

THE VALUE OF QUALITY

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Gordon A. Frank, PE, CVS became the Director of the Department of Defense (DoD) Total Quality Management Support Office upon its establishment in 1990. He reports directly to the Assistant to the Under Secretary of Defense (Acquisition) for Quality. The mission of the office is to assist in the development and deployment of continuous process improvement activities in all areas of acquisition.

Gordon earned a B.S. in Industrial Engineering and a Masters Degree in Business Administration from Northeastern University. He is a registered PE in Massachusetts.

Gordon is a senior member of the Institute of Industrial Engineers. A charter member of the Paul Revere Chapter of SAVE; he has been a member since 1962. He was awarded SAVE's Distinguished Service Award for his service in Government in 1985. Gordon received a DoD Award from the Deputy Secretary of Defense for his outstanding VE contribution to the Department from 1980 to 1990.

ABSTRACT

This paper discusses the value practitioner's role in balancing advocacy with inquiry. The paper suggests that judging value efforts solely on the basis of cost reduction or return on investment does not serve well either the value practitioner or the client or employer. The paper describes how practitioners can better understand the products or services they offer, customer-supplier relationships, the needs of the customers they serve, a way to determine customer satisfaction, and a technique that uses simple arithmetical displays to illustrate whether continuous improvement efforts are resulting in increased customer satisfaction.

ADVOCACY

For over 30 years I have listened and even participated in the "marketing" of value services by practitioners. Many practitioners, admittedly not all, use an approach that implies the practitioner knows what is best for the client or employer. Impatience is often an accompanying emotion. I understand that. After so many years I too often lose patience with those not yet convinced of the efficacy of the value job plan. Many believe that failing to make the case reflects adversely on the practitioner's competence. The practitioner knows value concepts work. Stridency increases.

Advocacy begins to approach zeal. The practitioner, perhaps now a zealot, strives mightily to demonstrate to another unbeliever the results that can be achieved. If the practitioner markets value concepts successfully, the client or employer conducts an initial trial. And to almost no one's surprise, the job plan works! The practitioner is delighted. There is another success. Why then, with all of these individual successes, has the valueconcept not been more widely embraced? Why is an uphill battle still being fought?

Absent any definitive data, I can only speculate. I believe, however, that I know of one contributing cause. In the hiring interviews that I have conducted over the years, rare indeed is the practitioner that fails to mention experience in briefing, giving speeches, and writing articles. Articulate is the word I hear most often to describe this capability. Yet, I do not ever remember any practitioner including a talent for being a good listener. I find the concentration on being articulate and overlooking effective listening to be a most damaging admission for a value practitioner. Perhaps too many practitioners are so self-hypnotized by the message they are trying to deliver, that they fail to hear the needs of the customer or client.

DISCUSSION

In his book, Peter Senge¹, traces the derivation of the words "discussion" and "dialogue" back to the ancient Greek language. With apologies to the Greeks, Webster, and Professor Senge, I understand discussion as an enterprise undertaken to reach a decision or a course of action. In a typical discussion positions are set forth and an earnest effort undertaken to reach a solution that, if not satisfactory, is at least acceptable to all parties. In many cases, however, one or more of the discussion participants

is not interested in reaching an accommodation but in prevailing. Discussions seeking a "win-win" outcome are useful. Any other purpose compromises the intent of a "discussion." Many value practitioners seem to believe that a "win-win" discussion is one which eventually results in demonstrating the efficacy of the job plan. If the practitioner wins, the value approach is undertaken. The employer or client "wins" when the savings are achieved from implementing the proposals. Although both may "win", this approach is NOT a "win-win" discussion.

Engaging in productive discussions in an art form that may be learned if one wishes to take the time. Too often, however, the participants wish to prevail. If there is a single winner, logic says there is also a loser. No one wishes to be a loser. The consequence is that the discussion becomes more heated and soon it is no longer a discussion. It is an argument. Professor Senge points out that prevailing (winning the argument) before fundamental truths have been uncovered may lead to an unhappy result and is best avoided.

DIALOGUE

"Dialogue", however, is another matter. A dialogue solicits information and gains more understanding. Those engaged in a dialogue are not seeking a solution. They seek understanding. If the increased understanding leads to a solution or agreed set of actions, this result is a by-product. It is not the purpose. This paper seeks to describe how dialogue may be used by the practitioner to develop an information exchange with employers or clients. Judgement is suspended. Any necessary evaluation will come later. The principle mechanism used is asking questions - and listening to the answers. If the answers are not understood, then further questions are needed. The process continues as long as necessary. The output of a dialogue is a further understanding of the position of each party and the logic used to arrive at it. There is no question of who is "right" or "wrong."

A qualified value practitioner is well versed in dialogue. Within any job plan, an early phase is entitled "information." The practitioner seeks audiences with experts, specialists, historians, and other contributors and asks questions. The need to clarify the original answers leads to more questions and, in turn, more answers. The process continues until the practitioner has the insight needed. In the process, those being interviewed are often piqued by the value concept and ask questions of the practitioner. If the questions are being asked to elicit information and the answers are accepted as information and are not judged, then a true dialogue may be taking place. The happy result of this sort of enterprise would be a respondent who has gained some understanding of value concepts and a practitioner who has gained needed information. Both insights were achieved because judgement was suspended. And there was no winner and no loser.

PERSPECTIVE

There seems to be a major difference in the approach of practitioners seeking to "market" value services from that used in the application of the job plan. Dialogue is a necessary element of the job plan. But discussion is an all too common mechanism for marketing a value program. The practitioner wins by being given

the opportunity to operate a workshop or some other demonstration of the job plan. Accordingly, has the client or employer lost? Realistically, perhaps both have if the practitioner assumes complete knowledge of what the client or employer needs to be satisfied.

Many practitioners do not see the need for dialogue with clients or employers. Any responsible client or employer seeks cost reduction (some say "improved value") from value efforts. How do value practitioners know that? Because practitioners are able to put themselves in the "other guy's shoes." They know what the client or employer wants. Maybe.

I would suggest such confidence is the province of mind readers. For the rest, they need to ask what the client or employer really needs from the value application to satisfy them. Even more insightful would be knowing what would delight them. All of the assumptions about what the client or employer really wants may or not be confirmed when there has been a successful dialogue with them. Is cost reduction the totality of the client's expectation? Is it the practitioner's? Let me offer an example of how different another's perspective might be from what we expect.

Recently, my wife was returning to her car parked in a supermarket parking lot. She noticed a blind man walking in the roadway, tapping his cane along the side of the curbing to guide him on his way. As he walked, he tripped on a speed bump. You and I have probably tripped many times. To my wife, seeing the blind man trip over the speed bump seemed especially poignant. By the time my wife got to her car and drove to the head of the driveway, the blind man was standing on the sidewalk waiting to cross the street. My wife had to make a right turn in front of the blind man. She stopped, opened the right hand electric window, and told the man to cross the street while she waited. He refused. She insisted. Again, he refused. Finally, realizing that my wife was not going to move the car until the man crossed the street, he explained his problem. To cross the street safely, he listened for cars. As long as my wife was stopped near him, he could not hear other cars coming because of the noise from her car engine. He could not cross

safely. My wife was astounded. Her simple act of courtesy could endanger this man's well-being. She thanked him and drove off. Presumably, he was able to cross safely.

The prologue to this story is that my wife told it to me so that I might use it as an example of a failure to understand the other fellow's needs. She recognized the situation called for a dialogue not a discussion. Once she understood his needs, she was able to execute one of at least two possible solutions. (The other would be to turn her engine off so the blind man could hear other cars.) My wife understood and wanted to make sure that I did too. I think I do. Do you?

CUSTOMERS

In developing the notion of customer satisfaction, we might just pause to consider the customer. When presenting a value change or opportunity, the individual(s) to whom we present the results of our efforts are often considered to be the customer. But is that the complete customer set? I think not. In structuring a process analysis, one has the flexibility to bound the process. This boundary determines who is next in line to receive the product or service. The flow continues until the product or service reaches the ultimate customer. The practitioner may be able to determine the customer for an individual change proposal. But who is the customer for the overall value effort? Is it a composite of all of those to whom each proposal is addressed? Is it "top management?" Or is it a combination? Are there others in the customer set?

For this paper, I have chosen to identify the ultimate customer as "the market." Much more could be written about aligning organizations and customer strings to assure that each is working for the benefit of the market. Inherent in this concept is the feedback loop to provide the needed information. In this paper we shall omit all of that. Figure 1 illustrates the basic concept of supplier, customer, market and the feedback loops. The notion, although simple in the abstract, is a difficult one to define in an actual circumstance. This latter statement will be confirmed when the reader tries it. What are your products and supplies? Who are your customers, suppliers, and market?

Supplier/Process/Customer Chain

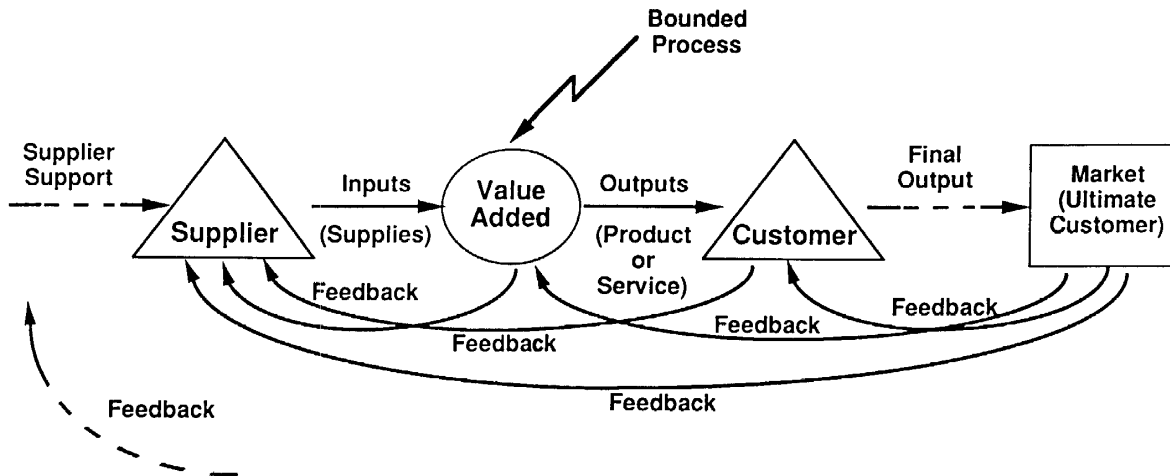


Figure 1

The customer set must be identified. Because, although internal measures may serve to guide quality efforts, the ultimate quality

metric is determined by the customer. You have not been a success in providing a quality product or service unless you have

not only met your customer's expectations, you have exceeded them. AT&T² from whom this notion was drawn calls it their quality architecture. Note how powerfully this notion varies from the value practitioner's offer to reduce cost without sacrificing quality, reliability or any other customer demand. If the practitioner understands about rising customer expectations, then the fundamental driver for the notion of continuous improvement is also understood.

Although simple in concept, the concept of customer identification has powerful implications. Prior to the start of a typical VE workshop or analysis, the recipient of the changes proposed is usually identified. Later, the team begins to realize that the addressee of the proposal seeks concurrence in the change from many interested parties. These stakeholders may include other executives; technical, marketing or financial specialists; or even the market. As the practitioner assists teams in developing improved solutions to product or process situations the nagging question continues. Was the effort a success? How do we know? Are we doing better? Has the client's or employer's overall situation improved?

TEAM BUILDING

In the second edition of his book, Lawrence Miles³ spoke of the embarrassment that results from the work of value practitioners and suggested some ways of mitigating it. His advice is sound. But it leads to a question whose importance is becoming increasingly understood in these complex times. For an organization that has not seen it before, is the introduction of VE practices disruptive or does it help to enhance the idea of team work and common fate? Some believe the VE workshop team is synonymous with organizational team building. I do not believe that is the case.

While it may be true that those selected to participate in a workshop, or other similar activity, may feel they are part of a VE "team," in many cases they compete with those who have not been selected. Such competition is destructive to organizational cohesiveness. Often, I have seen one of the criteria used for the selection of the participants in a workshop is that no one involved in the original design will be selected. The proponents believe inviting the originators would limit new thinking and new ideas. I believe this is nonsense. As a practical matter, once the workshop team has been selected, its members are likely to meet frequently with the originators and seek to understand the history and logic of the project they are reviewing. Where else can the workshop team go for this insight? Few workshop participants, however, have been properly trained in the correct use of dialogue. They may take the opportunity to build their own ego at the expense of the originator's.

There are at least two possible adverse consequences from such an arrangement. First, the workshop team is an ad hoc effort. The practitioner moves from one opportunistic assignment to another. There is no lasting affinity created among the workshop participants. Even if, optimistically, the team members become believers (zealots?) in the concepts, they are provided little in the way of follow-on leadership and little guidance from the executive leadership. It is like a shooting star that glows brightly momentarily and then is gone - forever!

Second, the embarrassment that the value team can create leaves a lasting impression that is divisive. Although those whose original efforts are "improved" in the workshop may agree and even support the technological advances brought forth by the team, the originators' prestige and standing frequently are adversely affected. The diminution of the organizational cohesiveness that results may often overshadow the benefits of lower cost. Often, a poorly thought out system of rewards and recognition further exacerbates the problem. Crediting the value practitioner or the practice of VE for the improvement carries with it the implication that the originator was incompetent to some degree in some way. In this environment people become less communicative, less trusting, and less open. The benefit from the specific improvement may be outweighed by the longer term and more pervasive damage to the organization and to the team building goals it may be trying to achieve. Chris Argyris⁴, a recognized expert on organization learning, uses a successful cost reduction exercise to highlight important questions that should be asked but rarely are. While attending a cost reduction

awards ceremony, he wanted to know what circumstances prevented an organization from implementing cost reduction actions that were known for years? Why were known problems not corrected? The response indicated that the answer to that question would surely spoil the celebration! The understanding and use of strategies to overcome all sorts of defense mechanisms used to forestall change should be a major accomplishment of every professional value practitioner. Each should be familiar with strategies to uncover what specialists in learning organizations describe as "undiscussables." These topics hide the root causes of organizational dysfunction but are never surfaced. If not surfaced they are never corrected. Instead the organization contents itself with shallow and meaningless "improvements."

GENESIS

Twenty-five years ago, the Office of the Secretary of Defense sought to understand the source of the VE opportunity as it was practiced at that time⁵. Seven factors were cited as the principal factors. Many are familiar with them. To perhaps no one's surprise, the factors included excessive cost and advances in technology. It is indicative of the level of sophistication available at that time, that the study was accepted as verification for the need for VE. And perhaps it is still true. Certainly, few would argue with the continuing and maybe increasing need to constrain costs and the necessity to have an organized way to deal with what many believe is the quickening pace of technology advances.

Now, however, we might view things differently. The practitioner conducts a value study and develops improvements to what has gone before. Is that all there is to it? Are the factors that were developed a quarter of a century ago really the root causes. Are they really what creates the opportunity for VE? It matters not what the genesis is in the generic sense, what matters for any organization is the root cause of the VE opportunity in a specific situation. Even more importantly, how is the organization using its value resources to address the root causes? How are they being used to correct the process problems - the quality practitioner's common causes - so that we do not limit the practitioner to only special causes? Whenever I see a value proposal that is similar to a previous one, I strongly suspect value resources are being wasted on a band-aid approach instead of investing them in seeking and correcting root causes.

Knowing the reason for the VE opportunity may be useful in justifying current and future value projects. Even more useful would be procedural improvements that would diminish the need for second look activities. These improvements would be continuous and would provide the organization the education, training, information, tools, and leadership that would allow it to respond better to the user's needs, apply new technology more quickly, and constrain acquisition and operating costs more effectively.

CONTINUOUS IMPROVEMENT

Except for a very modest number of special exceptions, the value practitioner focuses on the product and largely ignores the process. Therein lies the seed of the "band-aid" approach which is all too commonly followed. Many would claim that a value change that is proposed is an example of continuous improvement. Perhaps. Perhaps not. I believe that an effort by outsiders to improve a product or service is meddling. The idea of continuous improvement embodies within it the notion that it can only be applied to processes. The difference is considerable.

Let me use a pedestrian example to try and make my point. The preparation of correspondence is a typical government process. You write the government on some matter. Someone is tasked to prepare the answer. As required, the civil servant researches the situation and (hopefully) writes a thorough and comprehensive answer that responds to all the points raised in your letter. As it wends its way through the system to the individual who will sign the letter, it undergoes changes. The final letter is clearly better than the original. This procedure, however, is NOT continuous improvement. It is meddling. All of the work that went into improving the original letter is rework and represents a process quality improvement opportunity.

Now, let us suppose that someone examines the process by which the letter was answered. Among the aspects of the process

that the analyst might examine are the instructions for answering letters, the information regarding stylistic preferences for the individual who signs the letters, the ability of the system available to provide the data rapidly so that suspense dates are met, the education and training in letter writing and grammar, and finally the capability of the word processing and office automation equipment available to support the employee. As the organization works to improve each of the aspects of the process that is used to prepare correspondence, the amount of time needed to dispatch a letter is decreased, the letters are better, and with no increase in resources they are able to answer more letters (or the same number with fewer people).

They have improved the system. And the improvement process can go on for the foreseeable future. This example illustrates my notion of continuous improvement. And it contains the implication of quality measures about which we shall speak later.

PROCESS OWNER

Often in private discussions and public meetings I hear of the need for "management support." While I agree, I sometimes suspect that the notion is frequently misunderstood. Perhaps, "management support" should be replaced by the idea of process owner. "Management support" is an ethereal concept which is difficult to measure in absolute terms and difficult to detect changes. What purpose does "management support" serve? Those who really believe, except nothing less than "TOP management support." I am not sure what that means or how they know when they have it. How do you determine support from mere conversation - sometimes termed "lip service?" I worry about such uncertainties. Instead, I would wish for an understanding and support of continuous improvement activities by the process owner.

Who is the process owner? Its quite simple. The process owner is the individual in the organization who is able to support the team involved in continuous improvement. The process owner is able to either accept the changes offered and direct their implementation or, even better, is able to empower the team to implement the improvements it has developed. Once again, the idea is that continuous improvement activities are sponsored by and conducted under the leadership of the process owner. The process owner is interested, perhaps even eager, for the process improvements that will be forthcoming. By keeping abreast of the progress and objectives of the continuous improvement activities, the outputs may be implemented as they are created. Often simple process changes can be implemented without lengthy reports, detailed briefings or long explanations which would be needed to "market" the improvement to someone unfamiliar with it. The process owner may be the CEO, a foreman, or anyone in between. Absent a firm rapport and frequent interaction with the process owner, the agony of implementing process (or product) improvements can be excruciating indeed.

CAREERS

In my readings I frequently come across descriptions of the changes in our society and how each of us might wish to consider dealing with them. In an article in Business Week⁶, the author suggests that the notion of building a career with one company, if not obsolete, is certainly obsolescent. The downsizing of the manufacturing sector of our economy has seriously affected the number of high-paying blue collar jobs available to those with high school or less education. Those of us who were professionals had been affected less. No longer. Now there are major changes becoming obvious to many of us. We are being advised that we can no longer count on a career with a single employer. Instead we must develop a "portfolio of skills" that we can successfully market as we move from one employer to another.

As employees begin to understand these profound changes, one of the factors they might consider when seeking employment early in their careers is the employer's assistance in providing career building education and training, and opportunities to make wide ranging professional contacts. These factors along with initiative and a career plan will be needed to develop and execute a successful career.

How then does the value practitioner satisfy these needs? Not very well I'm afraid. In the early days, the practitioner received and, in turn, offered a training program that included a thorough grounding in the job plan along with some very excellent pointers on habits and attitudes. These latter insights were intended to help the practitioner with the human relations aspects of developing and implementing change. Today, these latter considerations have become the province of organizational development experts and, in some cases, anthropologists⁷. Much of the value training offered by today's practitioners focuses on the job plan and little else.

Quality management practitioners on the other hand typically offer a succession of courses that serve as an excellent set of management fundamentals in interpersonal communication skills, team building, statistical thinking for leaders, and process improvement skills among others⁸. Further, in many situations it is the manager who is trained in the quality concepts and, in turn, expected to teach them to subordinates. Train the leadership and then let them train the rest of the team! I know of only one company that ever tried a similar procedure with value training.

Given the competition for employee's time and the typical maximum training budget of 5% of salaries, which is the better value? Is it comprehensive quality training delivered, at least in part, by managers over a one to two year period or 40 hours of workshop training in the job plan? As an employee formulates a career plan, which training and education strategy will better serve individual career objectives? If I were a manager seeking to nurture my subordinates and help prepare them for a career, which training and education strategy would I favor?

There may even be an additional, more selfish, consideration. The changes in our society are leading to increased automation. From a marketing perspective, the organization that meets the market demand quickest and best is likely to be the survivor. The product oriented value specialist has few opportunities in such an enterprise. Instead the need is for analysts trained in eliminating non-value added work elements from processes and reducing rework by improving process control and reducing process variation. In the future that I see hurtling toward us, the value practitioner's career success may depend upon how well these concepts are understood and executed.

INTERVIEWS

An initial dialogue between customer and value practitioner typically reveals major differences in their perspectives. The practitioner markets value efforts based on a flow of cost reduction ideas. The customer sees turbulence. The practitioner talks of improving value by maintaining quality, reliability and a host of other "ilities." The customer knows the marketplace is becoming much more sophisticated and demands new features and new levels of reliability and serviceability. Maintaining the "status quo" quickly leads to a competitive disadvantage and eventually perhaps even threatening the survival of the enterprise. The customer looks at the speed with which the organization can respond to the needs of the marketplace. Attention is riveted on those activities that first assure survival and second secure and expand markets. Value applications that focus on cost reduction have a tenuous nexus to long term organizational objectives in current consumer and industrial markets.

As the conversation continues, the value practitioner begins to press for answers to questions that provide insight into the customer's goals. Each organization is different and each has a unique strategy for mapping its future. The following is not intended to be a comprehensive set of questions. It is intended to be a sample set to illustrate the considerations that a customer and market driven value application might seek to satisfy.

1. Will the value improvements help to differentiate our products and services in the market place?
2. Will the value training program support our need for team building?
3. Can we use value concepts to improve product development processes and reduce product

development cycle time to less than our competitors?

4. Is the use of value concepts to be a mainstream activity or a peripheral one?
5. Are the value applications going to lead to the identification of root causes and the correction of process problems?
6. How will we measure the success of our value activities?
7. Will we be able to identify which corporate goals and activities are supported by the value activities?
8. Are the goals supported by the value activities long range or short term?
9. Will the value effort be perceived as a permanent mechanism for assisting in continuous improvement activities or is it a technique for achieving short term fixes?

With an agenda of these or similar questions, the practitioner can begin to build an understanding of the corporate objectives and how value concepts can assist in their achievement. Even more importantly, the practitioner can build a set of customer driven measures to track how well the customer is being satisfied. The following is a simple example of such a construct.

CUSTOMER SATISFACTION

The idea of measuring and tracking customer satisfaction is a popular one. There are many different ways this can be accomplished. I am even aware of one company that provides personal computer based software⁹ that will assist the practitioner in the steps needed to define the organization's goals, determine the alignment to the goals of subordinate activities, provide agendas for meetings, and assist in the development and display of the measures used. For this paper we will leap to the final calculation and one possible display of customer satisfaction. But, the reader is reminded that many important procedural steps have been omitted.

In determining the factors to be used for measuring the success of any effort there are three necessary ingredients. First, the parties involved must agree to a description of the factor to be considered. Second, there must be a way to measure the success of the factor. Thirdly, there must be a success criterion. Success criteria which allow for continually raising the success horizon are preferred. Succinctly, to measure the success of any enterprise you need to know where you are going, how you are going to get there, and when you have arrived.

The following chart, Figure 2, illustrates how factors selected as the measure of satisfaction for a value effort can be determined, evaluated, weighted and then summed to provide a periodic figure of merit. Over time these figures of merit can be plotted to graphically illustrate progress over time. For this illustration, I will use only four factors although there are no constraints as to the number. However, the larger the number of factors, the more complex the analysis and the less attention that can be paid to each factor.

VALUE ACTIVITY SUCCESS INDEX			
Factor	Raw Score	Weight	Product
	(Percent)		
1. Implementation factor	40	.3	12
2. Employee involvement	30	.1	3
3. Product coverage	60	.2	12
4. Market (compliments/responses)	70	.4	28
Total		1.0	52

Figure 2

So what?

Well, there are several ways of looking at this example. First, is the notion of what is a successful effort. If we had previously decided that the goal was 98 than we clearly have a continuing opportunity to improve. Goal setting, however, can be tricky. Often, what happens is that the goal becomes the objective. If the goal is too easy, people slack off. If too difficult, they get discouraged and quit trying. If there is too much emphasis on goals it may drive people to fudge the numbers to show the goals have been achieved. Any of these activities are, of course, self defeating.

Rather than absolute goals, the objective might be set in terms of improvement. For example, we could start at whatever point we are at, and set an improvement goal. If our goal is a 10 percent improvement over some stated time interval then we could track the trend to see what progress is being made. Remember, in any system there is enough random variation so that a single data point provides little confidence that we are in fact improving or whatever. But, over time the measure will display our success (or lack of it) at improving the customer's satisfaction index, as shown in Figure 3.

Customer Satisfaction Chart

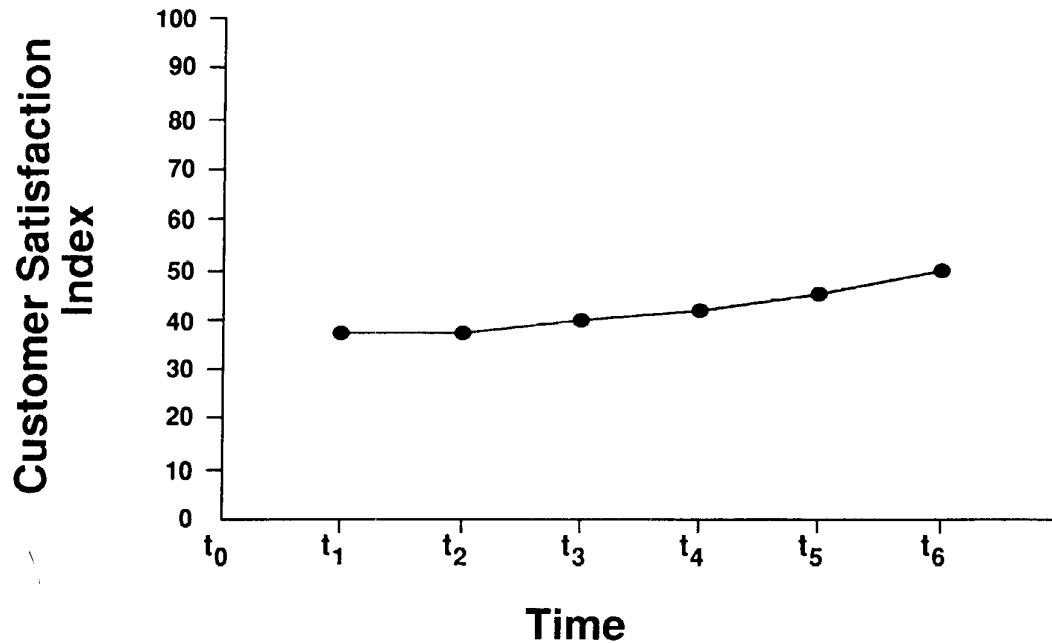


Figure 3

CUSTOMER SOPHISTICATION

The foregoing example was based on the assumption that the client or employer was sufficiently sophisticated in value and quality techniques that useful dialogues and discussions could be conducted. But, what if that is not the case? What if the client or employer is unschooled in the related value and quality concepts? It then becomes the value practitioner's responsibility to educate (not train) the client or employer to understand the relationship of product, process and customer. Further, for an optimum arrangement the practitioner and the client must reach an understanding regarding mission, vision, and objectives. Absent this understanding there is considerable risk that the practitioner will undertake value activities that either are of little interest or are misunderstood by the client or employer. These circumstances often lead to a "false start" and may result in a sputtering effort that eventually self-extinguishes, never to be re-ignited.

SUMMARY

To serve clients or employers effectively, the value practitioner must grasp new concepts and new techniques. The notion of reducing costs while maintaining the current level of quality and reliability ignores the reality of the market place. Rising expectations in the quality, durability and suitability of the products and services available in a global market make quality related value improvements paramount. In addition to internal metrics, customer satisfaction measures should also be included to determine the effectiveness of value efforts. The procedures should assure that value efforts support long term and short term organizational, team, and individual goals. Value practices should be based on current realities and global market place considerations. Over time, the customer's satisfaction index along with displays of internal measures of achievement can be used to demonstrate the increased effectiveness of value efforts.

This paper is not intended to provide answers. I do hope it stimulated the readers to consider how current quality concepts can be used to improve value practices and how value concepts can be used to strengthen quality based process improvement efforts. The relationship between quality and value concepts has never been more evident. It is up to each of us to integrate them fully for the benefit of the client or employer.

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Although the ideas, opinions and experiences cited in this paper came largely from my employment in the Department of Defense, they are my own. They do not represent Department policy nor do they necessarily represent the opinions of any other employee of the Department.

GAF