

QUALITY MANAGEMENT
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HANDOUT: VI

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PRINCIPLES OF TQ:

1. Leadership:

Most quality experts agree that strong leadership, especially from the senior management of an organization, is absolutely necessary to develop and sustain a quality-based culture.

Leadership is the ability to positively influence people and systems under one's authority to have a meaningful impact and achieve important results.

When we think of leadership, we generally think of *executive leadership*, which focuses on the roles of senior managers in guiding an organization to fulfill its mission and meet its goals.

Senior executives play many important roles as leaders.

These include:

- Defining and communicating business directions.
- Ensuring that goals and expectations are met.
- Reviewing business performance and taking appropriate action.
- Creating an enjoyable work environment that promotes creativity, innovation, and continual improvement.
- Soliciting input and feedback from customers.
- Ensuring that employees are effective contributors to the business.
- Motivating, inspiring, and energizing employees.
- Recognizing employee contributions.
- Providing honest feedback.

Effective leadership requires five core leadership skills: *vision, empowerment, intuition, self-understanding, and value congruence.*

1. Leaders are visionaries; they manage for the future, not the past. Vision is crucial during times of change. They create mental and verbal pictures of desirable future states and share these visions with their organizational partners, including customers, suppliers, and employees.
2. Leaders empower employees to assume ownership of problems or opportunities, and to be proactive in implementing improvements and making decisions in the best interests of the organization.
3. Leaders are not afraid to follow their intuition. Even in the face of uncertainty and change, they must anticipate the future and must be prepared to make difficult decisions that will help the organization to be successful.

4. Self-understanding requires the ability to look at one's self and then identify relationships with employees and within the organization. It requires an examination of one's weaknesses as well as strengths.

5. Finally, value congruence occurs when leaders integrate their values into the company's management system. Values are basic assumptions and beliefs about the nature of the business, mission, people, and relationships of an organization. Specifically, values include trust and respect for individuals, openness, teamwork, integrity and commitment to quality. Employees quickly recognize leaders who do not apply the values they espouse or who do so inconsistently.

These core skills—vision, empowerment, intuition, self-understanding, and congruence—are reflected in the practices of quality leaders in organizations throughout the world.

Leading Practices:

True leaders promote quality and business performance excellence in several ways:

1. *They create a strategic vision and clear quality values that serve as a basis for business decisions at all levels of the organization.*
2. *They create and sustain a leadership system and environment/or quality excellence.* Leaders provide an environment with few bureaucratic rules and procedures. Such an environment encourages managers to experiment and take risks, permits employees to talk openly about problems, supports teamwork, and promotes employees' understanding of their responsibilities for quality.
3. *They set high expectations.* A leader can inspire people to do things they do not believe they can do.

4. *They demonstrate substantial personal commitment and involvement in quality, often with a missionary-like enthusiasm.* Leaders display a certain passion about quality and actively live the values.

5. *They integrate quality values into daily leadership and management.*

6. *They integrate societal responsibilities and community involvement into their business practices.*

2. Customer Focus and satisfaction:

The modern definition of quality centers on meeting or exceeding customer expectations; thus, the customer is the principal judge of quality.

Perceptions of value and satisfaction are influenced by many factors throughout the customers' overall purchase, ownership and service experiences.

Companies must focus on all product and service attributes that contribute to perceived value to the customer and lead to customer satisfaction.

From a total quality perspective, all strategic decisions a company makes should be “customer driven”.

The company should show constant sensitivity to emerging customer and market requirements;

- it should also measure the factors that drive customer satisfaction;

- it should also develop new techniques to obtain customer feedback.

There are 2 distinct types of customers: external and internal;

Importance of Customer Satisfaction:

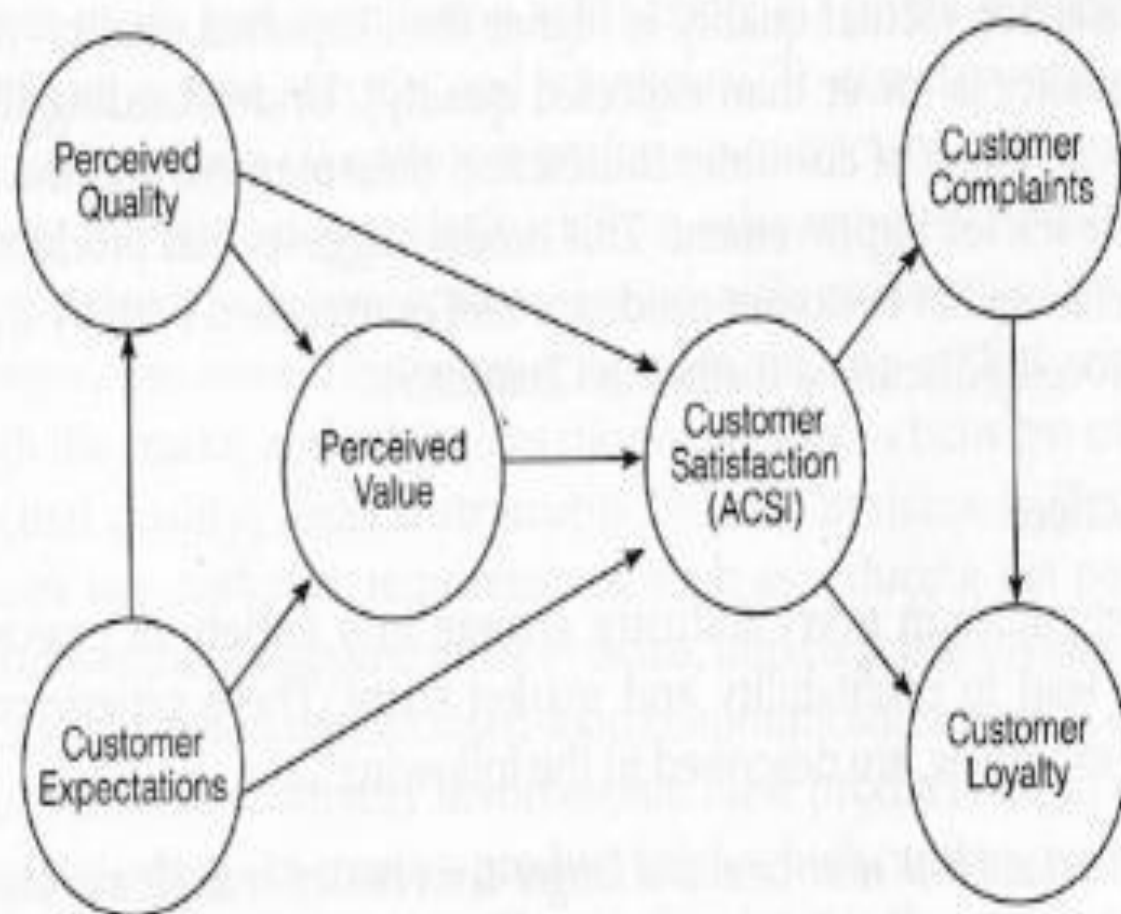
Customer satisfaction occurs when products and services meet or exceed customer expectations—our principal definition of quality.

Customer satisfaction translates directly into increased profits.

Loyal customers spend more, refer new clients, and are less costly to do business with.

Studies have shown that it costs about five times more to attract new customers than to keep old ones, and that satisfied customers purchase more and are willing to pay higher prices.

Customer retention is a key factor for competitive success and is closely tied to quality and customer satisfaction.



Source: Courtesy of National Quality Research Center (see note 9).

Creating Satisfied Customers:

Customer satisfaction results from providing goods and services that meet or exceed customers' needs.

The figure provides a view of the process in which customer needs and expectations are translated into outputs during the design, production, and delivery processes.

True customer needs and expectations are called *expected quality*. Expected quality is what the customer assumes will be received from the product.

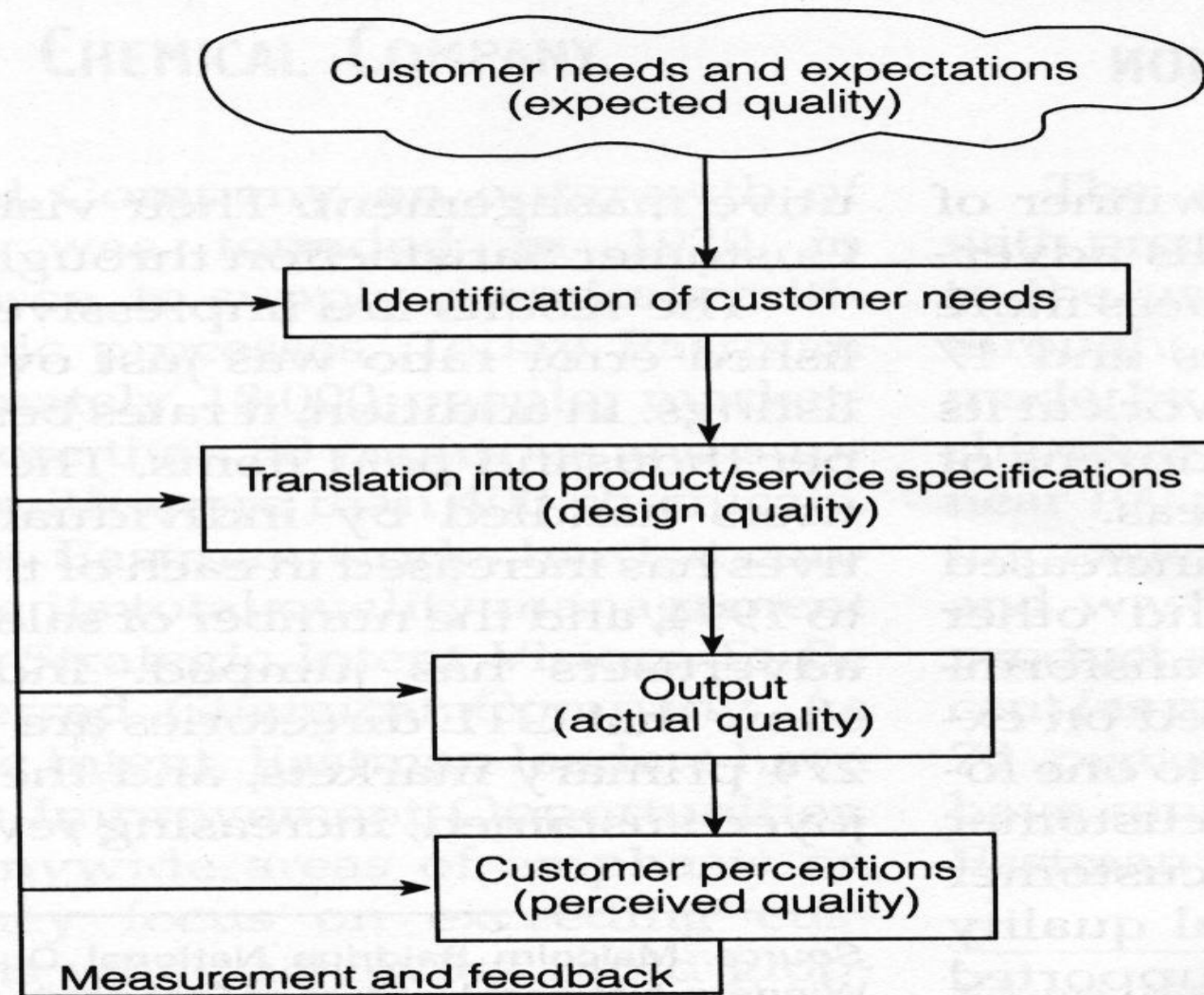
The producer identifies these needs and expectations and translates them into specifications for products and services.

Actual quality is the outcome of the production process and what is delivered to the customer.

Actual quality may differ considerably from expected quality.

Perceived quality = (Actual quality - Expected quality)

Any differences between the expected quality and actual quality can cause either unexpected satisfaction (actual quality is higher than expected quality) or dissatisfaction (actual quality is lower than expected quality).



Leading Practices

Successful companies in every industry engage in a variety of customer-oriented practices that lead to profitability and market share.

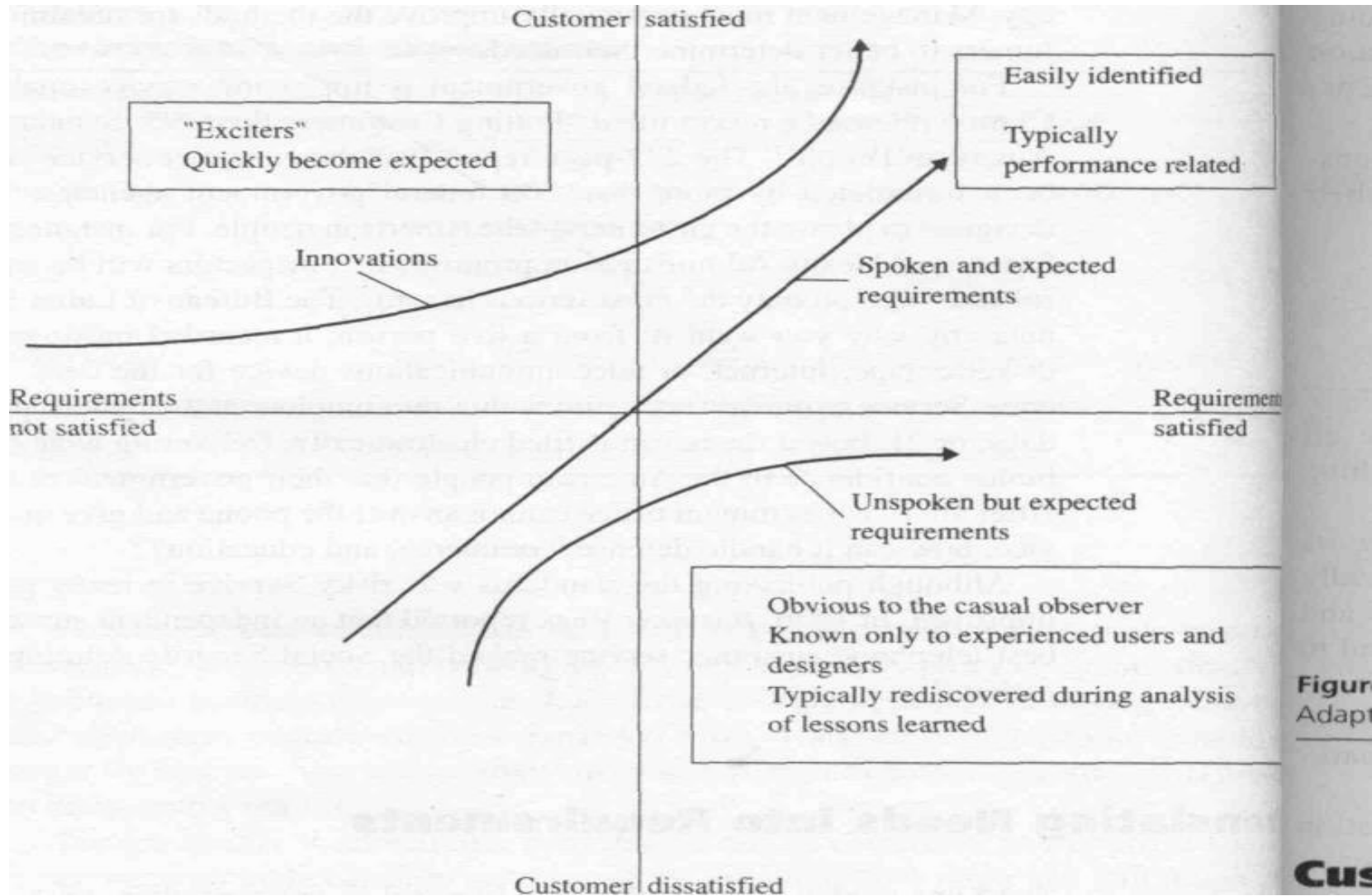
1. They understand both near-term and longer-term customer needs and expectations (the voice of the customer) and employ systematic processes/or gathering customer needs and managing the information.
2. They understand the linkages between the voice of the customer and design, production, and delivery processes.

3. They make commitments to customers that promote trust and confidence in their products and services.

4. They have effective customer relationship management processes by which customers " can easily seek assistance, comment, complain, and receive prompt resolution of their concerns.

5. They measure customer satisfaction, compare the results relative to competitors, and use the information to evaluate and improve internal processes.

KANO MODEL



- The first area of customer satisfaction, depicted by the diagonal line, represents explicit requirements.

These include written or verbal requirements and are easily identified, expected to be met, and typically performance related.

Satisfying the customer would be relatively simple if these were the only requirements.

The second area of customer satisfaction represents innovations, as shown by the curved line in the upper left corner of the figure.

A customer's written instructions are often purposefully vague to avoid stifling new ideas during conceptualization and product definition.

Because they are unexpected, these creative ideas often excite and delight the customer. These ideas quickly become expected.

The third and most significant area of customer satisfaction represents unstated or unspoken requirements, as shown by the lower right curve of the figure.

The customer may indeed be unaware of them or may assume that such requirements will be automatically supplied.

These implied requirements are the hardest to define but prove very costly if ignored.

Realistically, the customer doesn't buy a specification; the customer buys the product or service to fulfill a need.

However, just meeting a customer's needs is not enough the organization must exceed the customer's needs.

3. Participation, Teamwork and Employee involvement:

TQM is based on firm mutual collaboration between people through participation and effective teamwork.

Employee involvement is one approach to improving quality and productivity.

Participation:

When managers give employees the tools to make good decisions and the freedom and encouragement to make contributions, they virtually guarantee that better quality products and production processes will result.

Employees who are allowed to participate—both individually and in teams—in decisions that affect their jobs and the customer can make substantial quality contributions.

Management's task includes formulating the systems and procedures and then putting them in place to ensure that participation becomes a part of the culture.

Managers can encourage participation by implementing suggestion systems that act rapidly, provide feedback, and reward good ideas.

True empowerment can only occur in a customer-driven organization that embraces the ideals of total quality.

Teamwork:

Another important element of total quality is teamwork, which focuses attention on customer-supplier relationships and encourages the involvement of the total workforce in attacking systemic problems, particularly those that cross functional boundaries.

Teamwork combines teamwork and empowerment into a powerful method of employee involvement.

A *team* is defined as a group of people working together to achieve common objectives or goals.

Teamwork is the cumulative actions of the team during which each member of the team subordinates his individual interests and opinions to fulfill the objectives goals of the group.

For successful teamwork, it is necessary that the team composition, the work climate, the style of meetings, the team members and the leader comply with certain conditions.

A team should consist of 5-8 members (never more than 12); the members should have complementary skills; they should have a feeling of commitment to a common goal, and should be charged with the execution of decisions taken;

Cross-functional teams consisting of members from different disciplines prove to be useful.

Partnerships are an additional way of promoting teamwork. Partnerships between a company and organized labor and between customers and suppliers are common among companies practicing TQ.

Why Teams Work?

Teams work because many heads are more knowledgeable than one. Each member of the team has special abilities that can be used to solve problems.

Second, the whole is greater than the sum of its members. In other words, the interaction within the team produces results that exceed the contributions of each member.

Third, team members develop a rapport with each other that allows them to do a better job.

Finally, teams provide the vehicle for improved communication, thereby increasing the likelihood for a successful solution.

All team members should:

- a) Devote themselves to the common team goals based on a common mission and vision.
- b) Feel themselves responsible and equal.
- c) Be interested and motivated.
- d) Accept, appreciate and respect each other.
- e) Give high priority to continuous improvement.
- f) Participate actively with the activities of the team.
- g) Communicate openly and have an open mind for the expectations of their surroundings.
- h) Make use of information.
- i) Abide by the decisions taken by the team.
- j) See problems as a means for improvements; welcome problems as opportunities.
- k) Use a systematic approach to improvement.
- l) Build an environment of trust.
- m) Accountability.
- n) Appropriate leadership.
- o) Balanced participation.
- p) Cohesiveness.

Types of Total Quality Teams :

- a) The Work Team: Otherwise known as the self-directed team, this is a group of employees who cooperate as a team in general course of doing their jobs. It is a more or less permanent entity whose goal is to consistently fulfil the needs of a group of customers.
- b) The Problem-solving Team: This is often an ad hoc or project specific team, consisting of members with varying perspectives and expertise. Besides solving individual problems, these teams can be formed in order to define problems or to uncover and tackle potential difficulties. These address isolated and fairly well-defined problems.
- c) The Quality Improvement Team: These are interested in continuously improving entire processes. They may be either adhoc, working on distinct projects, or permanent, seeking to find ways to keep improving quality.

d) Process improvement team. The members of a process improvement team represent each operation of the process or sub-process. Usually the scope of the team's activity is limited to the work unit.

e) Cross-functional team. The members of the team, about six to ten, will represent a number of different functional areas.

f) Natural work teams. This type of team is not voluntary—it is composed of all the members of the work unit. It differs from quality control circles in that a manager is part of the team and the projects to be improved are selected by management.

g) Self-directed/self-managed work teams. They are an extension of natural work teams without the supervisor. Thus, they are the epitome of the empowered organization—they not only do the work but also manage it. There is wide discretion to organize their work subject to organizational work flow requirements.

Common problems in Teamwork:

1. Dominating participants
2. Reluctant participants
3. Unquestioned acceptance of opinions as facts
4. Rush to accomplish
5. Feuding team members

Common barriers to team progress:

1. Insufficient training
2. Incompatible rewards and compensation
3. Lack of planning
4. Lack of management support
5. Lack of access to information systems

Employee involvement:

The key to employee involvement lies in motivation. The building of a motivated workforce is for the most part an indirect process.

Managers at all levels cannot cause an employee to become motivated; they must create the environment for individuals to motivate themselves.

Concepts to achieve a motivate work force are as follows:

1. Know thyself.
2. Know your employees.
3. Establish a positive attitude.
4. Share the goals.
5. Monitor progress.
6. Develop interesting work.
7. Communicate effectively.
8. Celebrate success.

Benefits from Employee Involvement:

Employee involvement improves quality and increases productivity, because:

a) Employees make better decisions using their expert knowledge of the process.

b) Employees are more likely to implement and support decisions they had a part in making.

c) Employees are better able to spot and pinpoint areas for improvement.

d) Employees are better able to take immediate corrective action.

e) Employee involvement reduces labor/management hassle by more effective communications and cooperation.

f) Employee involvement increases morale by creating a feeling of belonging to the organization.

g) Employees are better able to accept change because they control the work environment.

h) Employees have an increased commitment to unit goals because they are involved.

Empowerment.

The dictionary definition of empowerment is to invest people with authority. Its purpose is to tap the enormous reservoir of creativity and potential contribution that lies within every worker at all levels.

Empowerment is an environment in which people have the ability, the confidence, and the commitment to take the responsibility and ownership to improve the process and initiate the necessary steps to satisfy customer requirements within well-defined boundaries in order to achieve organizational values and goals.

In order to create the empowered environment, three conditions are necessary:

- a) Everyone must understand the need for change;
- b) The system needs to change for the new paradigm;
- c) The organization must enable its employees.

4. Continuous improvement and learning:

Continuous improvement has its roots in the industrial revolution.

In the early 1900s, Frederick Taylor, often called the Father of Scientific Management, believed that management had a responsibility to find the best way to do a job and train workers in the appropriate procedures.

Time-and-motion studies became the staple of the industrial engineer who sought to break down work into its fundamental elements and eliminate wasted motion and operations.

In Taylor's philosophy, the focus was on efficiency and productivity.

Continuous improvement is one of the most crucial aspects of TQM.

From the TQM perspective, quality is not a fixed objective; rather, it is a moving target;

One must continually improve not only the product or service that is the company's ultimate output, but all the steps and support functions that lead up to that output.

There are 2 important reasons for this:

- a) Competition: If you are not moving forward in terms of quality, you are likely to be moving backward, in relation to your competitors. Continuous improvement is the only answer.
- b) Customers: Customers need change. Part of the continuous improvement process is to monitor, and even anticipate customer requirements.

Continuous improvement and learning should be an integral part of the management of all systems and processes.

Continuous improvement refers to both *incremental*—small and gradual—and *breakthrough*—large and rapid—improvement.

Improvements may take any one of several forms:

- Enhancing value to the customer through new and improved products and services
- Reducing errors, defects, waste, and related costs
- Improving productivity and effectiveness in the use of all resources
- Improving responsiveness and cycle time performance

5. Organizational culture:

Introduction to TQM is closely related to change and the necessary apportionment of the organizational culture.

The organizational culture encompasses the common behavior of all employees in the organization with regard to their work, the organization and their relations with customers, suppliers and colleagues.

It can also be described as a consolidation of opinions, ideas, values, rules, behavioral patterns and norms of the people within the organization.

Successful implementation of TQM requires cultural change, which above all things requires the fundamental adjustment of the behavior of people in the organization.

The principles of total quality must become a living, breathing part of the organization's culture.

They are embodied in the strategies and leadership philosophies of nearly every major company.

The organizational culture is a company's value system and its collection of guiding principles.

To change their management practices and move towards quality, organizations must first address their fundamental values.

Cultural values are often seen in the mission and vision statements of organizations.

Culture is a powerful influence on behavior because it is shared widely and because it operates without being talked about, and indeed, often without being thought of.

Culture is reflected by the management policies and actions that a company practices. Therefore, organizations that believe in the principles of total quality are more likely to implement the practices successfully.

Conversely, actions set culture in motion. Behavior leads people to think in certain ways. Thus, as total quality practices are used routinely within an organization, its people learn to believe in the principles, and cultural changes can occur.

Developing a total quality culture depends on:

- a) Top management leadership.
- b) A relentless focus on the customer.
- c) Care of all stakeholders in a balanced way.
- d) Systematic improvement of all business practices.
- e) High motivation, active participation and devotion to realize the stated goals.
- f) Decentralization of decision-making responsibility.
- g) A strong involvement of employees in the decision making process.
- h) Teamwork, mutual trust, respect and a “we-feeling”.
- i) Breaking down of organizational barriers.
- j) Top-down, bottom-up, free and open communication.
- k) Improvements that are linked to company objectives.
- l) Multifunctional usability, flexibility and willingness of employees towards change.
- m) Realignment of reward and measurement systems.

TQM regards change, which is inevitable and essential for the growth of an organization.

Unfortunately, most people within an organization despise and resist changes it affects their established ideas and opinions.

Methods to handle resistance include the following:

- a) Top management must communicate face-to-face and give information about the what, why and how of change.
- b) Be honest about the actual situation.
- c) Support the proposals with clear arguments.
- d) Inform the employees about the advantages of change and how the gap between future and present situations must be closed.
- e) Have meetings with those who show clear resistance and give a detailed reaction to all their objections.
- f) Involve concerned employees in the project.

6. Benchmarking:

Benchmarking is a systematic method by which organizations can measure themselves against the best industry practices.

It promotes superior performance by providing an organized framework through which organizations learn how the "best in class" do things, understand how these best practices differ from their own, and implement change to close the gap.

The essence of benchmarking is the process of borrowing ideas and adapting them to gain competitive advantage.

It is a tool for continuous improvement.

Benchmarking may be defined as “the continuous process of measuring our products, services and practices against the most successful competitors or companies which are established industry leaders”.

Benchmarking is measuring performance against that of best-in-class organizations, determining how the best in class achieve those performance levels, and using the information as the basis for goals, strategies, and implementation.

Implicit in the definition are two key elements:

a) First, measuring performance requires some sort of units of measure. These are called metrics and are usually expressed numerically. The organization seeking improvement then plots its own performance against the target.

b) Second, benchmarking requires that managers understand *why* their performance differs. An understanding of the differences allows managers to organize their improvement efforts to meet the goal.

Depending on the chosen subject, **several types** of benchmarking can be identified as *Internal, competitive, process, and strategic benchmarking*.

Internal benchmarking

Internal benchmarking involves a comparison of internal units (activities and processes) within the own company.

Competitive benchmarking

During competitive benchmarking, a comparison is made with direct competitors. Operations processes of these competitors are measured and compared against its own situation. Based on what is done by the competitor and what is lacking within the own organization, the own processes can be adjusted to improve efficiency, and thus produce a better and cheaper product.

Process/Functional/Generic benchmarking

Process benchmarking involves a search for the best in class of a certain process, regardless if it is a competitor or not and in which industrial branch it is applicable.

Strategic benchmarking

Strategic benchmarking is used to obtain sweeping breakthroughs in the areas of productivity and distinctive capacity, in order to strengthen its competitive position. This implies big leaps, which are hard to realize on your own. This type of benchmarking can support the strategic planning process by determining the relative competitive position of all business activities and accordingly, suggest the best course to follow.

Major steps in the benchmarking process involve,

- a) measuring the performance of best-in-class relative to critical performance variables;
- b) determining how the levels of performance are achieved;
- c) using the information to develop and implement a plan for improvement.

These may be broken up as:

1. Decide what to benchmark.
2. Understand current performance.
3. Plan
4. Study others.
5. Learn from the data.
6. Use the findings.

Benefits from benchmarking:

- a) Benchmarking forces you to look closely at your own operation, contributes to quality awareness and generates ideas for improvements.
- b) Benchmarking introduces reality into quality goals.
- c) Benchmarking makes goals specific.
- d) It makes competition real.
- e) It encourages continuous improvement.
- f) It can pinpoint undiscovered customer requirements.
- g) Benchmarking encourages proactive solutions.
- h) It aids problem solving.
- i) Weaknesses stand out.

More importantly,

- a) Cultural change: Benchmarking allows organizations to set realistic, rigorous new performance targets, and this process helps convince people of the credibility of these targets.
- b) Performance improvement: It allows the organization to define specific gaps in performance and to select the processes to improve.
- c) Human resources: Benchmarking provides a basis for training. Employees begin to see the gap between what they are doing and what best-in-class are doing. Closing the gap points out the need for personnel to be involved in techniques of problem solving and process improvement. Moreover , the synergy between organization activities is improved through cross-functional cooperation.