

Speech delivered at SAVE Convention

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By

L. D. Miles

Thank you, Fred Sherwin, and Gentlemen.

I am doubly honored today to see that our guests from Japan have selected from three choices -- it couldn't be just by chance -- to attend my meeting. Welcome! And I'm glad you are here. I am secondly honored because so many of you who are very skilled practitioners are here. I sense that you understand what I am grappling with. I, ~~am~~ myself, am trying to decide and to learn from experience what the fundamentals of Value Engineering are.

We dealt many years with the symptoms and found them quite useful. This morning I will take the opportunity to give you my latest thinking on what the fundamentals of Value Engineering will be. Actually, I will be ~~am~~ endeavoring to communicate one concept. At the end I will see whether I believe I have communicated it.

On March 28 I sat on beautiful Chesapeake Bay having some crab Norfolk and watched a fish hawk attempting to build a nest on a Gulf sign. I saw the history of industry and government reenacted. The fish hawk would bring quite a large stick or small piece of brush and drop it. In essentially all cases it fell to the ground. It would go and get another and drop it.

I returned on April 20 by chance to enjoy some more sea food and the sunset over the Bay and here was a beautiful nest, probably three feet in diameter, looking like a tremendous brush pile, and already eggs were apparently laid and the ~~g~~ fish hawk was busy at normal work in the nest. I then learned what had happened.

The fish hawk, like industry, like a business ~~am~~ man, started out using the tools that it had and the knowledge that it had. In previous years there had been a duck blind near by and for several years this fish hawk had built its nest in the top of the ~~kind~~ ~~in~~ brush. There, dropping of the sticks did allow cleavage and the next was built.

Now, something new was added. The species would have perished had not something come forward. This time what came forward was a dock boy who brought a piece of screen

from an old crab net up the pole and fastened it at the top. This dock boy added what was needed. Then the fish hawk proceeded to drop the sticks; they held, and it built a nest it is now on and it will endure.

Men ~~and~~ in industry and government proceed ~~x~~ from what we have learned in the past and we drop the stick as we have best learned. If the situation is ~~enough~~ enough like the past, that industry, that company, will live. If not, that company dies. As in the case of the fish hawk, something else was needed. It now becomes our task, as Value Engineers, to find what is needed in the new situation and to add it.

Then I will say the fundamentals of Value Engineering are: to find what is needed and does not exist; To end the absence; To detect the defective, and to doctor up the defective. You will see as our thinking develops that my firmest belief/^{is} that ^{now} the most fundamental thing to Value Engineering is to be able to learn the needs, see what is ~~not~~ not there, what is needed, and have it added. It can be anything from any office into any other office, from one discipline to another, from ~~x~~ attitudes to actions to decision making patterns -- what is needed and is absent.

Now another example, and I am over emphasizing a little here to communicate rather sharply in twenty-five minutes. We must be like a crab. A good Value Engineering program is like a crab. -- You see this Eastern Shore lore is getting into my thinking. -- But We have not been like a crab. We have not understood how well a crab was designed. I would characterize our beginning in Value Engineering -- and many of us are still in the beginning and I point the finger to myself also -- as a creature like a crab with two enormous claws with no legs, no feelers, no eyes, no protective shell.

Those enormous claws are the seminar approach of opening up the problem; of scheduling creativity, of scheduling search, and of getting better alternatives. We then have been in the position of the crab with two wonderful claws and no feet, eyes, nor shell, going around and in effect saying, "See what wonderful morsels of food I have." We have found very often only limited takers -- we found some who would take the morsels of food to their cave and devour it and others who wanted to devour us and did so.

It is fundamental in Value Analysis that we become like a crab; that we have what is required; that we not only have the seminar capability, the scheduled problem solving, but we have means of protecting ourselves; that we have means of competing/ with others which is nature's system whether it be mental or physical; that we have means of seeing, of feeling, we have legs with little feelers on, that we can cover the job which I am staking out for us; find in the whole field what is absent by seeing what is around it because there is nothing there to see -- it's not there; and by providing what is needed.

Why do we -- well, maybe that would be simple but it isn't simple as we all know. It is quite easy to see something that exists; that is, something that has substance. But unless we have a means to bring into sharp view something that does not exist, we miss it. So, what is that means? You will find in the teachings of Value Engineering step by step processes, good practices, many areas where caution is needed, where motivation is needed, where special attention is needed.

The best way probably to find what is absent is to construct a model that has everything present. Then we can measure ~~it~~ we are studying against something that has everything that is needed. We then can see in this area something else is needed to get results that are expected of it.

You will then find, in my judgment, the reason that we have put so much emphasis on having sound methods is to put together a pattern of what is needed. Now it is fundamental in Value Engineering work that we do NOT take that pattern and attempt to thrust that on every situation. That, however, becomes a working model/insofar as we can do it, ~~xxx~~ contains everything which needed to accomplish its job well. And by its job, I mean to achieve the objectives of the organization. If it is a business, it is to compete financially, profitably in a competitive market with a product that the customers are buying and keep them buying it. If it is in government, it is stated in a little different way but ~~xxx~~ means the same thing.

Now I think you might ask "What do I believe is really fundamental in this pattern that we create to measure our particular task by?" So I will just brush a few points. All of these are in the written text so you have them. Therefore, I will barely name them and move on.

In the approach we must make every situation more objective. Human beings are not objective, logical creatures. We like to think we are and I won't labor the point, but we are NOT. We are emotionally put together and emotions affect our decisions, ~~very~~ very often more strongly than logic, especially decisions on where to start our thinking; how much time to put in investigations where large evidence does not already exist. Therefore, make it as objective as possible, ~~xxxx~~ get each situation into basic factors. Reduce it just as much as you can; divide it into mind-sized steps. We want to climb a peak here and if it is a bleak rock, we don't know how to start and we won't start. However, every problem of this type can be put into mind-sized steps so we can take this step, then we can take this one, and then we can take that one, and they will be very different steps.

Improve the information. Some information on any situation is lacking and worse than that, some "information" is always wrong. ~~xxxxxxx~~ Improve it. Next, improve the assumptions. Always assumptions have to be made. A large percentage of them are faulty. Many of them deny the best solution. This is a step -- to improve them.

End generalities. Each case is one step by itself. We don't care what general rules are; what general system, what general practice is, what failed in some other situation, what worked. We have one set of objective data. We will strip from our minds anything that isn't objective and work on that step. We will cause search -- search of the world as our Japanese friends are doing. We could not have all the information in the world in a large room and use it. We couldn't find it. Search is the key that will fit it all if we know how and I honor the Gentlemen, our guests, because you know far better than we, how to search and I hope that we can catch up. We ought to come over there and learn; that's what we should do.

Next, recognize roadblocks and stoppers which always exist and deal with them. Cause better cost guides to be developed and then I will say, use a sensible job plan, a sensible plan which we call the job plan, which schedules the breaking into steps that doing the right thing first, emphasizing what should be emphasized, overcoming the/roadblocks first.

necessary

In any growing technology, variety exists. You will find different names applied to the job plan which don't make any difference to me. Each job plan used in the United States has the purpose of scheduling the problem solving, scheduling the creativity, scheduling the judgment, scheduling the development. We will have some of that today but that is not a part of my subject.

Now, I would like then to summarize: The fundamental of Value Engineering for professionals as I see it is to find ~~in~~ what does not exist; and to end the absence; to detect the defective, and to improve or doctor the defective. ~~Thix~~ These absences, these deficiencies may be found in the office of the President; in the actions of the secretary of his committee; they may be found in the executive vice president; in some of his reporting; some of his staff; some of his scheduling. Some of them will be found in the vice president of sales; in the sales manager, in the salesmen; in the customers -- that is -- something that is needed to allow this to be a healthy, profitable business with cost -- business that provides what the customer wants, gets his orders, and does it at a profit -- will be -- some action will be lacking in that area. In the engineering manager's office in the work of his design engineering manager, his drafting, his models, model makers, his testing, his test interpretation -- there are so many places where the getting of appropriate cost is blocked that it is fundamental in Value Engineering that we find the one that is needed on each job -- and there may be a dozen needed, a few large, maybe a dozen small, to move along the project.

Some may be in the manager of manufacturing office; in the methods engineer, in the planners, in the foremen; sometimes the accountant manager is the one who has a defective operation in relation to this project that we are working on. It might be a cost accountant; it might be manufacturing cost men. Sometimes it could well be in purchasing -- the action that is

needed and not there; the files; the expeditors. Sometimes the action that is needed is one of a little change in attitude; some times a large change in attitude. Some times a change in action. A change in attitude is not enough. A little action by the President, a little action by the vice president; and always it is very vital that the proper training be observed. In this model that we establish we must not only have the right actions, the right attitudes, the right motivation, but we must find the right timing.

cost
I would conclude with the thought that it might be a little surprising to some of you to ~~xxxxx~~ come and find so many subjects at this convention as there were at the ~~xxxx~~ fine convention in Boston. To me it is not ~~x~~ in the slightest surprising. But, because we have a very unusual type of situation of charter, of opportunity, in Value Engineering, we ~~x~~ may have to look anywhere and we do have to look everywhere to find out in any one particular ~~xxxxx~~ what it is that is lacking, and I close with the words I case want to be sure I have communicated: Our task is to find from the whole spectrum of the business enterprise, with relation to cost, what it is that does not exist that the business needs and get it put in; and to detect the defective operations and get them improved.