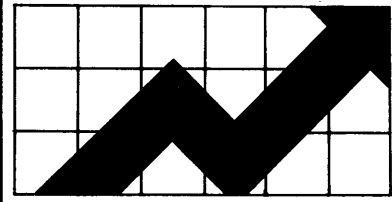


24-3



# NATIONAL PRODUCTIVITY REPORT

For Managers Concerned with Performance Improvement through: Human Resource Development; Cost Reduction; Managerial Effectiveness; Technology and Methods

1110 Greenwood Rd., Wheaton, IL 60187

Tel: 312/653-4424

Volume 13, Number 1  
January 15, 1984

## U.S. ENGINEER HONORED BY JAPAN

Three Japanese companies were the first to receive the newly created Miles Award for outstanding achievements in cost reduction through the application of value analysis. There were two awards: Company and Departmental. Companies and their departments singled out were Hitachi, Matsushita, and Fujita, a construction company. Awards were named in honor of Lawrence D. Miles, father of value analysis, who made the presentations in Japan, October, 1982. Sponsor of the award was the Society of Japanese Value Engineers.

Larry first developed and systematized value analysis in the 1940's while working for the General Electric Company. In 1972 he alerted the Japanese to the product enhancement and cost reduction possibilities of value analysis. Japanese management realized quickly that combining Deming's quality concepts with Miles' value analysis system gave them the techniques needed to achieve better quality, lower cost and assure product improvement.

Larry recalls that 800 Japanese managers attended his first value analysis seminar in 1972. He said, *"They grasped the significance of value analysis immediately and saw it as a means of reducing their manufacturing costs. Today it is widespread throughout Japan. Hitachi, for example, has 240 full time v.a. engineers who save the company millions each year."* Three departments in Hitachi were given the Miles Award, three in Fujita, and one in Matsushita.

To facilitate the acceptance of v.a. in Japan after Miles' first seminar the Society of Value Engineers was formed by Ichiro Ueno with the guiding philosophy *"...of increasing the value of products to the consumer, and streamlining the product to produce the desired function without waste."*

Congratulations to Larry Miles who takes his place beside Dr. W. Edwards Deming in being honored by the Japanese for his contribution to more efficient manufacturing. The recognition is well deserved.

\* \* \* \*

## MULTIGRAPHICS SCORES WITH VALUE ANALYSIS

*"I maintain that a company with financial difficulty cannot afford not to have an ongoing value analysis program. I know the value analysis concept is a sound one, and if practiced correctly can produce true cost savings,"* said Dieter Tannenber, president, Multigraphics Div., AM International. In the last few years AM International has had its share of financial difficulties,

but reported year-end profits of \$6.8 mil. against an \$82 mil. loss the previous year.

Although AM's three core divisions, of which Multigraphics is the largest, were on-going, viable businesses at the time, they nonetheless were affected by their parent company's difficult years. However, Multigraphics turned the profit corner during 1983, and is steadily improving. Multigraphics makes duplicators, offset printing equipment, copying systems, graphic arts presses, etc.

During 1982 Multigraphics examined its cost structure in terms of product and found that there had been no value analysis or value engineering for the past decade. As a result, product design was essentially stagnant. No new materials or design alternatives had been considered for most of the production parts or assemblies. *"One of the results was that manufacturing costs had continually increased to the point where it became difficult to maintain a competitive edge, especially with increased competition from foreign sources,"* Tannenberg said. *"To build quality into our products and extract costs, it was obvious that we needed to begin some type of value analysis/value engineering program."*

#### VA/VE Program Started

The value analysis effort at Multigraphics began in December, 1982, with the training of 57 employees in a four-day seminar. Members came from technical service, financial, manufacturing, engineering, purchasing and marketing. Note the diversity of functions among the original 57 employees. Everyone is involved, line, staff and senior management. No one sits on the sidelines. (This is reminiscent of Coachman Industries' experience where the chief financial officer attended a va/ve seminar and pushed the program through at Coachman. NPR, Number 8, 1982.)

After studying product functions participants in the seminar were asked to propose alternate, reliable design ideas to reduce manufacturing costs. During this initial seminar 96 cost reduction projects with a total of \$1.2 mil. in potential savings were identified. Savings of \$200,000 were quickly realized.

Twelve teams were formed to investigate the 96 projects. Priority was assigned to projects that could be implemented quickly with no extra cost, and that promised highest savings. Those requiring expensive tooling costs, or where substantial inventory was at hand, additional analysis was necessary.

As of December, 1983, the entire engineering staff has received training. their approach is to examine the functions of every component in a product, determine best way to build it in terms of materials, design, etc. Multigraphics' series of small offset presses was chosen first for analysis because of the sales volume and also because they contain many functions that are performed in an identical manner on different models. The vacuum system, one item chosen for study, had not basically changed in a decade. After analysis a change in the system resulted in a \$37.50 saving per model; in addition, it cut the cost of three other product lines by the same amount.

Multigraphics set definable goals, long-and short-range. One was to reduce the cost of one model by 20% by January 1984. That goal was reached.

By 1985 the intent is to reduce the cost by 30%, compared to 1983 costs. Other objectives were to redesign models to be more functional, easier to operate and maintain and to achieve highest quality. Commonality of parts is stressed to permit volume purchases. These objectives have been realized in newly introduced models.

Dieter Tannenbergr told us a few days ago -- January 1984 -- that savings to date, since December 1982, have reached \$600,000 and that \$3.0 mil, of additional savings have been identified. In purchasing they expect to realize further savings by extending the value analysis concept to current key vendors, and will seek to find alternate sources who practice value analysis in producing essential components. In addition to value analysis, Multigraphics has improved its production efficiency dramatically, maintained a constant 93% service parts availability, and achieved major quality improvements.

The company is ready to compete even with strong foreign competition. *"I know the value analysis concept is a sound one, and if practiced correctly, can produce true cost savings...it is becoming a way of life at Multigraphics, because our future depends on it,"* says Dieter Tannenbergr.

The original seminar in 1982 was led by "Dusty" Fowlkes, Value Analysis, Inc., 4029 Westerly Place, Suite 116, Newport Beach, CA 92660. Tel. 714/548-8018. Further info also from Dieter Tannenbergr, president Multigraphics, Inc., 1800 W. Central Rd., Mount Prospect, IL 60056. Tel. 312/774-4800. Incidentally, Larry Miles is a frequent speaker at Value Analysis' seminars.

\* \* \* \*

## TWO IMPORTANT MEETINGS COMING UP

Members of the American Productivity Management Association will meet to the theme of, *"In Search of Quality,"* on February 15-17 in Los Angeles. Highlight will be a presentation by Dr. W. Edwards Deming, "Managing Quality Improvement." Other speakers, group discussions, plant tours will make this a worthwhile meeting. Registration is limited to 250. Cost to non-members is \$575. Info from American Productivity Management Association, 4711 Golf Rd., Suite 412, Skokie, IL 60076. Tel. 312/677-9141.

The Improvement Institute and American Society of Performance Improvement will hold their annual joint meeting in Hartford, Conn., May 20-22. Balance of the week will be devoted to workshops. Theme of the meeting is, *"The Quest For Excellence."* Human resource management, participative management, team efforts, motivation will be stressed. Additional information in future issues. Contact: Tony Zulkeski, Hartford Insurance Group, Hartford Plaza, Hartford, CT 06115. Tel. 203/547-5558.

\* \* \* \*

## HOW EFFECTIVE ARE SOME PRODUCTIVITY IMPROVEMENT VENTURES?

The Institute of Industrial Engineers decided to find out. They surveyed their industrial engineering members regarding: 1. The kinds of productivity activities undertaken by their businesses; 2. The effectiveness of the activities:

...81% cited Capital Investment for New or Automated Equipment as the basis of

- their improvement effort....90% reported results high or moderate.
- ....69% cited Improvement of Inventory Control Methods as their basis for improvement....75% reported results high or moderate.
- ....69% cited Employee Involvement in Productivity Planning, (includes quality circles, work simplification, other team efforts) ....75% high/moderate.
- ....60% Improvement Through Worker Training....82% high/moderate results.
- ....60% Evaluating Performance/Establishing Goals....78% high/moderate.
- ....38% Employee Incentive Program....79% high/moderate.
- ....38% Development of Indirect Labor Standards & Controls....76% high/moderate.
- ....37% Systems Innovation, etc.....89% high/moderate.

Industrial engineers, 48.3%, judged workers' attitudes as "not very enthusiastic and optimistic," while 51.7% reported the opposite. Compared to 10 years ago IE's reported today's workers did not work as hard, had less pride in workmanship, loyalty, work motivation or workmanship. Their answer to the problem? 57.6% encouraged money rewards;63.3% cited personal recognition as the answer; 13% said,promotion, 11.1% said,other.

What did the engineers perceive as major obstacles to improvement?

- ....63.5%, said management fails to understand how productivity can be improved.
- ....59%, management fails to authorize sufficient manpower to direct productivity.
- ....58.8%, inability of labor and management to work toward productivity goals.
- ....55.6%, management fails to apply proper measurement to evaluate improvement.
- ....52.1%, insufficient training programs.
- ....41.3%, high interest rates that discourage capital expenditures.

One conclusion stands out in the IE survey: People, people, people. Until such time as all businesses operate automatically without any workers whatsoever, people will remain the backbone of any successful productivity improvement effort. Survey is available for \$1.00 from Institute of Industrial Engineers, 25 Technology Park, Atlanta, Norcross, GA 30092.

\* \* \* \*

Self-diagnosing Your Firm's Performance: a Quick Test, is an interesting 24-page guide to determine how your firm is doing in such fields as finance, production, human resources, marketing and sales, and general management. Particularly useful for small and medium-sized companies. A total of 19 ratios are used to give an overview of the company's strengths and weaknesses. While the guide offers no solutions, it is a well-organized system that will tell you where the company stands. It's worth studying. Get a free copy (in English) from Institut National de Productivite, 1 Complexe Desjardins, bureau 1509, tour sud C.P. 157, succursale Desjardines, Montreal, Que. H5b 1B3, Canada.

\* \* \* \*

We'll be making several promotions during the next few weeks. Due to the variety of mailing lists used you may receive a subscription promotion. As you can imagine, it's impossible to check the thousands of names and weed out our current subscribers. If you receive a piece, don't throw it away, give it to a friend who wants to improve productivity and better utilize his human resources.

\* \* \* \*

84-3

Memo from

William F. Schleicher

1/13/84

Dear Larry,

I'm pleased to send you the current copy of the NPR that carries your Award story.

You should be highly flattered by this international recognition, and I want to add my congratulations..... ~~It~~ Isn't it too bad that American managers remain immune to the benefits of v.a.

Cordially

Bill.