any "missteps" in preparation (wrong team assignments, weak, incorrect, or non-existent background information) can be overcome, assuming that the workshop is physically close enough to the business so that different people or documents can be ferried back and forth. Again, proper pre-workshop preparation is essential. In this case, the deliverables include knowledge, analysis of the problem, and a full running start on corrective action. Depending on the problem, it may even include a significant degree of actual solution implementation.

CEU

Continuing Education Units (CEU's) will be awarded to each participant who completes the program. The CEU is a nationally recognized means of tracking non-credit continuing education development. It confirms participation in a structured professional development activity or course work.

One CEU is awarded for 10 hours of completed activity or course work. A permanent record of each attendee's participation is maintained in the Office of the Registrar at the University of Michigan-Dearborn.

Register

Phone: 313-593-0938 ask for corporate training
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URL: <http://www.engin.umd.umich.edu/EPD/seminars.php>
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Instructor

Michael A. Anleitner is President of Livonia Technical Services Company, a firm specializing in consulting for technology driven businesses.

Mike was co-founder, and for seven years, CEO of HydraMechanica Corporation, which produced wet multi-disc brakes, clutches, torque-limiting devices, friction materials, and other special friction products for a variety of applications.

He holds a B.A. degree in technical communications from Michigan Technological University, a B.S. degree in engineering from Wayne State University, and an M.B.A. degree from the



University of Michigan. In addition, Mike has been recognized as a Six Sigma Black Belt through his affiliation with the American Supplier Institute.

He has 30 years of diversified experience in manufacturing and engineering, and was Director of Engineering for a Tier I automotive supplier prior to founding HydraMechanica via a leveraged buyout. His experience includes positions at Ford Motor Company in both materials and design engineering.

Mike's international client experience includes Ford Motor Company, Pulte Home Corporation, John Deere, Dura Automotive, Motorola, Autoliv, Alps Automotive, Knoll Furniture, Faurecia Automotive, Daewoo Motor, General Motors, Robert Bosch, Alps Automotive, Jabil Circuit, Allied-Signal, MeadJohnson, United Technologies, Volkswagen, Siemens, North American Lighting, Kia Motors, Ingersoll-Rand, Johnson Controls, MerCruiser, ITT, Rolls-Royce Allison, Sikorsky Aircraft, CTS, Magna, Eaton, Hella Lighting, General Cable Corporation, the PAICE hybrid vehicle consortium, 3M, Lockheed-Martin, and many other organizations.