Implementation of Total Quality Management, Lessons Learned

Dr. Thomas J. Haas

Dean, U. S. Coast Guard Academy,

U. S. A.

Implementation of Total Quality Management, Lessons Learned <Managing Quality-A Challenge for Leadership>

by

Thomas J. Haas, Ph.D.

Dean, U. S. Coast Guard Academy New London, CT 06320-8101

ABSTRACT

Managing quality is nothing new, but it has increasingly become more challenging. Demands from customers, flatter organizations, measuring and assessing outcomes, stiffer competition for resources, technology, environmental concerns and others, all have created changes in the workplace for which enhanced leadership is needed.

TQM, CQI, TQL, (managing quality), other acronyms can be summarized as a means of moving an organization into the new millennium with a keen focus on people, service, efficiencies, effectiveness and excellence. It is not an accident. It is the result of a clear, well-directed strategically focused thinking.

Attention to quality encourages individuals and teams throughout organizations to continually learn, think and contribute ideas on how to explore processes that affect them. The organization must change into a learning organization that seeks to continually improve its processes and services. This learning attitude requires a cultural shift from autocratic to more participatory leadership.

This presentation will examine the principles and lessons learned from implementation of quality initiatives from different organizations. Many of the themes shared are independent of the source and, as such, may be helpful in validating what you are doing or give you ideas on leading and implementing change within your organizations.

I. Introduction

Efforts to transfer the principles of Total Quality Management (TQM) or Continuous Quality Improvement (CQI) from corporate settings, whether in industry, service or education, have enjoyed uneven success. In fact, quality programs can be sabotaged from a number of directions. Some of these include not being patient enough for the full planning cycle to be completed and a failure of top leaders to be committed or relinquish authority. Others include the absence of a commonly understood and widely accepted institutional mission, or mechanical use of tools without cultural change.

This paper/presentation will define quality, link it to strategic planning and leadership, and illustrate best practice through lessons learned. Much of what will be shared in this paper comes from U.S. Coast Guard documents and other research in the corporate sector, as well as the field of education. The big picture of quality comes into focus from rising expectations on the part of the customers, stiffer competition for resources (people and money), technology, and environment concerns. Change in todays work environment has dictated a new way of doing business.

II. Quality

Quality, for purposes of this paper/presentation, is defined as encouraging individuals and teams throughout organizations to continually learn/think and contribute ideas on how to improve processes that affect them. This learning attitude requires a cultural shift from autocratic to more participatory leadership styles, and is necessary to change the institution into a learning organization. The work of Peter Senge is recommended.

Quality that is designed to make an organization more flexible, more efficient and better able to use its internal resources is founded on five principles: Enhanced leadership; flatter organizations; customer focus; measuring your outcomes and using assessments for improvement; and finally, effective communications. These principles, once in play, allow the organization to step in the right direction in achieving both quality and its mission.

At this point, some history and background of the quality movement is in order. It is not new. In fact, a few of the following people identified below have their roots in the quality movement from the 1950s. But all have a similar theme: quality means exceeding customer expectations! All features and characteristics of a product or a service that bear on its ability to deliver even partly stated or implied custom needs must be considered in delivering quality.

① W. Edwards Demings "14 Points" placed a strong emphasis on the need to accurately measure work procedures and processes prior to making adjustments. He truly believed in process improvement for quality service for the customer.

- ② Joseph Jurans "Project Management" looked at delivering quality by planning, and by searching for root causes that were detrimental to quality. He professed that quality practices must be project-by-project in their orientation.
- 3 Philip Crosbys "Zero Defects" articulated the need for clear, specified, measurable requirements. Each requirement for the product or service meets the needs of the customer, and no defects would be tolerated.
- ④ Kaoro Ishikawas "Problem Solving" developed approaches to take data and transform it into useful information. His Fishbone Diagram helps draw out logic, and quality circles help one see coworkers as internal customers who need to be served throughout the organization.
 - ⑤ A. V. Feigenbaums "System" combined the work of others and promoted a systems approach to thinking about processes and outcomes. He believed that the cost of quality can be measured accurately.

Our current understanding of quality TQM, CQI, and TQL (from the Navy) has melded together the best of these contributors, but must be adapted to get the best fit for any organization. So what is contemporary quality? By experience, it must be defined in the "eyes of the beholder." It is an expectation of the customer for a product or service that delivers on the expectation. For the organization, it is a culture that values doing the right things the right way.

The goal of this perspective is that organizational quality will be a means of moving the organization into the 21st Century, with a keen focus on people, services, and excellence. It is intended to provide continuous improvements despite a relatively fixed resource base. Quality is not an accident, but is a result of clear, well-directed, strategically-focused thinking. Quality allows the institution to be more flexible, agile, and efficient, and better able to use its full range of resources. It is a means to move from survival to excellence.

III. Strategic Planning

Inherent, therefore, in our discussion are the strong linkages between quality and strategic planning. Strategic thinking is a better term. This means "to maneuver forces into the most advantageous position so that the institution can strive for

quality and accomplish its vision and mission." (Ray Haas) Strategic thinking is a way to manage under chaos, learn from past experiences, and position for a future competitive advantage. The planning part comes in as one thinks about the future, organizes those thoughts, and writes them down. Additionally, this process of thinking and planning must bring the budget (human and operating) to bear on priorities and decision-making.

What makes the connection between quality and strategic planning fail may be a misunderstanding of purpose, no vision, lack of commitment, absence of an infrastructure, unrealistic expectations, or opposition of powerful groups. In contrast, what makes this all work, what builds success, are realistic timelines, sensing the real needs of the customer, building awareness (internally and externally), and further building broad support and consensus.

The tenets for planning are centered on the following questions:

- · What does the institution stand for?
- · What is the mission, the vision?
- How does the institution define and measure its quality, its excellence and its success?
- · Who are the customers?
- · What are their needs?
- What are the service(s), the product(s)?
- · What are the outside forces? the inside forces?

These questions are all rooted in a fundamental need of any institution to know its values: What are its guiding principles, assumptions and motivations? Examples of these include innovation, integrity, flexibility, tradition and others. Then, and only then, can a realistic vision and statement of purpose/mission be articulated. A "vision statement" is usually written as a "stretch goal." This must be shared amongst all in the organization. It must be understood. It is the mantra. Next the "statement of mission" defines core purpose(s), responsibilities, sets priorities and examines opportunities.

Then the process of strategic thinking clarifies on the definition of terms. Definition helps for accountability, assessment, productivity and growth. Critical to define is: who are the customers? What are their expectations for your product or services? The product and service must satisfy (or even delight) customers,

to not only attract but most importantly retain, them. Of further importance in this area is what is technology role (just look at the <u>e</u>-business boom in the economy), and also cultural considerations of the customer.

From an external perspective, the forces include political, economic, demographic, social, and cultural. Internally, the workers, unions, management, support service and internal cultural forces are viewed from that perspective. These forces must be known and understood for any successful implementation.

Where this all leads, of course, is to planning: strategic thinking that allows an organization to adapt and lead change, and helps the organization achieve its purposes. Lets explore the concept of change.

Weve used the term culture many times throughout this paper/presentation. It is best understood as an organizations shared values, beliefs, expectations, attitude, assumptions and norms. Culture is to an organization as personality is to an individual. A strong culture provides a unifying theme and means, directing and mobilization for the organization. At times, change will challenge culture, just as thinking and learning changes an individuals personality. In order to effect critical change, the leaders must recognize the importance of culture, including its influences in both a positive and negative way. Therefore, key to any change are leadership style and management practices.

Another key to cultural change is that resistance is normal and should be anticipated. Actually, it is healthy. The cycle to change resistance is denial (that change is needed), resistance (inertia), exploration (what is good about the change) and commitment (we are better off). The factors that contribute to successful change, in addition to the "change agent" or leader, is that accountability has been clearly identified: plans make it happen: and people in the organization feel good about their jobs; able to contribute; and empowered to be creative and encouraged to pursue quality.

Having the right structures in place can facilitate change. "Quality Councils", "Executive Steering Committees", and "Action Teams" are just a few. The players in the process include a coordinator, President, VPs, middle managers, facilitators, and team members.

IV. Total Quality Management Tools

So how do we do all this? What are the tactics? The rest of this portion of the paper will describe TQM/CQI tools that help organizations improve processes. These are <u>not</u> an end to themselves, but help to achieve the outcomes desired, the results.

To help explore the "Big Picture" of process improvements, FADE (Focus, Analyze, Develop, Execute) has been used with a good deal of effectiveness. This method includes a focus to generate a list of problems or areas for improvement, selecting one, verifying its relevance in achieving purposes, and further defining the problem. Next is to analyze, to collect the data, and determine root causes for the problem. This stage helps in knowing what the problem really is. Developing a list of solutions, selecting one and developing an implementation plan helps the organization make the changes needed. And finally execute means to commit to the plan, and implement the changes.

Another process improvement protocol is Demings cycle of Plan, Do, Act, Check. (All with feedback loops to results).

Generating ideas is another important step in the strategic thinking paradigm, and TQM/CQI tools include brainstorming and multivoting. When people contribute their thoughts to make things better, organizing information and identifying opportunities for improvement, implementation of change is facilitated. Ownership is established.

Brainstorming is a group activity that helps with creative thinking about problems or opportunities. This process does not analyze the thoughts but creates an atmosphere of sharing them. Multivoting gives the group a chance to prioritize the ideas to get to the vital few from the trivial many. Other tools include contingency diagrams, surveys, the Five Whys, Force Field Analysis and others.

Decision-making is at its best when founded upon data. Numerical facts (the data) can be transformed into useful information and provide the foundation for action. The picture that data gives is then founded on real reason, not intuition (though this does have a role at times). The facts provide a means for communication and repeatable methodology, and can confirm assumption or opinions.

Finally, analyzing the problems using the data and transforming it into useful information is captured in tools like Pareto Charts or Fishbone Diagrams. Pareto Charts are bar charts that support multivoting, and Fishbone Diagrams demonstrate cause-and-effect relationships. Flow Charts are another good way to take data and "flow" it into a logic to support decision-making.

In the CG and Navy measurement is vitally important...but measuring what is the question. In the CG one of our strategic goals is:

"We will deliver high quality services to the American public by all CG people continuously improving our processes to better meet the ever changing needs of our customer."

Measurement gives leaders a chance to be on much firmer ground as decisions are made. Further, using all the tools of TQM gives leaders the chance to communicate the results, improve the processes and support the strategic plan. TQM gives a competitive edge to organizations.

TQM measurements key elements provide for efficiency in time and effort, effective use of limited resources (priorities), and fixing those things that need fixing. Further, action plans, benchmarks, follow-up and responsibilities are all tied to the mission. Measuring progress must be done at all levels of the strategic plan, from vision to business objectives. Another way to say this is that the outcomes desired must be assessed in order for any quality initiative to be successful.

V. Leadership

In this paper we have described quality change, and tools for support of customer needs and decision-making. We now need to address one last fundamental in making this all fitleadership; in terms of leaders, teams and principles.

Leaders first. The attributes of successful leaders must include:

- a sense of vision and commitment.
- · taking care of their people.
- · creating a motivating work environment.
- integrity.

- developing people.
- · recognition.
- · being a change agent.
- · learning continuously.
- · having influence to create, and sustain change.

Many books and courses have described leadership and leaders, and all carry the theme that leaders are driven by excellence and quality. They make a difference for the long-term. But they can not do it alone!

In todays world Teams (Quality Teams) become a competitive advantage to organizations achieve their goals. We must then describe the attributes of effective teams. Simply, Teams of people make it happen! Teams--successful teams--are committed to a common vision of excellence; they understand teamwork, cooperation and value innovation, and take pride in individual and team accomplishment. Teams are moral (similar to individual integrity), and are made up of motivated people who unselfishly give their best efforts.

To summarize the principles of good leadership, we turn to James Moore, who recently wrote. New Millennium Creates Need for Old-fashioned Leadership. Great leaders dream about the future with ideas and ideals. They have a sense of vision. They take risks and understand Tofflers description of the rate of change in todays world. Leaders have a passion for flexibility and enjoy challenges. They learn from their mistakes and are resilient. Leaders have the power to inspire, can motivate without intimidation, and are able to delegate and teach others skills to succeed. They are champion communicators who share with many what the institution stands for and what must be done. Finally, good leadership is both strategic and technical. Leaders and teams position organizations for the future by taking advantage of current and projected trends.

VI. Lessons Learned in U.S. Coast Guard

In closing, lets described lessons learned and answer the question, "is it worth it?" From the Coast Guards <u>Implementation Guide and Measurements of TQM</u> the following has been learned:

- · Start in administrative areas.
- · Employ "small gains" approach.

- · Participation should be voluntary at the start.
- · Lead by example.
- · Let people choose their own projects.
- · Just do it.
- Avoid using buzzwords.
- Do not promise big savings or characterize it as a budget-cutting tool, even though efficiency may result.
- · Focus on improving service to customers.
- · Celebrate success and reward the team.
- · Be patient.

Is it worth it? Let's leave you with the following. In these exciting times of change, organizations are either growing and changing or are dying because they can not change. Organizations can be analyzed, and those which are most successful believe that the status quo may be the most dangerous course of action (or inaction), as the status quo may lead to an organization's irrelevancy.

VII. Concluding Remarks

We hope this paper has helped you understand the ideas of quality, strategic planning, TQM tools and leadership in order for you to determine the best course of action. After all you must determine if it is worth it...

Much of what is contained herein comes from a distillation of a multiple of resources, primarily the Implementation Guide for the Coast Guard. The principles for strategic thinking come from the work of Dr. Ray Haas, University of Richmond. Thanks to all who believe in quality and helped me put this work together, including CDR Rob Ayer who assisted with editing.