

# Larry Miles and Value Analysis: "Blast, Create, Then Refine"

*Lawrence D. Miles saved General Electric and the U.S. government millions of dollars, thanks to his value-oriented ideas. He pioneered the Value Analysis/Value Engineering<sup>1</sup> basics to improve manufacturing effectiveness 40 years ago, eventually touching the lives of followers around the world. So why don't we hear more about Miles and his concepts? Some bulldogs believe that manufacturing execs should stop reading the latest bestsellers on success and simply give VA a try.*

Lea Tonkin

**R**especting people and their ideas was Larry Miles' way. Refusing to be snagged on "the way we've always done it before" was another trademark. His influence remains powerful among Value Analysis (VA) practitioners. Yet this champion of function-oriented improvement may be more widely known overseas than in the United States.

Following is a sampling of Miles' teachings, Value Analysis/Value Engineering basics, and comment from VA practitioners who say that this creative approach packs a powerful wallop in improving manufacturing competitiveness.

## **Methods and Action: What it is, and Isn't**

Value Analysis (VA) is a system of techniques and methods for comparing total cost against desired function. It is also an *action* discipline. As envisioned and practiced by Larry Miles and others, it is directed to changes that benefit the company, its employees, relationships with customers and suppliers, and other "communities" served by an enterprise.

Value-oriented thinking sounds simple, which it is. It also sounds easy, which it is not. People who are overly impressed by complicated schematics and lengthy buzzwords tend to stumble on the VA basics. VA has been gunnysacked by some companies because it's viewed as a number-cruncher's cost-control-only scheme. For the rest of us open-minded types, Miles' step-by-step

process sounds much like a lot of JIT/TQC thinking:

- **Gather information.** What do we know about what the customer wants? What are the desirable characteristics? Don't be thrown off the track by "obvious facts."
- **Analyze functions.** Consider specific desired functions. What stands in the way of achieving them? Seek out cost/function information.
- **Encourage creativity.** Be a cheerleader for new ideas and possible solutions. Ask, "How might we do this a better way?" Don't wait for the perfect solution. As Miles would say, "Blast, create, then refine."
- **Select the best option and run with it.** When a solution has so many advantages that working out the bugs seems worthwhile, it's time for action.

## **"What Exactly Do We Want to Do?"**

Miles sometimes used unconventional means to share this VA gospel. A favorite way to open a seminar was whanging the daylight out of an alarm clock with a hammer. The clamor awoke the uninitiated and entertained the rest.

As his newly-alert audience pondered the scattered timepiece remains, Miles hammered home his point: Analyzing the function of a product, service, or process is the key to performance improvement. "What exactly do we want to do?" is the key question, he'd say. Functions of the clock-turned-

smithereens were listed: tell time, awake sleepers, please the customer (aesthetic function), etc.

Miles reasoned that once you know *exactly* what you want to do, and what things you are *actually* doing, then you can figure out whether there's a better way or whether you should be doing what you're doing in the first place. Too often, the desired functions of a product or process are fuzzy, Miles contended.

## **Managing Change**

"Value analysis is a way of approaching a problem. You investigate, create, and look for the best way possible. You're trying to change people's attitudes," says consultant Art Mudge, principal of Value Associates, Bethel Park, PA. Mudge recently retired from Joy Manufacturing, where he served as vice president of value planning for more than 20 years.

Mudge has a simple reply to people who pooh-pooh VA: Look at return on investment and savings as a percent of sales. At Joy, 24:1 ROI is recorded for every dollar invested in value-oriented efforts, and audited savings as a percent of sales are substantial.

Asked why VA doesn't have wider recognition, Mudge replies that success depends on top management's willingness to adopt this customer- and value-oriented approach. It takes a back seat when purchasing, industrial engineering, or another function becomes the



sole VA champion.

"Hitchhiking" multiplies VA effectiveness, Mudge says. Example: Because of VA teamwork, one Joy facility stopped packing standard tools (a couple of wrenches) with every piece of equipment shipped. The annual savings at this plant amounted to \$1325. After the practice was adopted at other Joy plants, savings reached more than \$575,000.

### **"You're Forcing People to Think"**

Like roller skating, VA takes practice. "You're forcing people to think, and that's one of the most difficult things to do," says VA consultant Richard J. Park, Birmingham,

MI. He likes another quote from Larry Miles: "Defining functions is so difficult and requires such powers of concentration that most people give up and go back to the same old ways."

Many people think of VA as a former fad, or a cost-driven approach, Park says. Actually using value-oriented thinking will show that it's much broader in scope, he says, citing success stories at Chrysler and other companies. "Value concepts take in all the fads, systems, and programs we've had in the last 30 years, and tie them together. They're reflected in the questions, 'How can we do our job better?' and, 'How do we meet customer de-

mands for quality and cost, for measurable result?'"

More information about VA/VE is available from the Society of American Value Engineers (SAVE), 600 South Federal Street, Suite 400, Chicago, IL 60605; 312/346-3265. The association offers a suggested VA reading list and a directory of VA/VE consultants.

<sup>1</sup>Function-based thinking (Value Analysis) applied in engineering applications is often called Value Engineering.

#### *Author:*

Lea Tonkin is managing editor of *Target*. It was her pleasure to report on Miles' activities many times late in his career. (Ed.)