Nov 15 1977

Maurice Gelphi;

Dear Maurice;

How nice that you stopped by on Eleanor's birthday! And what a treat that you brought her the lobsters! Thank you. I hope you had a pleasant trip back to Baltimore, on the rainy, rainy day.

Because you asked me to comment on the paper you left, I will do so.

I totally understand the negativeness you are in. We had it from day one. You may want to delete the sentence which indicates the opposite, from your paper. Open antagonism and criticism, veiled destructive actions, professional and personal criticism, all were commonplace. But - it has always been thus, when something new came along - especially if it is a real advance.

Laws at first denied the automobile the use of the roads. In England a law stated that a person must walk in front of the motorized vehicle, etc. The airplane - several USA papers refused to print the stories of the first flights. Or, today, the super-sonic plane - parades of protest to prevent giving it landing rights.

Function identification and study, and function evaluation, are a tremendous advance. They have such strength that they will hand over the market, in any competitive area where they are used. A certain percentage of professional people will learn them, use them, and win. Another percentage will, for a time, fight them, will hang on, and their employers will suffer. Competition will either take their employers out of competitive business, or cause the perceptive employer to take them out of the key responsibility.

Establishing function-cost relationships, is one of the masterkeys. If it is left out, its like leaving the rudder off of a ship, or unplugging an electric fan. Real achievements stop. And, like the automobile and aeroplane were - its new. Engineers do not learn it in college. Their training is to "design the valve", "design the fan", "design the motor". The science, as we have deepened it, of function determination, understanding and evaluation are not taught. Associating costs with functions, is brand new, and as such is occasionally fought, temporarily.

When I retired from GE I had invitation from one of the worlds leading companies in Europe to come over and tell him what it is. I did. He at once had me tell in 3 hours, to his 65 top technical people from all plants, what it was. Afterwards he said, "I want it, set up seminars". His top technical people said "No, No, No. We dont want it. Its no good. Its a waste of time". "We wont attend it". He asked me "why do they oppose it so?" I told him. He said, "we need it, we've got to have it, schedule it".
We scheduled orientation and project studies and training and advanced training and instructor training. The technical people were told, it was up to them. they could come to the orientation lectures or not, they could enroll in training or not. 2/3 came to orientation - some would come in the middle of the sessions. Two or three were so violently opposed that when shown some examples, would say "I don't believe it". But - dozens more were learning.

By the end of a year, 5 trips to Europe, 6 seminars (two advanced) (1 teacher training) using 6 effective value engineers whom I brought from the states at different times, enthusiasm and effective results were cropping up in many many plants, and their own good staff could continue the teaching. Unfortunately, the strongest antagonist, a product line engineering manager, had a bad nervous breakdown.

In my final meeting with the very superior company president, I said, "I don't know, we had lots of battles, but we taught lots of people, did I achieve what you hired me for?" He said, "Yes, you have afforded me opportunity. Now, when I have meetings with my technical and commercial staff members, and tell them what we must do, they no longer tell me it can't be done".

To help prolong and increase the benefits that company wrote a book in their own language on our value analysis/engineering techniques. They re-named it for "Function-cost-analysis". "Funktions-Kostnads-Analys".

So - Maurice - I say "beware", knocking out function-cost relationships and analysis is the first step in castration. The next step is to butcher the critter and call in artificial insemination.

Just a couple of more quickies -

SPECULATION. Yes, I agree with you its not as good a name for Creativity as Creativity is. See page 56 of the Second Edition, 1972.

TOO MANY "FUNCTION" WORDS IN THE JOB PLAN. Believe we have the same feeling here too. I don't know where all of the "Function" words you have listed in your job plan title came from. Note pages 53 to 58 of the second edition - 1972 for the headings I've found most effective.

"Mind Tuning"
Information Step
Analysis Step
Creativity Step
Judgement Step
Development Planning Step

Best of success in all of your activities, Maurice,

Sincerely,