Total Quality Management



★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?



- ★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:
- ★(I) 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.

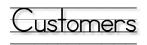
Basic Tenets of TQM

- ★ I. 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



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



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



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

Total Quality Management

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

<u>CONTINUOUS IMPROVEMENT</u>

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

Total Quality Management

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.

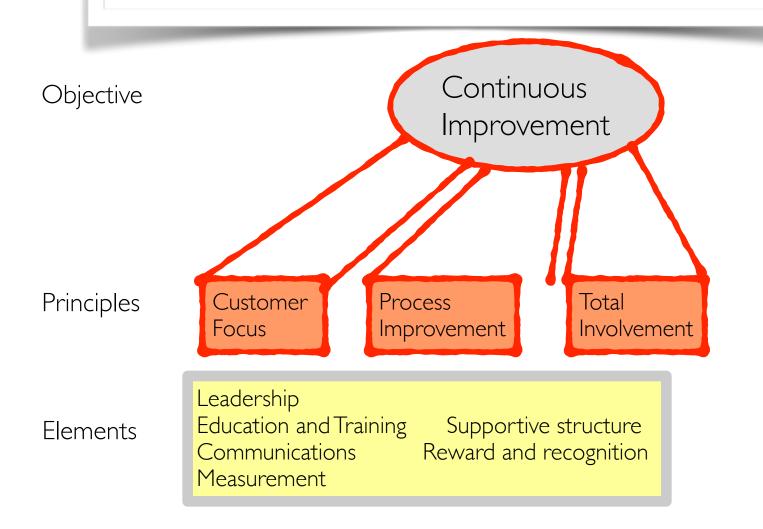
* 'All departments of the company must strive to improve the quality of their operations."

Value-based Approach

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

- Service Dimensions
 - Reliability
 - Responsiveness
 - Assurance
 - Empathy
 - Tangibles

The TQM System



INTRODUCTION TO TQM

What is TQM?

★TQM is the integration of all functions and processes within an organization in order to achieve continuous improvement of the quality of goods and services. The goal is customer satisfaction.

"No doubt, humans are always deficient" (Al-Quran)

The Three Quality Gurus

★Deming: the best known of the "early" pioneers, is credited with popularizing quality control in Japan in early 1950s. Today, he is regarded as a national hero in that country and is the father of the world famous Deming prize for quality.

JURAN

- ★Juran, like Deming was invited to Japan in 1954 by the union of Japanese Scientists and engineers.
- ★Juran defines quality as fitness for use in terms of design, conformance, availability, safety and field use. He focuses on top-down management and technical methods rather than worker pride and satisfaction.

Philip Crosby: author of popular book Quality is Free. His absolutes of quality are:

- ★Quality is defined as conformance to requirements, not
 "goodness"
- ★The system for achieving quality is prevention, not appraisal.
- ★The performance standard is zero defects, not "that's close enough"
- ★The measurement of quality is the price of non-conformance, not indexes.

Commonality of Themes of Quality Gurus

- ★Inspection is never the answer to quality improvement, nor is "policing".
- ★Involvement of leadership and top management is essential to the necessary culture of commitment to quality.
- A program for quality requires organization-wide efforts and long term commitment, accompanied by the necessary investment in training.
- ★Quality is first and schedules are second.

DEFINITION OF QUALITY

- ★The concept and vocabulary of quality are elusive. Different people interpret quality differently. Few can define quality in measurable terms that can be proved operationalized. When asked what differentiates their product or service;
- The <u>banker</u> will answer' service
- The <u>healthcare</u> worker will answer "quality health care"
- The hotel employee will answer "customer satisfaction"
- The manufacturer will simply answer "quality product"

Five Approaches of Defining Quality

★Harvard professor David Garvin, in his book Managing Quality summarized five principal approaches to define quality.

- **★**Transcendent
- **★**Product based
- **★**User based
- ★Manufacturing based
- **★** Value based

Transcendental view

- ★Those who hold the transcendental view would say "I can't define it, but I know it when I see it"
- *Advertisers are fond of promoting products in these terms.
- "Where shopping is a pleasure" (supermarket). "We love to fly and it shows" (airline).
- ★ Television and print media are awash with such indefinable claims and therein lies the problem:
- ★ Quality is difficult to define or to operationalize. It thus becomes elusive when using the approach as basis for competitive advantage. Moreover, the functions of design, production and service may find it difficult to use the definition as a basis for quality management.

USER BASED

- ★It is based on idea that quality is an individual matter and products that best satisfy their preferences are those with the highest quality. This is rational approach but leads to two problems;
- ★ Consumer preference vary widely and it is difficult to aggregate these preferences into products with wide appeal. This leads to the choice between a niche strategy or a market aggregation approach which tries to identify those product attributes that meet the needs of the largest number of consumers.
- ★ Another problem concerns the answer to the question "Are quality and customer satisfaction the same?" the answer is probably not. One may admit that a Lincoln continental has many quality attribute, but satisfaction may be better achieved with an Escort.

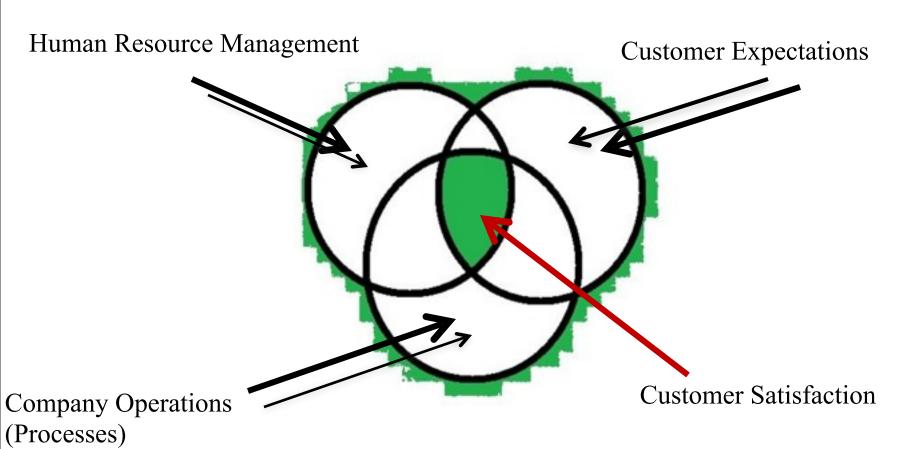
Characteristics of TQM Leader

- ★ Visible, Committed and Knowledgeable
- ★A Missionary Zeal
- **★**Aggressive Targets
- ★Strong Drivers
- **★**Communication of Values
- **★**Organization
- **★**Customers Contact

TQO HRM

- ★Five Principles are:
- ★Quality Work the First Time
- ★ Focus on the Customer
- ★Strategic Holistic Approach to Improvement
- ★<u>CI</u> as a Way of Life
- ★ Mutual Respect and Teamwork

Customer Satisfaction Three Part System



Indicators for Customer Satisfaction

- ★Frontline empowerment
- ★Excellent hiring, training, attitude and morale for front line employees
- ★Proactive customer service system
- ★Proactive management of relationship with customers
- ★Use of all listening posts
- ★Quality requirements of market segment
- **Commitment to customers**
- ★Understanding customer requirements
- ★Service standards meeting customers requirements

Cost of Quality Three Views of quality Costs

- **Higher quality means higher cost.**
- ★Quality attributes such as performance and features cost more in terms of labor, material, design and other costly resources.
- ★The additional benefits from improved quality do not compensate for additional expense.
- **The cost of improving quality is less than the resulting savings.**
- ★The saving result from less rework, scrap and other direct expenses related defects.
- ★This is said to account for the focus on continuous improvement of processes in Japanese firms.

Three Views of quality Costs

- Quality costs are those incurred in excess of those that would have been incurred if the product were built or the service performed exactly right the first time.
- **★**This view is held by adherents of TQM philosophy.
- Costs include not only those that are direct, but also those resulting from lost customers, lost market share and the many hidden costs and foregone opportunities not identified by modern cost accounting systems.