

Total Quality Management

Total Quality
Management
and Continuous
Improvement

Why TQM?

Ford Motor Company had operating losses of \$3.3 billion between 1980 and 1982.

Xerox market share dropped from 93% in 1971 to 40% in 1981.

Attention to quality was seen as a way to combat the competition.

TQM: A “Buzzword” Losing Popularity

- ◆ For many companies, the term TQM is associated with corporate programs (mid 1980s ~ early 1990s) aimed at implementing employee teams and statistical process control.
- ◆ Unfortunately, many companies were dissatisfied with the perceived results of these programs, concluding TQM does not work.

Question: Why were they dissatisfied?
Were they justified?

TQM

- ◆ Total - made up of the whole
- ◆ Quality - degree of excellence a product or service provides
- ◆ Management - act, art or manner of planning, controlling, directing,.....

Therefore, TQM is the art of managing the whole to achieve excellence.

What does TQM mean?

Total Quality Management means that the organization's culture is defined by and supports the constant attainment of customer satisfaction through an integrated system of tools, techniques, and training. This involves the continuous improvement of organizational processes, resulting in high quality products and services.


What's the goal of TQM?

*“Do the right things **right** the first time, every time.”*

Another way to put it

- ◆ At it's simplest, TQM is all managers leading and facilitating all contributors in everyone's two main objectives:

 (1) **total client satisfaction** through quality products and services; and

 (2) **continuous improvements** to *processes, systems, people, suppliers, partners, products, and services.*

Productivity and TQM

- ◆ Traditional view:
 - Quality cannot be improved without significant losses in productivity.
- ◆ TQM view:
 - Improved quality leads to improved productivity.

Basic Tenets of TQM

- ◆ 1. The customer makes the ultimate determination of quality.
- ◆ 2. Top management must provide leadership and support for all quality initiatives.
- ◆ 3. Preventing variability is the key to producing high quality.
- ◆ 4. Quality goals are a moving target, thereby requiring a commitment toward continuous improvement.
- ◆ 5. Improving quality requires the establishment of effective metrics. We must speak with data and facts not just opinions.

The three aspects of TQM

Counting

Tools, techniques, and training in their use for analyzing, understanding, and solving quality problems

Customers

Quality for the customer as a driving force and central concern.

Culture

Shared values and beliefs, expressed by leaders, that define and support quality.

Total Quality Management and Continuous Improvement

- ◆ TQM is the management process used to make continuous improvements to all functions.
- ◆ TQM represents an ongoing, continuous commitment to improvement.
- ◆ The foundation of total quality is a management philosophy that supports meeting customer requirements through continuous improvement.

Continuous Improvement versus Traditional Approach

Traditional Approach

- ◆ Market-share focus
- ◆ Individuals
- ◆ Focus on “who” and “why”
- ◆ Short-term focus
- ◆ Status quo focus
- ◆ Product focus
- ◆ Innovation
- ◆ Fire fighting

Continuous Improvement

- ◆ Customer focus
- ◆ Cross-functional teams
- ◆ Focus on “what” and “how”
- ◆ Long-term focus
- ◆ Continuous improvement
- ◆ Process improvement focus
- ◆ Incremental improvements
- ◆ Problem solving

Quality Throughout

- ◆ “A Customer’s impression of quality begins with the initial contact with the company and continues through the life of the product.”
 - Customers look to the total package - sales, service during the sale, packaging, deliver, and service after the sale.
 - Quality extends to how the receptionist answers the phone, how managers treat subordinates, how courteous sales and repair people are, and how the product is serviced after the sale.
- ◆ “All departments of the company must strive to improve the quality of their operations.”

Value-based Approach

◆ Manufacturing Dimensions

- Performance
- Features
- Reliability
- Conformance
- Durability
- Serviceability
- Aesthetics
- Perceived quality

◆ Service Dimensions

- Reliability
- Responsiveness
- Assurance
- Empathy
- Tangibles

The TQM System

Objective

*Continuous
Improvement*

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graph TD; A([Continuous Improvement]) --- B[Customer Focus]; A --- C[Process Improvement]; A --- D[Total Involvement]; B --- E[Leadership  
Education and Training  
Communications  
Measurement]; C --- E; D --- E;
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Principles

**Customer
Focus**

**Process
Improvement**

**Total
Involvement**

Elements

Leadership
Education and Training **Supportive structure**
Communications **Reward and recognition**
Measurement