Total Quality Management

Semester IV   **STAT CC410**

Unit 4

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Total Quality Management

- Total quality management (TQM) revolves around three main themes: the customer, the process, and the people.

- Figure 1 shows some basic features of a TQM model. At its core are the company vision and mission and management commitment.

- They bind the customer, the process, and the people into an integrated whole.

- A company's vision is quite simply what the company wants to be.

- The mission lays out the company's strategic focus. Every employee should understand the company's vision and mission so that individual efforts will contribute to the organizational mission.

- When employees do not understand the strategic focus, individuals and even departments pursue their own goals rather than those of the company, and the company's goals are inadvertently sabotaged. The classic example is maximizing production with no regard to quality or cost.

- Management commitment is another core value in the TQM model. It must exist at all levels for the company to succeed in implementing TQM.

- Top management envisions the strategy and creates policy. Middle management works on implementation. At the operational level, appropriate quality management tools and techniques are used.

Figure 1: Features of a TQM Model
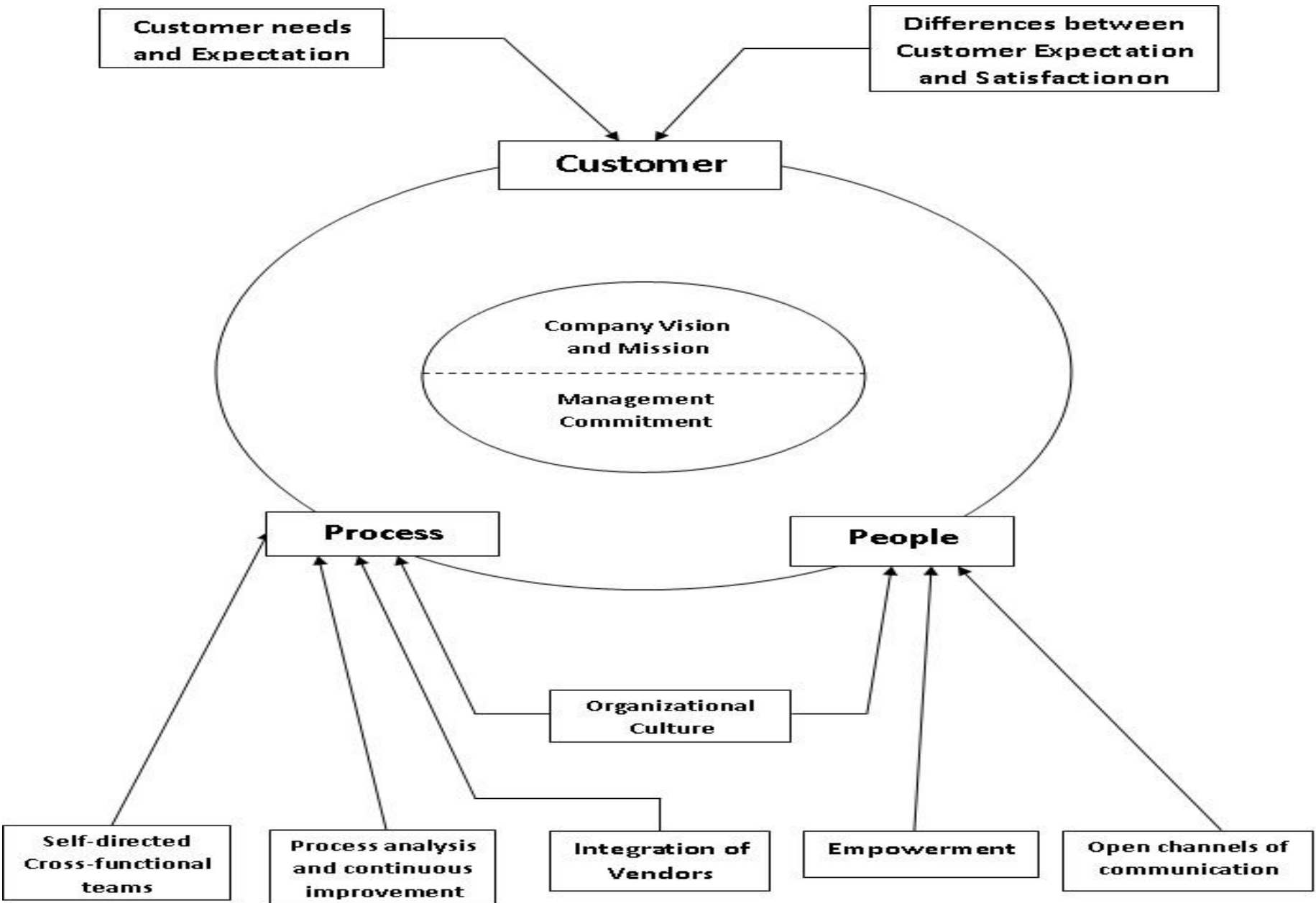
Customer Needs and Expectation

- In fact, satisfying customer needs and expectations is a **major theme in TQM**.

- Without satisfied customers, market share will not grow and revenue will not increase.

- Management should not guess the customer's need.

- For example, commercial builders should construct general merchandise stores only after they have determined that there is enough customer interest to support them.

- If consumers prefer specialty stores, specialty stores should be constructed.

- Direct feedback using a data-driven approach is the best way to identify customer expectations and needs. A company's strategic plan must conform to these needs.

Reducing the Cost of Scrap

- A key principle in quality programs is that customers are both internal and external.

- The receiving department of a processed component is a customer of that processing unit.

- Feedback from such internal customers identifies problem areas before the product reaches its finished stage, thus reducing the cost of scrap and rework.

Differences Between Customer Expectation and Satisfaction

- Customer expectations can, to some extent, be managed by the organization.

- Factors such as the quality of products and services and warranty policies offered by the competitor influence customer expectations directly.

- The company can, through truthful advertising, shape the public's expectations.

- For example, if the average life of a lawn mower under specified operating conditions is 15 years, there is no reason to exaggerate it. In service operations, customers know which companies are responsive and friendly. This does not need advertising.

- Customer surveys can help management to determine discrepancies between expectations and satisfaction.

- Taking measures to eliminate discrepancies is known as **gap analysis.**

Analyzing the Process

- The **second theme in TQM** is the process.

- Management is responsible for analyzing the process to improve it continuously.

- In this framework, vendors are part of the extended process, as advocated by Deming. Integrating vendors into the process improves the vendor's products, which leads to better final products.

- Because problems can span functional areas, self-directed cross functional teams are important for generating alternative feasible solutions - the process improves again.

- Technical tools and techniques along with management tools come in handy in searching for quality improvement.

- Self-directed teams are given the authority to make decisions and to make appropriate changes in the process.

Human Capital

- The **third theme** deals with the people.
- Human 'capital' is an organization's most important asset.
- **Empowerment -** involving employees in the decision-making process so that they take ownership of their work and the process is a key factor in TQM.
- It is people who find better ways to do a job, and this is no small source of pride. With pride comes motivation.
- There is a sense of pride in making things better through the elimination of unnecessary or non value added tasks or combining operations.
- In TQM, managing is empowering.

Open Channels of Communication

- Barriers restrict the flow of information. Thus, open channels of communication are imperative, and management had better maintain these.

- For example, if marketing fails to talk to product design, a key input on customer needs will not be incorporated into the product.

- Management must work with its human resources staff to empower people to break down inter departmental barriers.

- Once people understand that they, and only they, can improve the state of affairs, and once they are given the authority to make appropriate changes, they will do the job that needs to be done.

- There originates an intrinsic urge from within to do things better and such an urge has a force which supersedes the external forms of motivation.

Organizational Culture

- Linking the human element and the company's vision is the fabric, we call it as **organizational culture.**

- Culture comprises the beliefs, values, norms, and rules that prevail within an organization.

- How is business conducted? How does management behave? How are employees treated? What gets rewarded? How does the reward system work? How is input sought? How important are ethics? What is the social responsibility of the company?

- The answers to these and many other questions define an organization's culture.

- One culture may embrace a participative style of management that empowers its employees and delights its customers with innovative and timely products.

- Another culture may choose short-term profit over responsibility to the community at large.

- For example, consider the social responsibility adopted by the General Electric Company. The company and its employees made enormous contributions to support education, the arts, the environment, and human services organizations worldwide.