

Title:An Analysis of the Changes Required in OrganizationalBehavior in order to Develop a Quality Culture within an Organization.

Course: Year: 1994 Author(s): R. Markle

Report No: P94062

	ETM OFFICE USE ONLY
Report No.:	: See Above
Type: Note:	Student Project
Note:	This project is in the filing cabinet in the ETM department office.

Abstract: This paper explores some of the issues associated with changing an organization behavior in order to develop a quality culture within the organization. First, the author explores some of the traditional literature on developing a quality culture, looking for common themes and principles that can be applied to any organization. Next, he reviews some of the more current articles that suggest some general themes for organizational change, noting any new models of change that might be helpful. From these two explorations he next attempts to synthesize some general guidelines for changing organizational behavior toward a quality culture.

An Analysis of the Changes Required in Organizational Behavior in Order to Develop a Quality Culture Within an Organization

Richard B. Markle EMP-P9462

9462

AN ANALYSIS OF THE CHANGES REQUIRED IN ORGANIZATIONAL BEHAVIOR IN ORDER TO DEVELOP A QUALITY CULTURE WITHIN AN ORGANIZATION

by

Richard B. Markle

for

Dr. Dick Deckro

in partial fulfillment of the course requirements for

Total Quality Management I, Emgt 610

Portland State University

March, 1994

Motorola, a \$10.8 billion global company, in 1974 sold its television manufacturing facility in Chicago to Matsushita. Under the management of Motorola the plant had been averaging 150 defects per 100 television sets produced. By 1979 the plant under the direction of Matsushita was averaging only 4 defects per 100 television sets produced. The managers at Matsushita were using the same work force, only modestly improved equipment, and some new Japanese quality management techniques.¹ How was Matsushita able to achieve such better quality output using the same people and substantially the same production equipment? The only possible response to that question has to do with a fundamental change in people's behavior. But, what types of management techniques were necessary to cause this change?

This paper will explore some of the issues associated with changing an organization's behavior in order to develop a quality culture within the organization. First, we will explore some of the traditional literature on developing a quality culture, looking for common themes and principles that can be applied to any organization. Next, we will review some of the more current articles that suggest some general themes for organizational change, noting any new models of change that might be helpful. From these two explorations we will next attempt to synthesize some general guidelines for changing organizational behavior toward a quality culture.

One of the first people in recent times to address the subject of quality in organizations from a management perspective was W. Edwards Deming. Initially, he did not have much success in the United States. The economy was booming after the War and management generally did not have much faith in someone who was suggesting that business was in trouble. Without competition

¹Lloyd Dobyns and Clare Crawford-Mason, <u>Quality or Else: The Revolution in World Business</u>, (Boston: Houghton Mifflin Company, 1991) p. 127.

from other countries and unparalleled consumer demand at home, production was king and quality control came to mean end-of-line inspection.² Management assumed that there would be enough profit to cover any defects that did occur. Deming began to realize that the techniques that had been so successful during the War were fading from use because the right people had not been trained in their use. Management had shifted its focus to other areas and did not view quality tools and techniques as one of their major activities. Management was off measuring profits, return-on-investment, and using similar yardsticks.

Deming seemed to instinctively know that "what you measure is what you get."³ Since management was not directly concerned with quality and was not rewarding the efforts of the workers toward quality, within a few years after the War almost all quality efforts that utilized Statistical Process Control had ceased in the United States.

In Japan the story was different. The Japanese manufacturing facilities had been pretty much destroyed in the War. Deming was invited to Japan to deliver some lectures on quality control methods. It was felt by some of the Japanese managers, engineers, and scientists that the methods of quality control might lead the country out of the hard times after the war. The rest of the story is well known. The Japanese did take Deming's teachings to heart and developed the quality control systems that make them such formidable competitors today.

What conditions favored the Japanese adoption of quality control? The Japanese high level management personnel realized that they would need some edge in order to change the world's image of their products. "Made in Japan,

²Mary Walton, <u>The Deming Management Method</u>, (New York: Putnam Publishing Co., 1986) p. 9.

³Robert S. Kaplan and David P. Norton, "The Balanced Scorecard - Measures That Drive Performance," <u>Harvard Business Review</u>, Jan/Feb, 1992, p. 71.

stamped on a piece of merchandise was a synonym for junk."⁴ A second factor was the broken spirit of the Japanese themselves. When your back is against the wall, you are willing to try anything to remedy your situation. Deming's theories and techniques must have seemed like a lifeline at the time. It was a chance to focus their energies toward a goal, which if achieved, would go far toward restoring their former place in the world.

From this short review of Deming's early failures and successes we can gleam two bits of information that will help to create a general framework for successful organizational change. The first rule is that management must be involved. Without the support of management any organizational change effort can be easily undermined and defeated. In the United States management did not support or develop measures for the quality effort. The quality programs failed in the United States for this reason. In Japan the managers fully supported the quality effort. This provided the fertile ground for developing the quality effort. The quality focus was successful and succeeded in changing their cultural beliefs about quality.

The second bit of information that can be gleamed from this story is that a crisis seems to help the adoption and development effort. Managers and other leadership personnel seem to be more willing to listen when their back is against the wall. In the United States the economy was booming and manufacturers could not seem to build enough items to satisfy demand. In Japan the manufacturing machinery had been all but destroyed during the War. The Japanese people had little or no money to buy what products were produced. The Japanese were facing a crisis. In the United States there was no crisis.

⁴Mary Walton, <u>The Deming Management Method</u>, (New York: Putnam Publishing Co., 1986) p. 12.

At about the same time Juran was also teaching and developing his theories concerning quality. Juran likewise taught quality principles and techniques to some of the Japanese business managers. However, Juran began his teaching in Japan a little later than Deming. Juran felt that managers must take an active role in the development of quality programs.⁵ In fact he stated that managers must take the initiative in achieving quality within an organization. While their theories for achieving quality are stated in different words, they are quite similar. However, one area of strict departure is in the area of fear. Deming advocates driving out fear. Juran, on the other hand, suggests that fear is a good motivator which is capable of bringing out the best in a person.⁶ We will explore this contrast later in this paper.

Juran has developed a definition for Quality. It is "fitness for use."⁷ In later works he has modified this definition somewhat. Quality, more recently, has been defined by Juran as "(1) Product features that respond to customer needs; (2) freedom from deficiencies."⁸ This change in the definition reflects a new awareness of the special role that the customer plays in achieving quality.

With the two pieces of our general framework for achieving quality developed from Deming:

- management must be involved
- a crisis seems to help the adoption and development effort.

We can now add a third item from Juran:

customers play a special role in quality.

⁵J. M. Juran, <u>Juran on Quality by Design: The New Steps for Planning Quality in Goods and</u> <u>Services</u>, (New York: The Free Press, 1992), p. 328.

⁶James R. Evans and William M. Lindsay, <u>The Management and Control of Quality</u>, 2nd ed., (Minneapolis/St. Paul: West Publishing Co., 1993), p. 94. ⁷Ibid., p. 92.

⁸J.M. Juran, <u>Juran on Quality by Design: The New Steps for Planning Quality in Goods and</u> <u>Services</u>, (New York: The Free Press, 1992), p. 510.

A little later in time Phillip Crosby wrote a book, <u>Quality if Free</u>, ⁹ in which he defined quality as "conformance to requirements."¹⁰ He indicated that quality is easily measurable because it means conformance to requirements. Once we know what the requirements are, we can then measure how well our output conforms to these requirements. In stating that quality if free Crosby means that the degree by which a product or service does not conform to requirements is an indicator of how much it will cost to throw away or rework the item. This is where the cost factor comes in. From the above information we can add another factor of quality:

• Quality is conformance to requirements.

Crosby also departed from his predecessors by focusing on behavioral change as the key to achieving quality goals. Both Deming and Juran felt that the application of statistical process controls (SPC) was the key. Crosby felt that all of the required materials and equipment generally was in place to achieve a higher level of quality. The only thing missing was the behavioral change necessary to bring it into being. Therefore, adopting a quality orientation within an organization requires a behavioral change.

To summarize our points so far, the factors of quality are:

management must be involved

a crisis seems to help the adoption and development effort

customers play a special role in quality

quality is conformance to requirements

quality involves a behavioral change

⁹Phillip B. Crosby, <u>Quality is Free</u>, (New York: McGraw-Hill, 1979)

¹⁰Phillip B. Crosby, <u>Quality is Free: The Art of Making Certain</u>, (New York: Penguin Books, 1980), p. 15. Note: I did not have the original text, I had to make do with a pocket book version of the original text.

These three early writers in the quality arena provided a firm foundation upon which to build a quality program within an organization. Their ideas could be called the traditional approach to TQM. Many more modern writers have also addressed this area. While they do not have the fame that Deming, Juran, and Crosby have, their ideas are still worth noting.

Robert A. Goldense has written an article in which he addresses the role of work teams in the adoption of TQM. He states, "TQM requires a shift to adopting a participative management philosophy. The ideal form is self-directed or empowered and trained work teams."¹¹ Adopting a participative management philosophy involves a big change in most organizational cultures. Autocratic management styles of leadership are pervasive in modern organizations. This style fosters strict hierarchical lines of control. Coordinated effort and teamwork are not possible. In order to shift the style of management, teams must be created and trained. For a period of time the teams will not be functional because the concept of empowerment is foreign to their old way of functioning. The more time spent in developing the teams, the less chance that problems will develop later on.

The concept of a team has a rather loose meaning in our language. Because of this it is often not clear what is meant by shifting to a teamwork environment. Katzenback and Smith have defined a team as "a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable."¹² They also state that the makeup of a team is vital to success.

¹¹Robert A. Goldense, "Attaining TQM Through Employee Involvement: Imperatives for Implementation," <u>Journal of Management Science & Policy Analysis</u>, v8 n3,4, Spring/Summer 1991, p. 271.

¹²Jon R. Katzenback and Douglas K. Smith, "The Discipline of Teams," <u>Harvard Business</u> <u>Review</u>, March-April 1993, p. 112.

Each team must possess three skill areas within the group; technical or functional expertise, problem-solving and decision-making skills, and interpersonal skills.¹³ This does not mean that each member of the group must possess all three qualities. Rather it means that the team must be made up of individuals who possess diverse skill sets. The sum of the team members must possess expertise in all three areas in order to be effective.

Effective teams tend to move through four stages in their development. These stages are; forming, storming, norming, and performing.¹⁴ When the team in forming the members are not sure of the leadership divisions among the members. Little gets accomplished at this stage. Storming is the next stage and usually entails arguments and thrashing about at the team searches for ways to develop. Leadership roles are usually defined during this stage. Again, little gets accomplished during this stage. Storming is the most dangerous phase of the process of team development. Some groups never develop beyond this stage. If the team moves on, the next stage is the norming stage. The members finally accept the team concept, develop team ground rules, establish their own roles on the team, and accept that each member of the team is unique. Now that the roles of the members have been worked out, they have time to begin planning how they will work on various projects and develop goals to achieve success. The last stage is the performing stage. This is where the team works together to accomplish the established team goals. The team is now effective. If the team is able to develop their own projects and goals then the goal of selfdirected work teams as discussed by Goldense, above, has been accomplished. From the above discussion we can add another factor of quality:

¹³Ibid., pp. 114-115.

¹⁴Peter R. Sholtes, <u>The Team Handbook</u>, (Madison, WI: Joiner Associates, Inc., 1993), pp. 6-4 through 6-8.

Teamwork is necessary for TQM to succeed

One other aspect of an organization that is often overlooked in the quest for quality is the organizational culture. If the culture is not conducive to quality it is unlikely that a lasting move toward TQM will take place. What is organizational culture? Westbrook lists and discusses five attributes of corporate culture; language, artifacts and symbols, patterns of behavior, basic underlying assumptions, and subcultures.¹⁵ In any move toward TQM the organization must evaluate its culture on these five dimensions and develop plans to overcome any shortcomings. If the culture does not believe in TQM, then the culture will attempt to thwart any efforts toward TQM.

Creating a TQM organization requires that the members of the organization be aligned toward a common goal. This may be one of the most difficult aspects of a move toward TQM. It deals with peoples attitudes toward work. Merron suggests four steps to achieve organizational alignment.¹⁶ The first step is to determine where the organization is right now. Next is to determine where the organization wants to go. The third step is to determine how to get the organization to where it wants to be. The final step is to constantly reevaluate. These steps sound very simple and obvious. However, most organizations never give much consideration to these steps with regard to alignment within the organization. Managers do not often articulate their evaluation of where the organization is right now and where it wants to go in the future. How can the workers assist in this movement if they do not know where they are going? Communication is the key to success in alignment. This idea produces another factor of quality:

¹⁵Jerry D. Westbrook, "Organizational Culture and its Relationship to TQM," <u>Industrial</u> <u>Management</u>, January/February 1993, pp. 1-3.

¹⁶Keith A. Merron, " Creating TQM Organizations," <u>Quality Progress</u>, January 1994, pp. 51-54.

alignment is necessary to achieve quality

We have now developed seven factors that are necessary to achieve a successful move toward TQM within an organization. These factors are:

- management must be involved
- a crisis seems to help the adoption and development effort
- customers play a special role in quality
- quality is conformance to requirements
- quality involves a behavioral change
- teamwork is necessary for TQM to succeed
- alignment is necessary to achieve quality

These seven factors represent some general guidelines for changing an organization to reflect TQM principles. If any of the seven is missing, the odds are against achieving a successful transformation to a TQM driven organization.

Most organizations currently have not made a successful transition to TQM. This failure is usually due to one or more of these seven factors. A good crisis is often necessary to shake the organization out of its status quo. An example of a crisis could be increased competition resulting in the loss of market share. Perhaps the competition is selling a similar product with better quality at a cheaper price. Your organization might not be able to meet that price due to the manufacturing costs at your facilities. It is then time to reconsider your methods. If management is convinced that a move toward TQM might decrease your costs then the second factor is in place. Some market research to find out what your customers expect of your products might help you to refocus your efforts. From this information you can develop product specifications that will meet your customers needs. The organizational culture must be modified to reflect this new orientation toward meeting the needs of your customer. Developing and using work teams to solve problems will help in the behavior

modifications necessary to be more efficient. The last factor is achieving alignment among all members of the organization. By alignment we mean that the focus of each member of the organization is in achieving the goals of the organization. When these seven factors are present in an organization the circumstances are ripe for the change to a TQM organization.