

77-41

EARLIEST HISTORY OF VALUE ANALYSIS

Assembled by Larry Miles 4/29/77

There comes a time in history when a story should be told "Like it is". Here it is.

The story that during the war of 1941-45 Harry Erlicher, vice president Purchasing - GE, saw so many forced substitutes which made the product not only cheaper but also better, that he set up an activity to learn how to make the changes by intent rather than by necessity, is not true. He supported it. He did not initiate it.

This was a "sales" story, to facilitate getting appointments with GE's management so that the functional approach and achievements could be shown. Attributing its origin to a vice president opened doors.

The use of this approach was cleared with Mr Erlicher, prior to using. He said, "If it is felt that it will help, I have no objections to temporarily using it. No one will be embarrassed. There are only three who know it isn't true, Larry Miles, Bill Sredenschek and I".

What did happen? Start in 1938. As published in Jan. 1964 Readers Digest, a 34 year old GE engineer went to his boss, W.C. White, Mgr. of Vacuum Tube Engineering in Schenectady and said, "Doesnt anyone in GE care what things cost"? Whereupon Mr White picked up the phone, called Harry Erlicher and repeated it verbatim. Mr Erlicher said "Send him over". (author Stouffer, in Readers Digest, collapsed time by using 1947 instead of the actual 1938).

Thus Miles worked for Erlicher in the central purchasing dept. of GE and the seeds which were to germinate into VA started.

Tragic rumblings came from Europe. US found itself unprepared. Industrialists with experience in the 1938-1945 years will recall that every facility was scheduled to the hilt, with priorities running higher and higher, up to AAA and higher. Steel of all types was totally scheduled. Also was copper, bronze, tin, nickel, ball bearings, roller bearings, electrical resistors and capacitors, and all vital products and materials.

Miles was assigned the task of "finding, negotiating for and getting" a number of these vital materials, such as materials to expand production of turbo-superchargers from 50/week to 1000/week for B-24s, capacitors and resistors for skyrocketing military electronic needs, armament parts for expanding production of B-29s, etc. In this environment it was not possible to stop short of achieving the essential results.

Frequently, suppliers, already over-extended, said "No" to increased schedules or new necessary products. In this desperate situation Miles was forced to basics. "If I cant get the product, I've got to get the function. How can you provide the function by using some machine or labor or material that you can get"? Time and again there was a way to do it. Engineering tests and approvals were rushed and schedules met. Thus "function" grew in vitality and was to later mature into the development of the VA techniques.

To assure materials for these and other vital programs. Miles usually worked 2 days in vendors plants, one to two days in GE plants, one day in the Pentagon keeping priorities suitable, each week, Saturdays and Sundays in his own office. One exact incident will illustrate the function emphasis which pressed itself upon him.

A production manager gave Miles a schedule calling for thousands of a few dozen types of resistors and capacitors to be delivered weekly starting in one week. Manufacturing schedules at the time were 9 months out, with 6 months firm. He was told it was an absolute requirement. Miles asked, "Who agrees with you that this must be secured, regardless"? He said "Tom Garahan, overall production manager of GE." Miles asked, "Does Harry Erlicher agree?". He said yes. Next - to Erlicher's office. Erlicher said "Yes".

They were secured. They were for Oak Ridge Tenn. Much later it was learned it was for atomic bomb research and development. Their priority overrode all others, still the others were vital too. Miles went to vendors, made schedule changes, but told each to find some way to provide the essential functions of resistance and capacitance thru a different shape or type or material or equipment, which would keep other vital electronic equipment on schedule for the military. The function approach proved to be so effective that he was never to abandon it.

Critical years passed. In 1944 Erlicher asked Miles to become Purchasing Agent of a GE plant. Miles experienced more benefits from the functional approach in buying.

In 1947 Miles told Erlicher that he believed that much good could come to GE if he were relieved of line operating responsibilities and assigned full time to cost reduction work in the central purchasing office. Mr Erlicher bought the idea and moved him back to Schenectady in late 1947, where his activity was named the Purchasing Department Cost Reduction Section, PDCRS.

Miles and the people he hired, Roy Fountain and others started studying products and costs on a function basis, associating costs with functions and jelling up the specific function based techniques of VA.

24 years later, in 1971, the National Capital Chapter invited Wm Sredenschek to be their guest speaker and tell them the exact circumstances of the "birth" of Value Analysis. They asked Larry Miles to introduce him.

Those talks were taped and transcribed and are enclosed to complete the task of "telling it like it is"

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THE BEGINNING OF VALUE ANALYSIS

Washington DC  
Sept 8, 1971

Comments by General Electric Manager Wm. A Sredenschek under whom the Value Analysis system was originated, as he spoke at the meeting of the Washington Capitol Chapter, accepting the INVOLVED MANAGER AWARD from the Society of American Value Engineers. (Extracted from taped documentation)

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Pres. Kempter, Mr Brogan, honored guests, members of the Society of American Value Engineers, ladies and gentlemen.

I'd like to tell you a few things that happened in our lives during the first few moments when Value Analysis was being born.

It happened that I had been selected to work as the assistant to the vice president in charge of purchasing, Harry Erlicher, and to take over that job when he retired. Actually I transferred in Nov. 1947. I found a young engineer by the name of Larry D Miles had transferred to central purchasing the previous month. He had been the purchasing agent at our Baltimore plant and was now between assignments.

He was doing purchasing cost-reduction work and called his activity Purchasing Department Cost-Reduction Section - PDCRS.

My boss Harry Erlicher got ahold of me and said, "Larry Miles will be here a while. He's started on Cost-Reduction. I'm going to hook Larry onto you. You sort of help him to get started.

After a short time, he burst into my office early one morning, and said, "Can I have a few minutes with you?" I said, "Sure, sit down". He started out.

"Sreddy, this cost-reduction program has got to be broader than just getting a lower price for purchased material". I reacted, "Yeah, what are you thinking about, after all, we're purchasing people, it's our job to get material for lower cost".

He said, "But the cost of the material is not the heart of the problem, the real meat of the coconut is to get the lowest cost for providing the function that the customer wants in our products, - and he hit (emphasized) the word function."

Again I reacted, "We've got a purchasing job to do, what in the name of sense is this function thing you're talking about?" He said, "Well, it'll take a few minutes, is now a good time?" I told him "sure".

Three hours later I reached for the phone and said, "We'll get the boss (Harry Erlicher), we're going out for lunch!" Fortunately he was available. He bought the concept. So, that afternoon, though yet unnamed, Value Analysis was born.

1948 budgets were all set and did not include money to develop and perfect this approach, so my first job was to get some money for the work. You know how it is with budgets, you put a little fat here, and a little fat there, so I pulled out enough to tell Larry to hire some good people. We gave him some for research too.

You know the story from then on. We set up meetings with management people. We started training work. We selected products from the various departments and trained men while they worked on them.

Whenever either active or passive opposition arose, I could, from my position, bring about a confrontation, and we changed it to support.

Achievement ran so high that by 1952 the company gave Larry its highest award, which, at that time, went to one in each 10,000 employees. He was the first and only purchasing man to ever receive it. The citation was:

"In recognition of his outstanding accomplishment through the establishment, organization, and development of a Value Analysis Program, which has resulted in Substantial cost-reductions".

Transcript provided by  
Larry Miles