



IE407 Total Quality Management

Lecture 04



Instructor: Dr. Ali Ahmad

Reminder: SA grade

- ▶ SA grade will be determined by the attendance system
- ▶ More than 8 absents will automatically lead to SA grade
- ▶ Please be careful about your attendance in lectures





Besterfield Chapter 1: Introduction

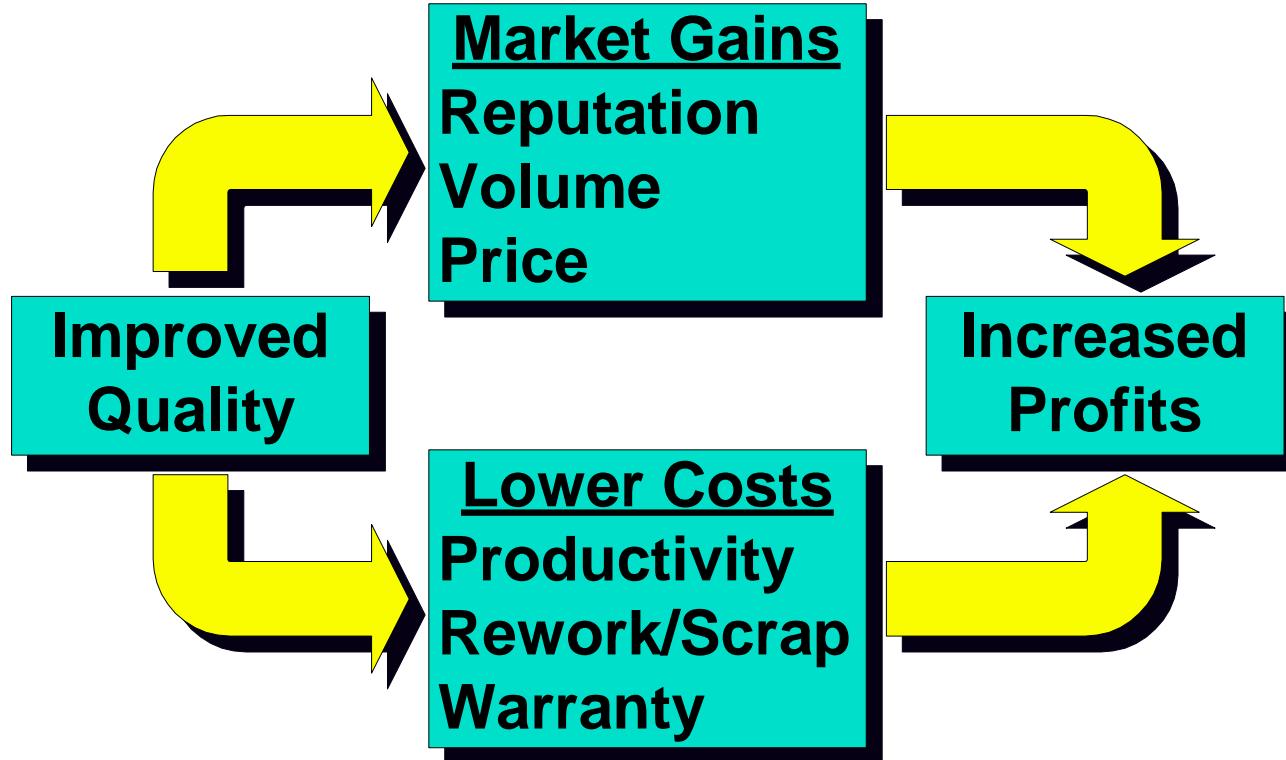


Consequences of TQM Efforts

- ❖ TQM efforts lead to good quality product / service which, in turn, increases productivity and lowers cost
- ❖ Higher quality and lower price improves the competitive position in the marketplace
- ❖ This makes achievement of profit and growth objectives easier with TQM efforts than without
- ❖ With job security, the workforce will find their work a source of satisfaction



Quality Improvements Make Business Sense



Source: Heizer & Render. Principles of Operations Management

TQM Requires a Cultural Change

New and Old Cultures (Table 1-1, p. 3)

Quality Element	Previous State	TQM
Definition	Product-oriented	Customer-oriented
Priorities	Second to service and cost	First among equals of service and cost
Decisions	Short-term	Long-term
Emphasis	Detection	Prevention
Errors	Operations	System
Responsibility	Quality Control	Everyone
Problem Solving	Managers	Teams
Procurement	Price	Life-cycle costs, partnership
Manager's Role	Plan, assign, control, and enforce	Delegate, coach, facilitate, and mentor



TQM: More on the Web

- ❖ You can read more about TQM on the following URLs
- ❖ <http://asq.org/learn-about-quality/total-quality-management/overview/overview.html>
- ❖ <http://webarchive.nationalarchives.gov.uk/20050302052419/http://www.dti.gov.uk/quality/pdfs/sections/TQM.pdf>
- ❖ <https://webarchive.nationalarchives.gov.uk/ukgwa/20050302172152/http://www2.dti.gov.uk/quality/>

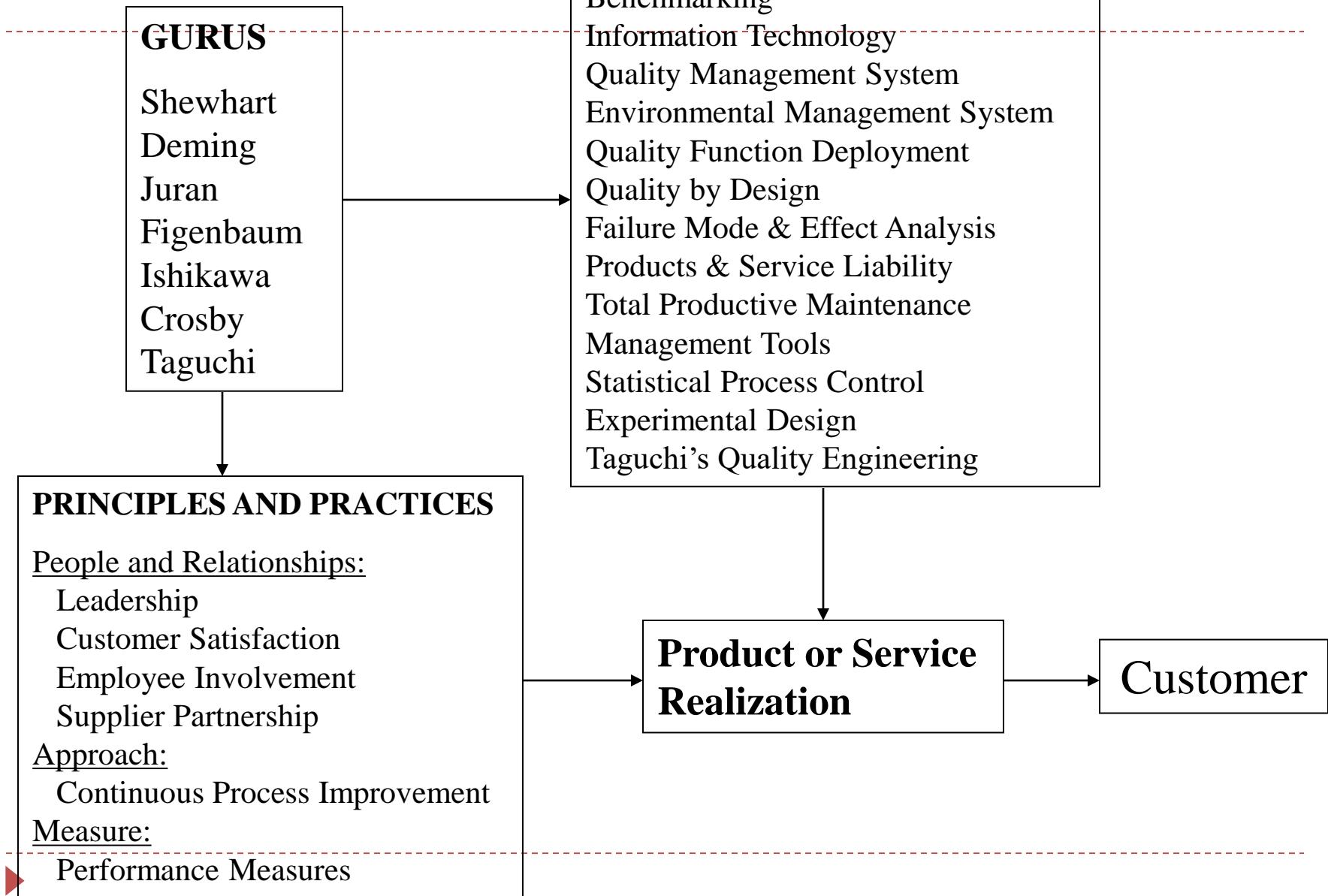




TQM Framework

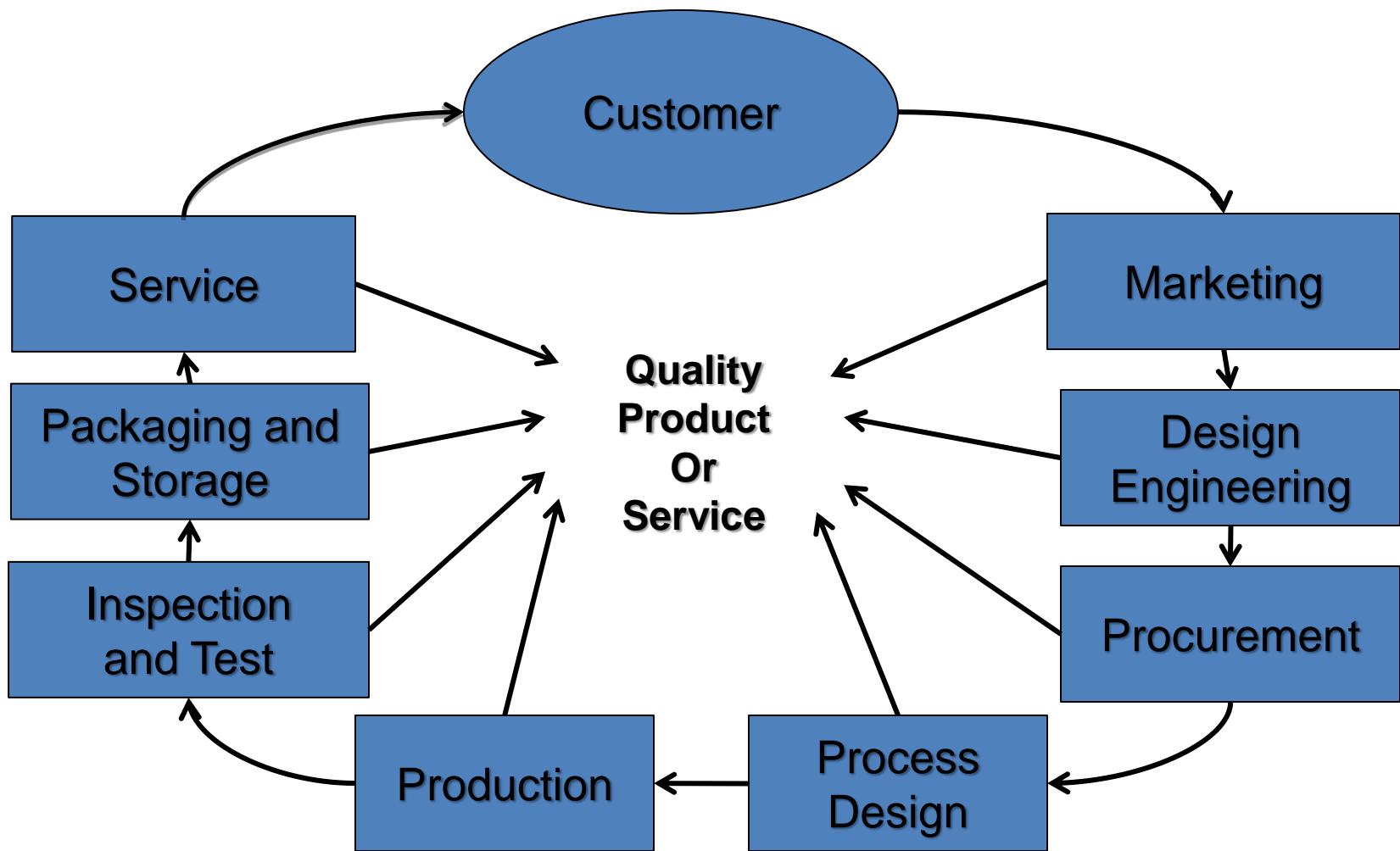


TQM Framework



The following 4 slides are from
Besterfield: Quality Improvement

Responsibility for Quality



Responsibility for Quality - 2

- ▶ **Marketing**
 - ▶ Help to evaluate the level of product quality that a customer wants, needs, expects
 - ▶ **Design Engineering**
 - ▶ Translate the customer's requirements into operating characteristics, exact specifications, and appropriate tolerances
 - ▶ **Procurement**
 - ▶ Responsible for procuring quality materials and components
 - ▶ **Process Design**
 - ▶ Develops processes and procedures that will produce a quality product/service
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Responsibility for Quality - 3

- ▶ **Production**
 - ▶ Produce quality products and services
- ▶ **Inspection and Test**
 - ▶ Appraise the quality of purchased and manufactured items and to report the results
- ▶ **Packaging and Storage**
 - ▶ Preserve and protect the quality of the product
- ▶ **Service**
 - ▶ Fully realizing the intended function of the product during its expected life



Chief Executive Officer (CEO)

- ▶ The highest-ranking executive officer within a company or corporation
 - ▶ Has responsibility for overall management of its day-to-day affairs under the supervision of the board of directors
- ▶ He / She has the ultimate responsibility for quality
- ▶ Should spend 35% of his/her time on quality





Besterfield Chapter 2: Leadership





Leadership: Definition

Leadership Defined

❖ James MacGregor Burns says:

- ❖ A leader is one who instills purposes, not one who controls by brute force
- ❖ A leader strengthens and inspires the followers to accomplish shared goals
- ❖ Leaders:
 - ❖ Shape the organization's values
 - ❖ Promote the organization's values
 - ❖ Protect the organization's values
 - ❖ Exemplify the organization's values
- ❖ Leaders and followers raise one another to higher levels of motivation and morality





Leadership for Quality: Behavioural Characteristics

12 Characteristics of Quality Leaders

- ❖ They give priority attention to external and internal customers and their needs
- ❖ They empower, rather than control subordinates
- ❖ They emphasize improvement, rather than maintenance
- ❖ They emphasize prevention, rather than correction
- ❖ They encourage collaboration, rather than competition
- ❖ They train and coach, rather than direct and supervise



12 Characteristics of Quality Leaders - 2

- ❖ They learn from problems
- ❖ They continually try to improve communications
- ❖ They continually demonstrate their commitment to quality
- ❖ They choose suppliers on the basis of quality, not price
- ❖ They establish organizational systems to support the quality efforts
- ❖ They encourage and recognize team effort



Understanding Human Nature

- ❖ Leadership requires an intuitive understanding of human nature:
 - ❖ People, paradoxically, need security and independence at the same time
 - ❖ People are sensitive to external rewards and punishments and yet are also strongly self motivated
 - ❖ People like to hear a kind word of praise
 - ❖ People can process only a few facts at a time
 - ❖ People trust their gut reaction more than statistical data
 - ❖ People distrust a leader's rhetoric if the words are inconsistent with the leader's actions



References

- ▶ Besterfield, Dale H. and others. 2019. *Total Quality Management*, 5th edition. Pearson India
- ▶ Besterfield, Dale H. *Quality Improvement*, 9th edition, Pearson

