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Improving Your Competitive Position Through Total Quality Management (TQM)

IVA-3

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Overview

Today we see Total Quality Management (TQM) surfacing as a requirement in government and industry solicitations, such as Requests for Information (RFIs), Requests for Proposals (RFPs) and Requests for Quotes (RFQs). This new requirement, resulting from many activities propagating throughout industry and government, influences the contractor/customer relationship profoundly.

In the past, the subject of quality has typically been reserved for manufacturers. This is changing, however, as stringent quality guidelines surface in solicitations and contracts involving professional and other services. We also see changes occurring in quality requirements that traditionally influence the prime contractor/sub-contractor relationship. Quality companies now realize they can push their own quality efforts just so far before they must turn to their providers of goods and services to continue improving their own operations.

Today's TQM requirements do not circumvent traditional quality requirements, such as MIL-I-45208, MIL-Q-9858, NHB 5300.4(1B), FED-STD-368, ANSI/ASME, or NQA-1. Rather, TQM causes a movement away from traditional Quality Assurance (QA)/Quality Control (QC) functions and applies system-related factors to the process that can be directly tied to America's quality standard of excellence, the Malcolm Baldrige National Quality Award.

Background

Organizations move toward quality for a variety of reasons. It should be noted that most do not make the change without cause. In the private sector, customer expectations typically prompt the changes. Remaining competitive in today's global economy requires an increased level of product and service quality at lower cost. In government the motivation often arises from Presidential Order #12552, or more importantly, constrained budgets.

The standard scenario in government is an increase in customer expectations and, at the very same time, a decrease in the resources available to provide these services. In some instances, TQM is viewed as a vehicle to do more with less. In other instances it is perceived as a means to prioritize business practices and reallocate resources to meet the greatest (or most promising) needs to ensure survival. This has profoundly impacted governments manner of doing business, where the terms "customer," "strategic planning," and "competition" are often new terminology.

Introduction

We can define TQM as:

"A cooperative form of doing business that relies on the talents and capabilities of both labor and management to continually improve quality and productivity using teams."

Embodied in this definition are the three ingredients necessary for TQM to flourish in any company: (1) participative management, (2) continuous process improvement, and (3) the use of teams.

Participative management arises from practicing TQM. Arming employees with the skills and support to better understand how they do business, identifying opportunities for improvement, and making change happen, allows participative management to flourish. Recognizing the capabilities and contributions employees can make begins to chip away at the traditional barriers separating management and labor. Those first few steps toward participative management occur slowly; momentum builds gradually. Traditional barriers between management and labor must be breached by an entity willing to take the plunge and offer a show of faith. That is management's responsibility.

Continuous process improvement means accepting small, incremental gains in the right direction toward Total Quality. Substantial gains result from the accumulation of many seemingly unimportant improvements whose synergies yield tremendous gains over the long run. Continuous process improvement reinforces a basic principle of TQM-long-term focus. Corporate leaders must be willing to invest in Total Quality today, recognizing that big gains may lie in the future.

Finally, TQM involves teams. Each team includes a cross-section of members representing some part of the process under study. This includes the person who works within the process, the supplier of services and materials brought into the process, and its beneficiaries, the customers. Through training, people learn to recognize opportunities for improvement within our company, understand our business practices, apply a structured approach to problem solving, and offer management recommendations on where to apply scarce resources first, to realize the greatest gains. This approach empowers people directly involved in the day-to-day operations of the company to improve their work environment and aligns them with the corporation's goals for improvement. This personal commitment is achieved in exchange for individual and team rewards, recognition, and job security.

Standards of Excellence

Two basic standards of excellence exist for quality-the Malcolm Baldrige National Quality Award (MBNQA) in the private sector, and the President's Quality Improvement Prototype (QIP) Award in the public sector.

The Malcolm Baldrige National Quality Improvement Act of 1987 establishes an annual United States National Quality Award. The purposes of the Award are to promote quality awareness, to recognize quality achievements of U.S. companies, and to publicize successful quality strategies.

The Award formally recognizes companies attaining preeminent quality leadership and permits them to publicize and advertise their awards. It encourages other companies to improve their quality management practices in order to compete more effectively for future awards. The published Award criteria serves as quality improvement guidelines for U.S. companies. Furthermore, the dissemination of non-proprietary information about the quality strategies of the Award recipients spreads the message that quality is achievable.

The evaluation is based upon seven examination categories:

1.0 Leadership
2.0 Information and Analysis
3.0 Strategic Quality Planning
4.0 Human Resource Utilization
5.0 Quality Assurance of Products and Services
6.0 Quality Results
7.0 Customer Satisfaction

The President's Quality Improvement Award criteria differ from the Malcolm Baldrige criteria in one important area. The Malcolm Baldrige Award favors customer satisfaction as the ultimate goal, whereas the Prototype Award focuses on quality results. Therefore, while the standards differ somewhat, the final

analysis of quality is very similar. This common understanding of quality helps people develop the quality-related criteria for RFIs, RFPs and RFQs.

Trends in Quality

Government's movement toward TQM is prompting a re-evaluation of the traditional roles of inspection, testing, planning, and supplier relations. The Federal Acquisition Regulations have not kept abreast of this change, although the interpretation of this information has placed a much greater burden on the Contracting Officer.

Inspection, a well-known term in the quality arena, takes on new meaning as we move toward TQM. Traditionally, inspection meant examining and testing supplies or services to determine whether they conformed to the contract requirements. A movement toward TQM dictates a change to quality audits and process certification. An audit, in sharp contrast to an inspection, fosters a participative ethic between customer and contractor, recognizing that they both work toward a common goal or outcome. The police-action attitude typically associated with inspection is replaced with education on behalf of both parties.

A contractor might look for several indicators to determine if the customer is moving toward TQM. These can include specific terms such as vendor reduction program, vendor certification/qualification, quality audit, partnering, and strategic supplier. Educated customers realize they no longer can afford to bear the costs of OUR mistakes, nor do they have to. And as a company evolves through the process of TQM, it will expect help from suppliers in the pursuit of increased product and service quality. So if your customers are describing their implementation of TQM, you should realize they will expect you to participate.

Developing Quality Requirements

Guidance compelling us to use TQM in our source selection process begins at the highest levels in industry and government (Figure 1). This guidance has propagated throughout the procurement process, surfacing in RFIs, RFPs and RFQs. Figure 2 provides an example of how to develop TQM requirements and describes the methodology.

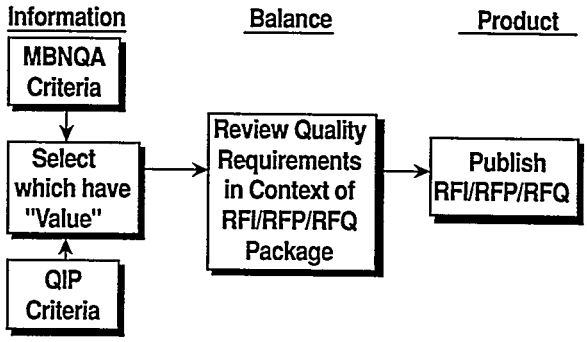
Figure 1.
Example of TQM Guidance

"It is critical at this time that the Department of Defense (DoD), its contractors, and their vendors focus on quality as the vehicle for achieving higher levels of performance."

"I am giving top priority to the DoD Total Quality Management (TQM) effort as the vehicle for attaining continuous quality improvement in our operations, and as a major strategy to meet the President's productivity objectives under Executive Order 12552."

Source: Secretary of Defense Letter Dated Mar 30,1988
Subject: DoD Posture on Quality

Figure 2.
Formulation of Quality Requirements for Solicitations



Developing quality requirements involves three steps: information, balance, and product. Information (or guidance) in this area is the Malcolm Baldrige or QIP criteria. Here you select the factors you consider to have value. They could be top management involvement, training, processes targeted for improvement, measurement, or others. Balance considers your quality requirements in context of all other factors involved, such as technical merit, on-time delivery, or cost. Here the relative point assignments are made and the "'value" associated with quality determined.

In today's environment, as quality increases in importance, it often accounts for a significant portion of the technical or management points awarded in the proposal evaluation process. As the final step, the RFI/RFP/RFQ is published and shipped to the contractor for consideration.

Figure 3 provides an example of one RFQ criterion for distribution services. Here quality accounts for 205 out of a possible 700 technical points. In this case the factors equating to quality in the eyes of the customer include training, relevant experience, policies and procedures, and management commitment to quality. Some of the factors are subjective and descriptive in nature, such as management commitment, where you discuss your direct involvement in the quality process. In addition, you describe your leadership style, which encourages the participative ethic embedded in the definition of TQM.

Figure 3.
Example RFQ Criteria for Distribution Services

Date of RFP: August 1990 Customer: DOE Contractor

Category	Point Assignment
10.0 Quality Control Program	
10.1 Training	30
10.2 Experience	30
10.3 Policies and Procedures	30
10.4 Management Commitment to Quality	30
10.5 Flow Diagram.	15
a) Tasks	20
b) Monitored Processes.	20
10.6 Tracking Costs	30
Total Points for Quality Program	205
Total Technical Points	700
Total Proposal Points	1,000

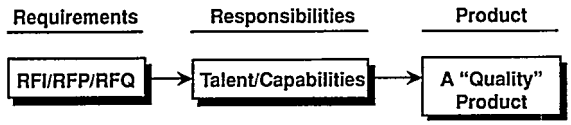
The more technical requirements, such as a flow diagram, require you to describe your processes. Here, you describe the processes you will use to accomplish the work under bid. Flow diagrams, or flow charts, provide a graphic means for depicting the steps you will take to accomplish the work. Other factors considered in this area include establishing logical starting and ending points in the process, establishing metrics, monitoring these factors on a regular basis, and comparing your performance to others with similar processes.

Responding to Quality Requirements

When developing a proposal in response to an RFI/RFP/RFQ with a quality requirement, three logical places exist for describing your TQM approach. They are the cover letter, a section on TQM, and what I call the thread of credibility. The cover letter is a logical first step for communicating your movement into the quality arena, whether it is an RFI/RFP/RFQ requirement or not. In a section devoted to quality, you can describe your approach, explain how you are encouraging your people to practice these skills, and discuss the progress you have made thus far. The third place for mentioning your quality approach is the most subtle, yet the most powerful. It weaves the concepts of leadership, measurement, work flow, and other factors throughout the entire proposal. This approach reinforces TQM as a system of doing business, which touches the technical, administrative, costing, and other facets of your business practice and proposal sections. This third approach, although most indicative of the TQM philosophy, assumes a certain sophistication on behalf of the party reading your proposal and should be accounted for in your decision-making process of where and how you will place TQM in your proposal.

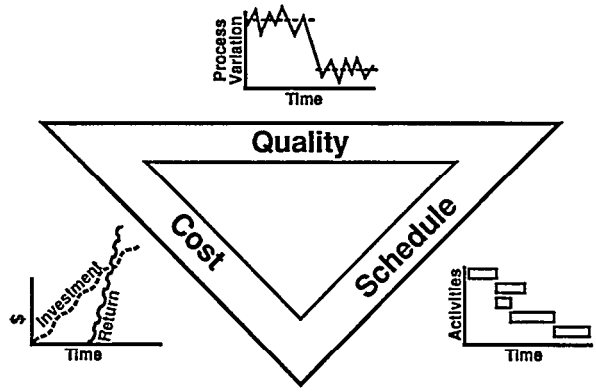
Figure 4 shows the three basis functions performed in the proposal development process: requirements, responsibilities, and product. The requirements are read in the RFI/RFP/RFQ and interpreted based upon your knowledge of the customer. Your ability to address these requirements is also assessed in comparison with that of your competitors, which will influence your decision to bid on the work. After assigning responsibilities to your in-house and hired talent and allowing for appropriate reviews and adjustments, you can converge on a final product.

Figure 4.
Proposal Development Process



A "Quality" Product = The "Best" product you can produce which "meets" the customers' requirements and "exceeds" their expectations.

Figure 5.
Definition of Quality



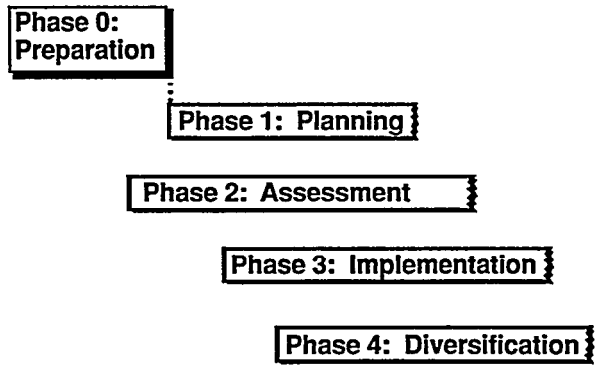
Probably the greatest value TQM offers at this stage is its application to the proposal development process itself. TQM can help your team develop more quickly. Disconnects surface earlier in the proposal development process, so you can converge on a second-or third-generation product which will cast your company in the most favorable light. Remember, *quality in the proposal development process means creating the best product you can to meet the customers' requirements and exceed their expectations.* In today's economic climate, merely meeting the customer's needs is simply not enough. innumerable procurement actions have been unsuccessfully contested by companies who had written a 'good proposal" and merely "answered the mail."

TQM has caused us to re-evaluate many facets of proposal writing procedures. One area routinely surfacing as a difficult point is your definition of quality for that specific work, as shown in Figure 5. Traditionally we have considered cost and schedule as synonymous with quality. Today, TQM forces us to consider other metrics for quantifying performance. In the professional services area, for example, quality may be a quantification of the accurate processing of change orders. In the distribution industry, quality may mean accurate delivery of 95% of ordered items within 24 hours of receiving the order. In the manufacturing industry quality can mean demonstrating your processes are in control, certifying the quality of your delivered product, and alleviating the need for your customer to inspect it. Though quality is not always specified in the RFI/RFP/RFQ, it is an important part in your document.

Implementing TQM

Figure 6 provides an overview of the five-phase process to implement TQM in your company (Jablonski,l991). As you can see, Phase 0 is unique in that it has a definite beginning and end. This differs from the other phases, which evolve over time and go on continuously.

Figure 6.
Five Phases to Implement TQM



Successful implementation of TQM begins with Phase 0, Preparation. It is termed Phase 0 because it actually preceeds a building process involving the organization's Key Executives. Here, Key Executives develop the organization's vision statement, set corporate goals and draft policy in direct support of the corporate strategic plan. Phase 0 concludes with a commitment of resources necessary to plan the implementation of TQM.

The beginning of Phase 1, Planning, lays the foundation for the process of change within the organization. individuals who will make up the Corporate Council use the statements developed during the Preparation Phase to begin the meticulous planning process. Once formed, the Corporate Council develops the implementation plan, commits resources and makes it a reality. The planning process relies on inputs from all subsequent phases to help guide its implementation and evolution.

Assessment, Phase 2, involves the exchange of information necessary to support the preparation, planning, and diversification phases. It consists of surveys, evaluations, questionnaires and interviews throughout the organization at all levels, as well as self-evaluations assessing individual and group perceptions of the organization's strengths and weaknesses.

Phase 3 is Implementation, where the investment made during the previous phases pays off. A well-defined training initiative for managers and the workforce begins. With the full support of the Corporate Council, Process Action Teams (PATs) are chartered to evaluate and improve processes and implement change, using the tools of TQM.

The final step, Phase 4, is diversification. Accomplishing Phase 0 (Preparation) through Phase 3 (Implementation) provides the organization with a substantial knowledge base: Policy has been defined, objections to change have been overcome, and success stories may already be reported by PATs. At this point, with newly acquired experience, other parts of the organization should be invited to participate. This may include subordinate organizations, strategic business units, subsidiaries, off-site divisions, suppliers, vendors, or various departments within the organization. Diversification is recommended after the parent, implementing organization, has earned credibility.

Conclusions

The times they are a changing. Government and industry movement toward TQM profoundly influences the manner in which we all will be expected to do business in the near future. The term, "strategic supplier," is becoming a routine way of doing business, and as this trend continues fewer contractors will have larger workloads. Seeley Enterprises, a supplier of sheet metal and high-precision machined parts to the defense industry, recently weathered a ten-times reduction in their customers' supplier numbers. This degree of reduction is not uncommon for major companies moving toward TQM. So if your customer is beginning to plan for the implementation of TQM, it may be time for you to consider its application in your organization. To wait may be too late.

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