Title: TQM: Effective Teams and the Organizational Culture Factor.

Course:
Year: 1994
Author(s):   J. Alvarez

Report No: P94055

Abstract: This research paper tries to show some of the factors identified by different authors which affect the implementation of TQM at the industry level. The research paper finally focuses on the importance of adopting a new corporate culture to successfully implement the TQM philosophy and its relationship with effective team building in an organization.

TQM: Effective Teams and the Organizational Culture Factor

John J. Alvarez

EMP-P9455

9455

RESEARCH PAPER:

TQM: EFFECTIVE TEAMS AND THE ORGANIZATIONAL
CULTURE FACTOR

SUBJECT: TQM 510

PRESENTED TO: DR. RICHARD DECKRO

BY: JOHN ALVAREZ

WINTER TERM

Date: March 8/94

BACKGROUND

The TQM philosophy evolved in the United States before the Second World War when Statistical techniques were developed by Bell Labs and used in manufacturing operations to measure variances of the processes. The increase of demand of goods and services generated after the war caused American industry to focus on producing quantity and not quality. As stated by Ray Graves ," Before the Second World War, advanced quality techniques that included statistical techniques built on the concept of variance were developed in the United States, especially at organizations such as Bell Labs. Faced with an overwhelming demand for goods and services after the war, Americans concentrated on producing quantity, not quality. In a sellers' market, producers became arrogant and focused internally on the company not externally on the customer".[1]

During the 60's and 70's superior products from Japan and Germany recaptured a significant share of the US market and caused American management to focus its attention on the TQM philosophy during the 80's. In his article "Total Quality-Does It Work In Engineering Management?" ,Ray states:

"Peters and Waterman's (1982) book, In search of excellence refocused the attention of management on the customer and quality. A few progressive companies went to Japan to learn, and even hired Deming, Juran, Crosby, and other quality gurus to teach them. The

---

[1] Ray Graves, " Total Quality-Does it Works In Engineering Management?", Journal of Management in Engineering, Vol. 9., No. 4, October, 1993, PP-444.

Japanese quality methodology, called TQC, began to be imported into the United States as Total Quality Management (TQM). In 1987, the US government began to recognize quality with the Malcolm Baldridge National Quality Award."[2]

This research paper tries to show some of the factors identified by different authors which affect the implementation of TQM at the industry level. The research paper finally focuses on the importance of adopting a new corporate culture to successfully implement the TQM philosophy and its relationship with effective team building in a organization.

[2] Ibid, PP-444

TQM AND FACTORS AFFECTING ITS IMPLEMENTATION

Different authors use or give different definitions of Total Quality philosophy or TQM. Ray Graves uses a definition provided by the Quality and Productivity Management Association (QPMA) which states :

" Total Quality is a client-focused, strategic, and systematic approach to the continuous improvement of performance."[3]

Ray Graves further states " TQ can be thought of conceptually as four quadrants of activities-process improvement, participative workplace, client focus, and leadership all interrelated and working together". [4] This article states that all this areas of activities or quadrants must be considered to implement TQM. The article further on states that the adoption of TQM requires changing the organizational culture to adopt the "new philosophy" by making a direct reference of Deming's second point. This cultural changes according to Graves usually begin with quadrant 1 ("Client focus') which results when the organization doesn't meet the customers needs and causes quadrant 2 ("leadership ") to develop a strategy to improve client satisfaction. Graves believes that to improve client satisfaction the company should rely on the latent potential of its employees by creating a more participative workplace.

---

[3] Ibid, PP. 444-445
[4] Ibid. 445

According to A. Blanton Godfrey TQM has become far more than a set of useful tools; it has become a new management philosophy leading to radical changes in the ways that people, companies, and even entire societies are working together. [5] In his article Godfrey emphasizes the importance of teams when he identifies self-directing work teams as one of the 10 clear trends for quality management over the next 10 years.

In another article " How to Use Process Improvement Teams ", Charles Weaver says that TQM is an organizational development effort that requires two organizational changes. The first is an educational effort to change the organization's culture and the second is a long-term education effort to increase the organization's effectiveness. As stated directly by Weaver:

" TQM is an organizational development effort that requires two organizational changes. The first is an educational effort to change an organization's culture, which includes how it recruits, trains, and manages its employees; how it selects and deals with its suppliers; and how it relates to its customers. The second is a long-term education to increase an organization's effectiveness. Long -term education involves learning new methods for planning, engineering, problem solving, consensus building, communicating, and using process improvement teams."[6]

---

[5] A. Blanton Godfrey, "Ten Areas for Future Research in Total Quality Management",Quality Management Journal, Vol. 1., N0.1, October, 1993, PP. 47

[6] Charles N. Weaver, " How to Use Process Improvement Teams", Quality Progress, , December, 1993, PP. 65

All this definitions emphasize the importance of empowering the workforce both through individual commitment and quality team development and the importance of changing the organization's culture to successfully implement TQM.

DEFINITION OF ORGANIZATIONAL CULTURE

Culture is a term often used when a company is thinking of implementing a TQM program

and referred as an important factor that must be considered to implement the new

philosophy. Culture is stated indirectly by Deming in the second of his fourteen points

when he emphasizes that the organization must learn the new philosophy, top management

and everybody. According to Evans and Lindsay , Deming in this point states that

changing the old methods of management, such as numbers driven-production, work

measurement-based quotas, a bottom -line mentality , and adversarial work relationships

for a quality conscious management will drive out mistrust, fear and anxiety from the

current system by implementing a never ending cycle of improvement . This new system

will therefore change the managerial and worker attitudes. Evans and Lindsay also analyze

Juran's and Crosby's approach to culture. In their book, The Management and Control of

Quality, they state that Crosby places more emphasis on management and organizational

processes for changing corporate culture and attitudes than on the use of statistical

techniques. These same authors on the other hand state that opposed to Deming, Juran

does not propose a major cultural change in the organization, but rather focuses in

improving quality by working within the system to which American industry is used to.

Juran's programs therefore are designed to fit the strategical corporate business plan with

minimal risk of rejection. [7]

---

[7] James R. Evans, William M. Lindsay, The Management and Control of Quality, Second edition, St. Paul, MN 55164-06526, West Publishing Company,1993, PP. 82-96

The organizational culture is stated in the works of Deming, Juran and Crosby but the term itself is seldom defined. Evans and Lindsay define corporate culture as the way an organization does things.[8] . A much more thorough definition of the term is given in the article " Organizational Culture and its Relationship to TQM". In this article the author Jerry Westbrook reffers to Ott's definition . According to Ott, organization culture includes five attributes which are:

- Language;

- Artifacts and symbols;

- Patterns of behavior;

- Basic underlying assumptions; and

- subcultures

These attributes, Westbrook says, must be clearly identified by an organization that wants to implement TQM relative to its existing culture. [9] Westbrook further states that any shortcoming relative to these attributes identified must be effectively dealt with in order to have a successful implementation of the TQM philosophy. Each of these attributes are explained in detail in the succeeding paragraphs.

---

[8] Ibid. PP. 179

[9] Jerry D. Westbrook, Organizational Culture and its Relationship to TQM", Industrial Management, , January/February, 1993, PP. 1

Language

The language of an organization communicates and helps perpetuate the existing culture of an organization. Westbrook states that when someone attempts to change the culture, language "comes to the rescue" and gives the following example of how language is used to preserve the existing culture . "We've seen programs like this before. wait six months and it will be gone like the rest of them."

The main elements of language are jargon, metaphors, myths, heroes, and ceremonies and celebrations. Jargon , the author says is the shorthand of language. It is used to give special meanings to words, phrases and acronyms within the organization. Different segments of the organization have different jargon which allows communication to be understood by its members only when others are present. In other words jargon subtly adds complexity to communication and creates divided loyalties among different portions of the organization. Myths are basically stories based on facts. Myths can have a positive or negative impact over the organization. A positive myth stated by Westbrook is the following:

" So many people people tell the story of Hewlett-packard's David Packard when he cut the lock off the tool crib one Saturday morning that there is no way everyone could have possibly been there. Packard also added a note to the door of the tool crib. It read" Do not

ever lock the tool crib again. Thanks, Dave." This story tells alot about how H-P feels

about its employees. That is why the story is spread so readily."[10]

Metaphors apply words or phrases to refer to an object or concept it does not literally

denote. An example of a negative metaphor would be the use of " The third floor " to

refer collectively to the executives of an organization. Heroes are the people who

represent or exemplify the culture and also help generate the myths. Some examples of

heroes would be Lee Iacocca of Chrysler and Steven Jobs of Apple Computer. Finally

ceremonies and celebrations help communicate the values of an organization and include

Christmas parties, retirement celebrations, celebrations of team accomplishments, etc.

Artifacts and Symbols

Artifacts and symbols indicate the character of culture even more than words . Some

obvious symbols are the timeclocks, guard station in the entrance of an organization, the

use of neckties, the separation of areas for executives and for employees, etc. A good

example of the use of a symbol was the Skull and Crossbones-Jolly Roger flag over the

building where the Apple team developed the Macintosh. This symbol as stated by

Westbrook gives the message " leave us alone and we will make great

accomplishments".[11]

---

[10] Ibid., PP. 2
[11] Ibid., PP.2

Patterns of Behavior

The main elements of patterns of behavior are rites and rituals, behavioral norms and beliefs and values.

Rites and rituals are activities required by the organization like getting to work on time, or the way employees leave their job and their importance is compared to the value of the service rendered. Many Companies spend alot of time controlling the entrance of their employees on time and less time in how efficiently the employee use their time to do their work. Behavioral norms are the standards set for employee behavior, speech and performance. An example of a behavioral norm is the unofficial IBM dress-code (dark suit, white shirt). At the same time some behaviors like, stopping work 15 minutes before the end of a work shift, or following orders which are known to be incorrect to make management look bad are norms in some companies. Finally, Beliefs and values are the core of the culture and are the justifications for behavior and norms. Values are affected by resource availability, leadership, technology, success and competitive forces.

Basic Underlying Assumptions

Its the hidden agenda of management. An example of this is the message given to the employees when timeclocks are in existence in a company. A company using this policy is indirectly giving the workers the message that they are not trusted. The basic underlying assumptions are affected by the subculture. A subculture is imbedded within a primary

culture. This means that their may be many subcultures within one primary culture. The subculture has goals and attitudes toward the subculture itself as well as to the primary culture. The subculture may be supportive or may attempt to attack the primary culture.

TRADITIONAL VERSUS TQM CULTURE

The implementation of the TQM philosophy leads a company to change the way it does things. The implementation of the TQM philosophy affects the existing culture . According to Westbrook ,"TQM has been defined as an interrelationship between the organization's culture; its relationship with its customers, both external and internal; the use of organizational teams and cross functional teams; an emphasis on problem solving teams as just mentioned, and Shewhart's wheel plan- do, check, act; recognition of the need for continuous improvement; and the use of measurement to evaluate systems and practices and to indicate the effectiveness of improvement efforts."[12]

Westbrook further says that culture in an organization is seen as a paradigm shift, the empowerment of the employees, a recognition of the importance of the human element ,etc., but emphasis is put on what is needed and not in what is culture. He finally concludes that if an organization wants to adopt TQM they must strive to make the culture supportive.

In the "Culture Factor and Quality" ,Liberatore discusses the importance of changing the corporate culture in order to support new ways of thinking and doing business and analyzes the culture-systems relationship. In this article corporate systems are defined as

---

[12] Jerry D. Westbrook, " Organizational Culture and its Relationship to TQM", Industrial Management, , January/February, 1993
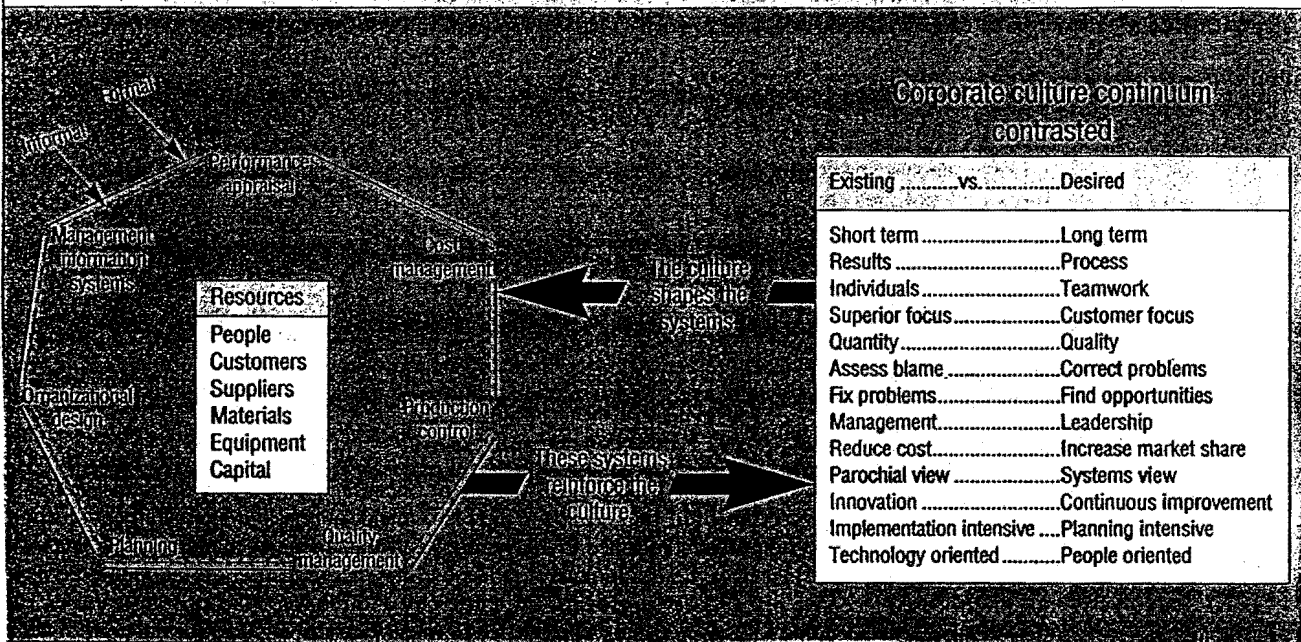
the procedures and policies that, when combined with employees, equipment, methods, materials, suppliers, and customers, become the dynamic processes of doing business. These systems can be formal or informal. According to Liberatore informal systems are as strong as the formal system and more representative of the existing culture because they have the freedom to conform. Most systems, Liberatore says were not designed ;they formed to fill particular needs, and the pre-established cultures ensured that what filled those needs were systems that conformed to their own agendas. The prevailing corporate culture of the 60's for example, was obsessed with quantity, and developed quantitative-driven incentive plans. Liberatore finally states that a corporate culture has its deepest roots in the systems that control how business is conducted and develops the 13 corporate culture continua, shown in figure 1, which span the present desired and what he calls actual extremes of an organization's culture.[13]

[13] Ralph L. Liberatore, " The Culture Factor and Quality", Quality Progress, , December, 1993. PP. 61

Figure 1. How a Culture Develops Within an Organization

Resources
People
Customers
Suppliers
Materials
Equipment
Capital

The culture shapes the systems

These systems reinforce the culture

Corporate culture continuum contrasted

Existing	vs.	Desired
Short term		Long term
Results		Process
Individuals		Teamwork
Superior focus		Customer focus
Quantity		Quality
Assess blame		Correct problems
Fix problems		Find opportunities
Management		Leadership
Reduce cost		Increase market share
Parochial view		Systems view
Innovation		Continuous improvement
Implementation intensive		Planning intensive
Technology oriented		People oriented

In the article "Total Quality-Does it Work In Engineering Management?" ,Graves contrasts a quality culture with traditional management practices as shown in the following table 1.[14]

Table 1. The Quality Culture: Less of and More of

Area of business	Less of This	More of This
Improvement	Correct people problem	Improve processes
Quality control	Correction	prevention
Improvement methods	Individual dealing with opinions	Teams dealing with facts
Recognition	Individual performance	Team performance
Rewards	Objective, material things(money) given by management	Psychological and personal appreciation and recognition
Employees	Obedient doers; need direction	Highly competent; need empowerment
Work	Do assigned tasks (job description)	Assure quality results (goals)
Profit	Efficient use of labor and capital drives profit	Quality and customer value drives profit
Business mission	provide goods and service	Provide value to client
Business focus	Inward on procedures and rules	Outward on clients and competitors
Marketing	Sell products or services	Create and keep clients
Structure and systems	Define action and bounds	Support and serve people
Management style	Direct and control	lead and empower
Performance standards	Meet specification limits	Continuous improvements
Business Leverage	Automation	People
Communication	One-way, tell	Two-way, listen
Customers/clients	Unreasonable, arbitrary, and fickle	Appreciating asset and long term partner
Measurement	Efficiency:doing things right	Effectiveness: doing the right thing

---

[14] Ray Graves, "Total Quality-Does It Work In Engineering Management?",Vol. 9., No.4, October, 1993, PP. 447

DEFINITION OF THE TQM TEAM CONCEPT

The importance of empowering the employees and development of teams for a successful

TQM implementation is also discussed in many articles. According to Graves,"There are

two ways to improve quality: people and processes. Faulty processes cause about 85% of

quality problems and people problems the remaining 15% so it is best to focus first on

improving the work processes. The Japanese have successfully used quality teams or

quality circles and quality tools to improve work processes."[15]

Companies are also are moving towards the development of Self-directing work teams .

This teams would have the means to measure the quality of their own work processes,

interpret the measurements and compare them to goals an to take action when the

processes are not in control.[16] Some of these teams may even have the authority to hire

and fire someone as long as they conform to the guidelines and continue to show

improvement.[17]

The article " Attaining TQM Through Employee Involvement: Imperatives For

Implementation" states the importance of employee involvement :

[15] Ibid. PP. 447

[16] A. Blanton Godfrey, "Ten Areas for Future Research in Total Quality Management", Quality Management Journal, Vol. 1., N0.1, October,1993, PP. 56-57

[17] Robert A. Goldense, " Attaining TQM Through Employee Involvement: Imperatives for Implementation", Journal of Mangement Mangement Science& Policy Analysis, Vol.8, No. 3&4, Spring/summer, 1991, PP-267

" Attaining the goals of Total Quality Management (TQM) can only be accomplished

through joint employee and management participation. In order for employee involvement

to function, management must change philosophies and strategies."[18]

According to Jon R. Katzenbach and Douglas K. Smith teams differ from working groups

because they require both individual and mutual accountability. These authors give the

following definition :

"A team is 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"[19]

This definition shows that the essence of a team is common commitment. Without this

commitment groups perform as an array of individuals and with it they become a strong

unit of performance (See Table 2). In the introduction of their article Katzenbach and

Smith give examples of successful teams :

" Early in the 1980's, Bill Greenwood and a small band of rebel railroaders took on most

of the top management of Burlington Northern and created a multibillion-dollar business

in "piggy-backing" rail services despite widespread resistance, even resentment, within the

company. The Medical products Group at Hewlett Packard owes most of its leading

---

[18] Ibid ,PP.264

[19] Jon R. Katzenbach and Douglas K. Smith, " The Discipline of Teams", Harvard Business Review, ,
March -April, 1993, PP112.

performance to the remarkable efforts of Dean Morton, Lew Platt, Ben Holmes, Dick

alberting, and a handful of their colleagues who revitalized a health care business that most

others had written off. At knight-Ridder, Jim Batten's " customer obsession' vision took

root at the Tallhassee Democrat when 14 front-line enthusiasts turned a charter to

eliminate errors into a mission of major change and took the entire paper along with

them."[20]

---

[20] Ibid..,PP.113

Table2 NOT ALL GROUPS ARE TEAMS: HOW TO TELL THE DIFFERENCE

WORKING GROUP	TEAM
Strong, clearly focused leader	Shared leadership roles
Individual accountability	Individual and mutual accountability
The group's purpose is the same as the broader organizational mission	Specific team purpose that the team itself delivers
Individual work-products	Collective work-products
Runs efficient meetings	Encourages open-ended discussion and active problem solving meetings
Measures its effectiveness indirectly by its influence on others (e.g., financial performance of the business)	Measures performance directly by assessing collective work-products
Discusses, decides and delegates	Discusses, decides, and does real work together

CULTURE AND TQM TEAMS

Goldense says that an organizational culture that supports TQM is built on strong equal trust for all employees at al levels. This means that their must be visible cooperation supporting employee involvement teams from top management. All levels must adopt TQM philosophy and get involved in TQM teams by developing a strong commitment to the new philosophy. This new type of culture will support TQM through employee involvement , and be receptive to the advantages of conflict resolution rather than making every attempt to stop conflict.

In "How to Use Process Improvement Teams", Weaver gives an explication for the fact that some TQM efforts have a successful start but vanish after several years . This author believes it is almost impossible to secure enduring improvements in organizational effectiveness without supporting changes of the organizational culture. Weaver supports his opinion by saying that among some of the reasons for this lack of success is the fact that due to ignorance or resistance, senior managers, have no reason of changing their organization's culture or don't understand the purpose of building teams.

Weaver further states that an organization that wants to implement a TQM philosophy may try using the quality improvement council/process improvement team approach . This council's responsibility would be to train members in TQM concepts, provide funds for the team, allot time for employees to work in the teams and build an appropriate recognition and reward system for the members of the teams. The main advantage of using

this approach is that the improvement teams would introduce TQM throughout all the organization's departments by convincing the employees that management is serious about improving quality. This approach would also assure that once all the departments are involved and improving the setting will be right for comprehensive cultural changes and effectiveness gains.

CONCLUSION

This research paper analyzes the organizational culture and the team concepts and their impact for a successful implementation of a TQM philosophy in an organization. The two concepts have been defined using definitions found in TQM literature.

An important conclusion derived from the TQM literature found is that organizational culture,teams (as defined in this paper) and TQM are interrelated. This interrelationship implies that TQM can only be implemented successfully if the organizational culture changes and recognizes the potential of organization's members and of effective improvement teams. This interrelationship also implies that changes in the organizational culture can be implemented through the creation of improvement teams that must have the support of upper management.

Further areas of research can focus on the degree in which the organizational culture must be changed through the use of improvement teams. The scope of this change is not explored thoroughly in this paper. The articles consulted however suggest that the importance of changing the organizational culture vary from author to author . A TQM philosopher like Crosby gives a special emphasis on changing the corporate culture and management attitudes in one hand and Juran puts more emphasis on improving quality by working with the systemin the other hand. The fact that an existing culture resists major changes may imply that   upper management should try to reinforce its existing culture rather than attempt to change it dramatically .

This paper also explores the implications of adopting the TQM philosophy by comparing the traditional organization versus the new TQM organization. This comparison is a good pointing start for those companies which want to implement TQM and would allow management to identify areas of its corporate culture which may be improved. These areas could be identified using Table 1. And determining the organizations strengths and weaknesses with respect to the 13 points presented.

Finally, the importance understanding the concept behind the definition of an effective team is explored by comparing it with the group concept. Managers who are planning to implement TQM in their business units must clearly understand the difference between a Team and a group if they want to accomplish this new philosophy successfully.

BIBLIOGRAPHY

1. Ray Graves, " Total Quality Management- Does it Work in Engineering

Management?", Journal of Management in Engineering, Vol. 9., No. 4, October, 1993

2. A. Blanton Godfrey, "Ten Areas for Future Research in Total Quality Management",

Quality Management Journal, Vol. 1, No.1, October, 1993

3. Jerry D. Westbrook, "Organizational Culture and its Relationship to TQM", Industrial

Management, January/February, 1993.

4. Charles N. Weaver, " How to Use Process Improvement Teams", Quality Progress,

December, 1993.

5. Jon R. Katzenbach and Douglas K. Smith, " The Discipline of Teams", Harvard

Business Review, March-April, 1993.

6. Peter F. Drucker, "Don't Change Corporate Culture- Use It!", The Wall Street Journal,

Thursday, March 28, 1991.

7. Ralph L. Liberatore, " The Culture Factor and Quality", Quality Progress, December, 1993.

8. James R. Evans, William M. Lindsay, The Management and Control of Quality, Second edition, St. Paul, MN 55164-06526, West Publishing Company, 1993.

9. Robert A. Goldense, " Attaining TQM Through Employee Involvement: Imperatives for Implementation", Journal of Management Science & Policy Analysis, Vol. 8, No.3&4, Spring/Summer, 1991.

10. John Scully, Odyssey, New York, N.Y. 10022,Harper & Row ,1987.