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Total Quality Management is a journey, not a destination

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ABSTRACT

TQM (Total Quality Management) is frequently considered to be a means for achieving competitive advantage. The enchanting of quality management is a description of the culture, attitude and organization of a company that aims to provide, and continue to provide, its customers with products and services that satisfy their needs. The progress requires quality in all aspects of the company's operations, with things being done right first time, and defects and waste eradicated from operations. It has a customer-first orientation. The consumer, not internal activities and constraints, comes first. Customer satisfaction is seen as the company's highest priority. The firm believes it will only be successful if customers are satisfied. In the TQM perspective, 'being sensitive to customer requirements' goes beyond defect and error reduction, and merely meeting specifications or reducing customer complaints. The notion of requirements is expanded to take in not only product and service attributes that meet basic requirements, but also those that enhance and differentiate them for competitive advantage. Continual improvement of all operations and activities is at the heart of TQM. At the same time as recognizing the link between product quality and customer satisfaction, TQM also recognizes that product quality is the result of process quality. Thus, there is a focus on continuous improvement of the company's processes. To attain customer satisfaction, the company has to respond rapidly to customer needs.

This entails short product and service introduction cycles. These can be achieved with customer-driven and process-oriented product development because the resulting simplicity and efficiency greatly reduce the time involved. The most noteworthy implication of this papers that more attention

should be given to total quality management practices. In the light of this background, this paper discusses the concept of TQM, PDCA cycle, principles & strategies to develop TQM along with the concept of TQP (Total Quality people).

Keywords:TQM (Total Quality Management), TQP (Total Quality People), customer satisfaction, competitive & future prospective.

1. INTRODUCTION TO QUALITY

One of the important issues that business has focused on in the last two decades is "quality". The other issues are cost and delivery. Quality has been widely considered as a key element for success in business in the present competitive market. Quality refers to meeting the needs and expectations of customers. It is important to understand that quality is about more than a product simply working properly.

Quality refers to certain standards and the ways and means by which those standards are achieved, maintained and improved. Quality is not just confined to products and services. It is a homogeneous element of any aspect of doing things with high degree of perfection. For example Business success depends on the quality decision making.

1.1 Quantification of Quality

Quality can be quantified as follows

$$Q=P/E$$

Where

Q = Quality

P = Performance

E = Expectation



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1.1.1 Dimension of Quality

1. Performance 2. Features 3. Conformance
4. Reliability 5. Durability 6. Service
7. Response 8. Aesthetics 9. Reputation

1.2 Total Quality Management

Total Quality Management (TQM) is an enhancement to the traditional way of doing business.

Total - Made up of the whole

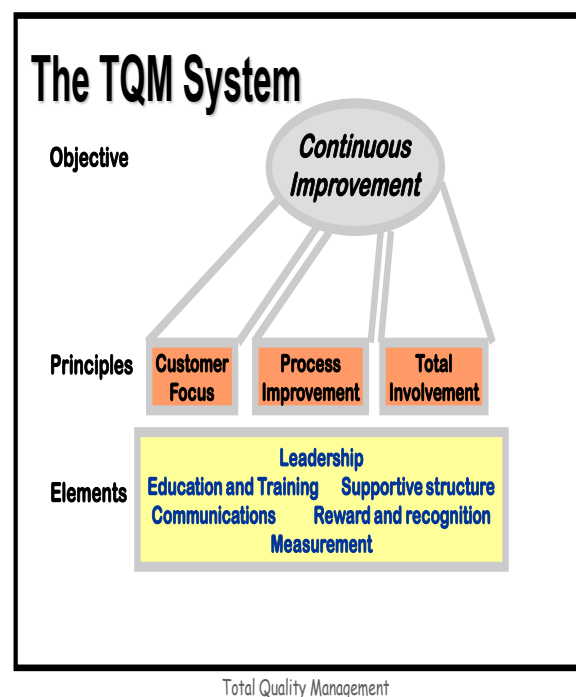
Quality- Degree of excellence a product or service provides

Management- Act, Art or manner of handling, controlling, directing, etc...

TQM is an integrated organizational approach in delighting customers (both internal and external) by meeting their expectations on a continuous basis through everyone involved with the organization working on continuous improvement in all products, services, and processes along with proper problem solving methodology -

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Fig 1: TQM System



1.2.1 Characteristics

1.2.1.1 Customer Oriented

1.2.1.2 Long term commitment for continuous improvement of all process

1.2.1.3 Team work

1.2.1.4 Continuous involvement of top management

1.2.1.5 Continuous improving at all levels and all areas of responsibility

2. OBJECTIVES OF STUDY

The objectives are:

2.1 To summarize right attitudes in the context of effective involvement and utilization of entire work force.

2.2 To articulate suitable steps to establish performance measures for the processes.

2.3 To highlight the principles of TQM.

2.4 To depict the strategies to maintain continuous improvement.



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2.5 To bring to light the relation of TQM with Customer Satisfaction, TQM with Organizational Development & TQM with Human Resource.

3. METHODOLOGY

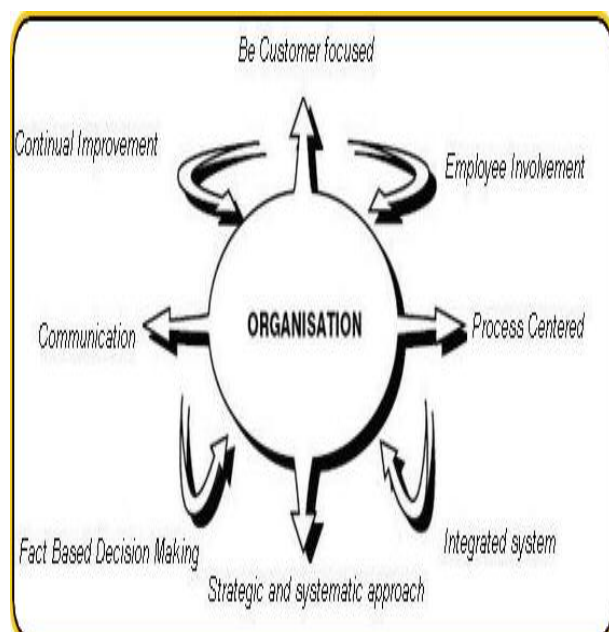
Information has been sourced from books, articles, various websites. This research paper is based on secondary data for finalization of views and opinions.

4. PRINCIPLES OF TQM

4.1 Customer focused: Whatever you do for quality improvement, remember that ONLY customers determine the level of quality. Whatever you do to foster quality improvement, training employees, integrating quality into processes management, ONLY customers determine whether your efforts were worthwhile.

4.2 Total Employee Involvement: You must remove fear from work place, then empower employee... you provide the Proper Environment.

Fig 2: Principles of TQM



4.3 Need to be Process Centered: Fundamental part of TQM is to focus on process thinking.

4.4 Integrated system: All employees must know the

business mission and vision. An integrated business system may be modeled by MBNQA or ISO 9000.

4.5 Strategic and systematic

approach: Strategic plan must integrate quality as core component.

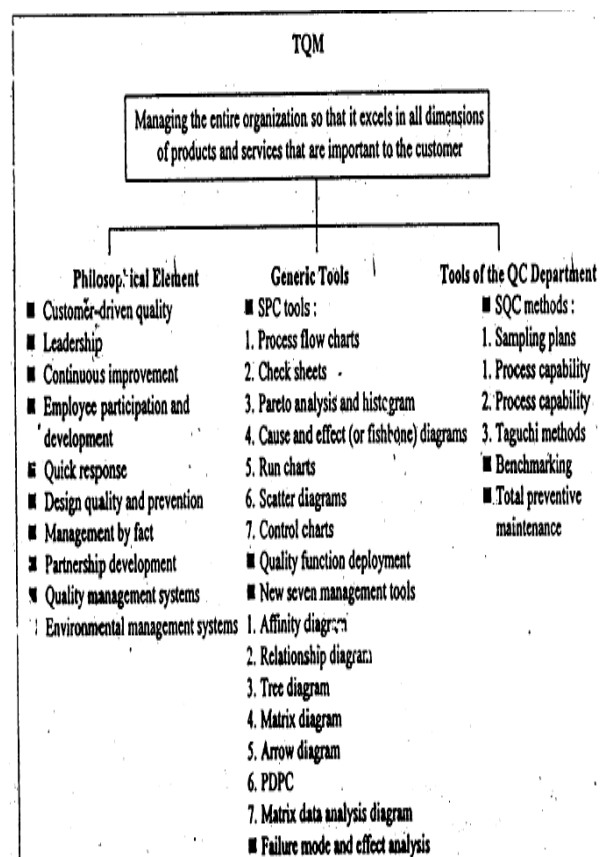
4.6 Continual Improvement: Using analytical, quality tools, and creative thinking to become more efficient and effective.

4.7 Fact Based Decision Making: Decision making must be ONLY on data, not personal or situational thinking.

4.8 Communication: Communication strategy, method and timeliness must be well defined.

5. TQM FRAME WORK

Fig 3: TQM Elements





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6. PLAN-DO-CHECK-ACT(PDCA) CYCLE:

The Plan-Do-Check-Act (PDCA) cycle applies the scientific method to problem solving.

6.1 Plan

6.1.1 Identify the problem, plan and opportunities

6.1.2 Observe and analyze

6.1.3 Isolate the real causes

6.1.4 Determine corrective actions

6.2 Do

6.2.1 Prepare

6.2.2 Apply

6.2.3 Check application

6.3 Study / Check

6.3.1 Check results

6.3.2 Compare with goals

6.4 Act

6.4.1 Standardize and consolidate

6.4.2 Prepare next stage of planning

Fig 4: PDCA Cycle



In the plan phase, the problem solving team analyzes data to identify possible causes for the problem and then proposes a solution. In the Do phase, an experiment is conducted. In the

check phase, the results of the experiment are analyzed. And in the Act phase, if the results of the experiment are favorable, the plan is implemented. If the results of the experiment are not favorable, the team goes back to the original data and starts all over again.

Perhaps the most important feature of TQM is that "it improves productivity by encouraging the use of science in decision making and discouraging *counter productive defensive behavior*. Thousands of organizations have been involved in total quality management (TQM) and similar programs.

7. STRATEGIES TO DEVELOP TQM

7.1 Distribute Quality on Time All the Time.

Develop a pattern of delivering perfect products & services on time. Rate your sources by their ability to do this.

7.2 Business Relationships based on Mutual Trust and

Confidence: Providers and Suppliers build trust and confidence through quality and deliverability. Customers build it by quick payment and clear lines of communication. Reliability, Forthrightness, and Honesty are the Basis of forming Business Relations.

7.3 Develop Individuals and Teams to Solve Problems:

Teach Problem -Solving Tools / Techniques & Teaming as the means to solve quality, safety, productivity, and deliverability problems.

7.4 Endow employees to be responsible for quality,

safety, productivity and deliverability: Empowering means giving workers responsibility for their actions affecting their work. Share governance.

7.5 Deed 'ownership' of process to employees who have

proven their capability: Reward and reinforce empowerment with Incentives, Job Security and Equity Sharing. Make employees owners of the process, not attendants.



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7.6 Device the New Technology: Use modern information resources, INTERNET, databases, telecommunications, applications software, and project scheduling as tools to improve productivity. Use Statistical Process Control (SPC) to eliminate errors and defects and continually improve the system.

7.7 Collect, measure and evaluate data before making decisions: "It never hurts to turn the light on." (J. DeSimone). Make Decisions based on evidence. "If you can't measure it, you can't evaluate it."

7.8 Apply The '80/20' Principle: Use this Problem-Solving Tool to put problems into 'Trivial Many' and 'Vital Few' Categories. Record the causes and frequencies of problems on a Tally Sheet. Develop this into a Pareto Chart which plots the frequencies (most- to least-important) of the problems. 20% of the causes create at least 80% of the problems.

7.9 Develop 'Win-Win' Scenarios: Create solutions that will benefit all parties. Cooperation that develops synergism is the best solution.

7.10 Develop a Master Plan: Good Design Precedes Good Craftsmanship. A well-designed plan tracks and benchmarks an action through to its completion. "Quality begins at the Design Level." (Marty Madigan)

7.11 Plan for all Contingencies: Prepare for all solutions by developing alternatives. If necessary, flowchart plans dealing with all possible alternatives. Apply 'If-Then-Else' type of logic to problems.

7.12 Make Zero Defects and Accidents Your Goal: Use the tools of TQM, SPC, and Problem-Solving to achieve these goals by detecting and eliminating the causes.

7.13 Qualify Your Sources and Suppliers: Use Quality and Deliverability as the basis for selecting the source of your materials and services.

7.14 Deliverability: The Right Product at the Right Place at the Right Time. In world-class Just-in-Time (JIT)

delivery systems, source parts are used without delay and inspection in the process.

7.15 Meet the Needs of Your Customers: Customers are anyone affected by your work: co-workers, team members, management, & especially the end-users. They are the rationale for your work. The justification for your work is to deliver products or services that meet or exceed their requirements.

7.16 Improve Continuously And Always: Institute continuous improvement & life-long education, principles based on the 14 Points by W. Edwards Deming.

8. TQM AND CUSTOMER SATISFACTION

Long-term benefit of total quality management relates to customer satisfaction. It aims at improving quality, and identifies the best measure of quality as matching customer expectations in terms of service, product, and experience. TQM interventions quantify problems and aim to achieve the best state defined in terms of such customer expectations.

Few examples of the application of total quality management to improve customer satisfaction include: Reduction of waiting time by changing the method of appointment scheduling or client handling. Making changes to the delivery process so that the product reaches the customer faster

Better quality products requiring no repairs improving customer loyalty.

9. TQM AND ORGANIZATIONAL DEVELOPMENT

Amongst the key benefits of total quality management is improvement in organizational development. TQM heralds a change in the work culture by educating all employees on quality and making quality the concern of everybody, not just the quality control department. The focus on quality leads to a proactive work culture aimed at preventing mistakes rather than correcting mistakes.

It focus on teamwork leads to the formation of cross-departmental teams and cross-functional knowledge sharing.



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Such interventions lead to many benefits such as: Improvement in communication skills of individual employees and overall organizational communication

Knowledge sharing, resulting in deepening and broadening of knowledge and skill-set of team members, and the making of a learning organization Flexibility for the organization in deploying personnel, contributing to rightsizing, and ensuring cost competitiveness.

Additional benefit of total quality management is that TQM promotes the concept of internal customer/supplier satisfaction. For instance, the hr department considers employees as internal customers and processes their queries or requests within the specified time limit. The lab technician in a hospital processes the clinical tests required by the doctor, an internal customer in a timely and efficient manner, according to the laid down customer satisfaction norms.

10. TQM AND HUMAN RESOURCES

A main application of benefits of total quality management relate to human resource management. Application of TQM in an organization brings about the following benefits to the human resources of an organization:

It extends the ownership of the business process to each employee involved in the process by empowering them to rectify mistakes on the spot without supervisor review or action. This generates intrinsic motivation and creates an atmosphere of enthusiasm and satisfaction among the workforce.

TQM's thrust on eliminating mistakes and improving productivity contributes to accomplishment of targets faster. The resultant free time allows employees to enhance their knowledge and apply their creativity to improve existing products and develop new products.

TQM's thrust on quality leads to identifying skill-deficiencies in employees and providing training and other interventions to bridge such deficiencies. Cross-functional and cross-departmental teams allow employees to share their experience and solve issues jointly, leading to benefits such as broadening skill-sets, and improvement of existing skills.

TQM's focus on eliminating mistakes and bringing about process efficiency heralds a direct approach such as counseling and other remedial actions to solve issues such as absenteeism.

The enhanced productivity brought about by TQM translates to better profits for the organization, and consequently better wages.

11. TQP-TOTAL QUALITY PEOPLE

What is TQP? TQP is Total Quality People— people with character, integrity, good values, and a positive attitude. Don't get me wrong. You do need all the other programs, but they will only work when you have the right foundation, and the foundation is Total Quality People. For example, some customer services programs teach participants to say "please," and "thank-you," give smiles and handshakes. But how long can a person keep on a fake smile if he does not have the desire to serve? Besides, people can see through him. And if the smile is not sincere, it is irritating. My point is, there has to be substance over form, not form over substance. Without a doubt, one does need to remember "please" and "thank-you," the smiles, etc.—they are very important. But keep in mind that they come a lot easier when accompanied by a desire to serve.

Somebody once approached Blaise Pascal, the famous French philosopher and said, **"If I had your brains, I would be a better person."** Pascal replied, **"Be a better person and you will have my brains."**

12. FINDINGS

12.1 TQM is people oriented.

12.2 It requires a long term commitment for continuous improvement.

12.3 Success of TQM depends on top management continuous involvement.

12.4 Responsibility for establishment and improvement of system lies with the management of an organization.



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12.5 TQM is a strategy for continuously improving performance at all levels and in all areas of responsibility.

12.6 It eliminates the mistakes & improves the efficiency.

12.7 Lack of management commitment

12.8 Lack of faith in and support to TQM activities among management personnel

12.9 Failure to appreciate TQM as a cultural revolution. In other words, inability to change organizational culture

12.10 Misunderstanding about the concept of TQM

12.11 Improper planning

12.12 Lack of employees commitment

12.13 Lack of effective communication.

13. CONCLUSION

Total Quality Management is practiced by many business organizations around the world. It is a proven method for implementing a quality conscious culture across all the vertical and horizontal layers of the company. It is proved that TQM is a strategic tool industry that can employ in the quest to remain competitive. It is also discovered that for the TQM to be properly implemented, everybody in the organization must be involved from the management to the employees and even the customers.

Although there are many benefits, one should take the cost into the account when implementing TQM.

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