

Basic Principles and Methods of Quality

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American Society For Quality
2005-2007



A truly integrated quality system is based on three principles: customer focus, process improvement and total involvement:

1. **Customer focus** encompasses both the external and internal customers' needs.
2. **Process improvement** is the lifeblood of an organization wishing to sustain growth.
3. **Total involvement** is the vehicle through which the organization accomplishes the daily activities that accomplish the first two principles.

Currently, practicing quality professionals deal with interrelated sets of requirements that form quality management systems (QMSs). The two most frequently used QMS models are the Baldrige National Quality Program criteria for performance excellence and the eight quality management principles that are the basis of the ISO 9000 family of QMS standards. These models provide insight into the component parts of a QMS and define quality as it is practiced today.

The Baldrige criteria, as shown in the model in Figure 1, below are:

1. Leadership
2. Strategic planning
3. Customer and market focus
4. Information and analysis
5. Workforce focus
6. Process management
7. Business results

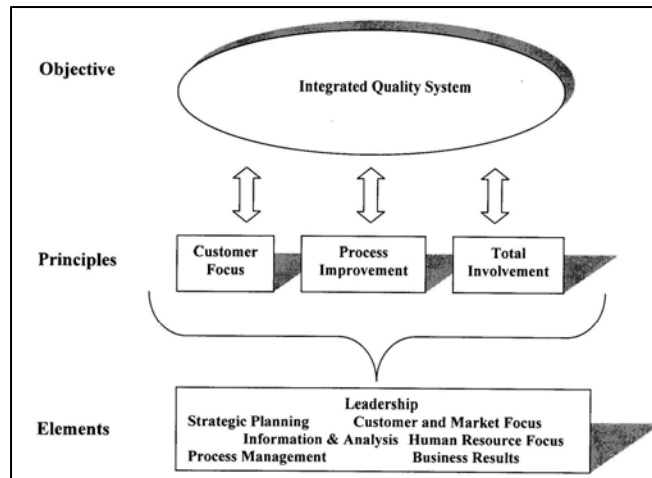


Figure 1

The eight management system standards of the ISO 9000:2000 family of standards are:

- 1. Customer orientation**—Organizations must focus on understanding their customers' needs and requirements. They try to anticipate and exceed the customers' expectations.
- 2. Leadership**—Organizations need strong leaders to establish common goals and direction. Effective leaders establish open environments in which all employees can participate in meeting their organization's goals.
- 3. Involvement**—People are the most important part of any organization. Managers must assure that employees at all levels of the organization can fully participate and use all their skills to make the organization successful.
- 4. Process management**—The most successful organizations understand that they must manage all activities as processes.
- 5. System management**—In addition to the management of individual processes, successful organizations understand that their many individual processes are interrelated and must be managed within an overall system.
- 6. Continual improvement**—Continual improvement is the key to long-term success and high performance. Successful managers recognize that processes must be reviewed and improved continually to ensure that their organization stays competitive.
- 7. Fact based decisions**—Organizations that base their decisions on factual data are more likely to make the correct decision.
- 8. Close supplier relationships**—Organizations that partner and work closely with their suppliers ensure that both the organization and the supplier are better able to succeed.

There is no one right way to integrate quality principles into a working environment. W. Edwards Deming espoused the data approach. He recommended we start with statistical analysis of operations and draw conclusions from the data by using his plan-do-study-act cycle.

Joseph Juran chose the opposite approach: beginning with the corporate vision, then drilling down through strategic, tactical and operational levels using the Juran trilogy: quality planning, quality control and quality improvement.

Either approach to integrating the quality principles is effective. Senior leadership should choose the approach that most closely aligns with their organizational and customer requirements.