

## The Quality Management System

### **Quality Management** - Prime Focus:

- Achieving results that satisfy the requirements for quality.
- Motivated by stakeholders internal to the organisation, especially the organisation's management.
- Goal is to satisfy all stakeholders.
- Effective, efficient, and continually improving, overall quality related performance is the intended result.
- Scope covers all activities that affect the total quality-related business results of the organisation.

The universal processes of managing quality are Quality planning, Quality control and Quality improvement. (Page 2.6, Figure 2.2)

Definitions:

**Quality planning** – is a structured process for developing products (both goods and services) that ensures that customer needs are met by the final result.

Quality planning steps:

- Establish the product or service
- Identify the customers
- Discover the customer needs
- Develop the product or service
- Develop the realisation process
- Develop the controls and transfer to operations

**Quality control**– is a universal management process for conducting operations so as to provide stability – to prevent adverse change and to 'maintain the status quo.' To maintain stability, the quality control process evaluates actual performance, compares actual performance to goals, and takes action on the difference.

**Quality improvement** - as used here, 'improvement' means 'the organized creation of beneficial change; the attainment of unprecedented levels of performance.' A synonym is 'breakthrough.'

Two kinds of beneficial change: Better quality is a form of beneficial change. It is applicable to both kinds of beneficial change that are summarized below. (Page 5.3)

Product features that meet customer needs	Freedom from deficiencies
Higher quality enables companies to:	Higher quality enables companies to:
<ul style="list-style-type: none"> <li>Increase customer satisfaction</li> <li>Make products saleable</li> <li>Meet competition</li> <li>Increase market share</li> <li>Provides sales income</li> <li>Secure premium prices</li> </ul>	<ul style="list-style-type: none"> <li>Reduce error rates</li> <li>Reduce rework, waste</li> <li>Reduce field failures, warranty charges</li> <li>Reduce customer dissatisfaction</li> <li>Reduce inspection, test</li> <li>Shorten time to put new products on the market</li> <li>Increases yields, capacity</li> <li>Improve delivery performance</li> </ul>
The major effect is on sales.	Major effect is on cost.
Usually, higher quality costs more.	Usually, higher quality costs less.

The meaning of quality. (Figure 2.1, Page 2.2)

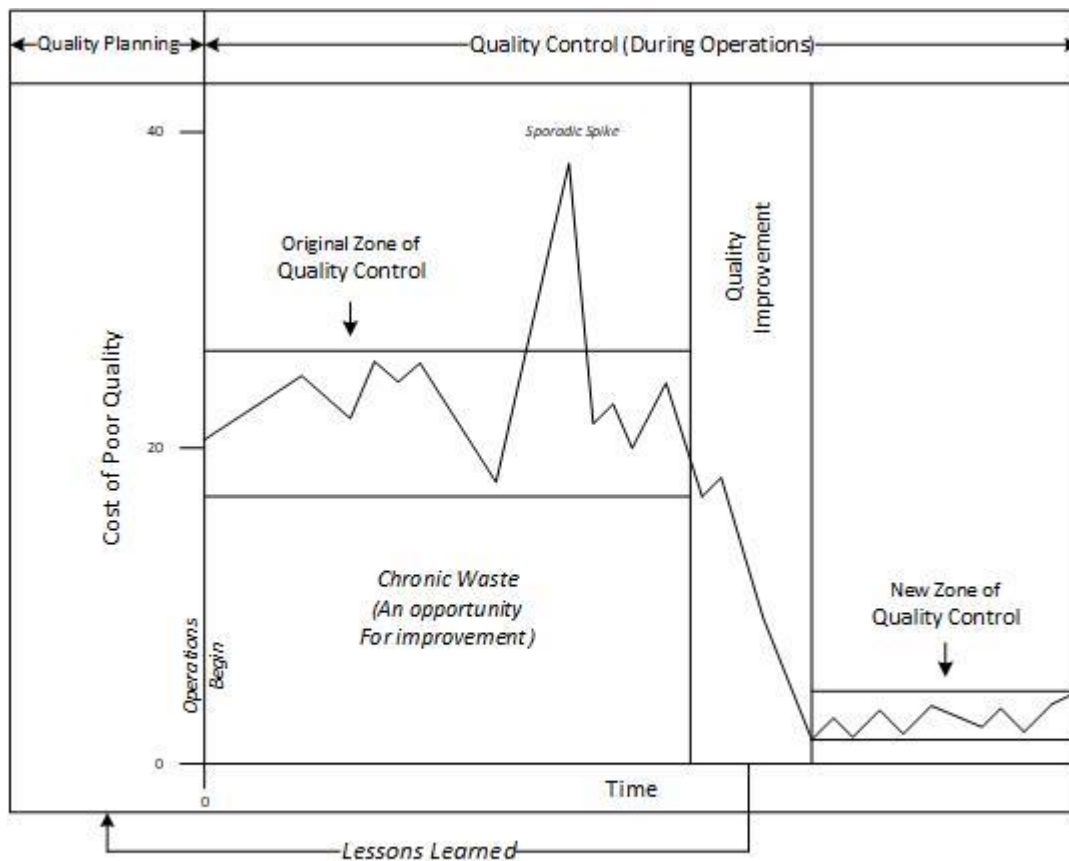
**Two kinds of beneficial change:**

1. Quality improvement to increase income may consist of such actions as:
  - Product development to create new features that provide greater customer satisfaction and hence increase income.
  - Business process improvement to reduce the cycle time for providing better service to customers.
  - Creation of 'one-stop shopping' to reduce customer frustration over having to deal with multiple personnel to get service.

2. Quality improvement to reduce deficiencies that create chronic waste may consist of such action as:

- Increase of the yield of factory processes.
- Reduction of the error rates in the offices.
- Reduction of field failures.

The end result, in both cases, is called 'quality improvement.' However, the processes used to secure these results are fundamentally different. (Page 5.3)



The Juran trilogy diagram (Figure 5.3, Page 5.8)

**Quality assurance**– Prime focus:

- Demonstration that the requirements for quality have been met (and can be) achieved.
- Motivated by stakeholders, especially customers, external to the organisation.
- Goal is to satisfy all customers.
- Confidence in the organisation's products is the intended result.
- Scope of demonstration covers activities that directly affect quality-related process and product results.

Achieved by the application and results of Quality Planning, Quality Control and Quality Improvement