TOTAL QUALITY MANAGEMENT

ISO-9000 Definition "Quality the totality of features and characteristics of a product and service that bears on its ability to meet stated or implied needs."

Juran-- Quality is fitness for use

Crosby-- Conformance to requirements

Japanese-- Providing extraordinary customers satisfaction

Total Quality Management (TQM) is an enhancement to the traditional way of doing business. It is a proven technique to guarantee survival in world-class competition. Only by changing the actions of management will the culture and actions of an entire organization be transformed. TQM is for the most part common sense. Analyzing the three words, we have

Total—Made up of the whole.

Quality—Degree of excellence a product or service provides.

Management—Act, art, or manner of handling, controlling, directing, etc.

Therefore, TQM is the art of managing the whole to achieve excellence. The Golden Rule is a simple but effective way to explain it: Do unto others as you would have them do unto you.

TQM is defined as both a philosophy and a set of guiding principles that represent the foundation of a continuously improving organization. It is the application of quantitative methods and human resources to improve all the processes within an organization and exceed customer needs now and in the future. TQM integrates fundamental management techniques, existing improvement efforts, and technical tools under a disciplined approach.

TQM requires six basic concepts:

1. A committed and involved management to provide long-term top-to-bottom organizational support.
2. An unwavering focus on the customer, both internally and externally.
3. Effective involvement and utilization of the entire work force.
4. Continuous improvement of the business and production process.
5. Treating suppliers as partners.
6. Establish performance measures for the processes.

TQM-REENGINEERING

Reengineering sometimes called Business Process Reengineering (BPR), involves a complete rethinking and transformation of key business processes, leading to strong horizontal coordination and greater flexibility in responding to changes in environment. Because work is originated around processes rather than function, reengineering often involves a shift to horizontal structure based on teams.

Reengineering basically means starting over–throwing out all the notions of how work was done and deciding how it can best be done now. It requires identifying customer needs and them designing how it can best be done now. It requires identifying customer needs then designing processes and aligning people to meet those needs.

Banks and insurance companies, manufacturing and mining companies, and service companies throughout the world, all have achieved breakthroughs in speed, flexibility, innovation and quality through reengineering.

It is very important to understand that Reengineering is not a separate discipline. It is, in fact, a subset of TQM. The essential difference between (Business Process) Reengineering and TQM is that reengineering aims at quantum gains on the order of 30 to 50 percent or more, whereas Total Quality Management programs stress incremental progress, striving for inch-by-inch gains again and again.

The two approaches to improve performance are not mutually exclusive; it makes sense to use them in tandem. Reengineering can be used to first produce good basic design that dramatically improves a business process. Total quality programs can be used to work out bugs, perfect the processes, and gradually improve both efficient and effectiveness.

Such two-pronged approach to implementing organizational and strategic change is like a marathon race where you run fast four laps as fast as you can, then gradually pick up speed the remainder of the way.

According to the authors of the book, "Reengineering is the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance such as cost, quality, service and speed.

Reengineering is done by analyzing and redesigning of workflow within and between enterprises. Engineering reached its heyday in the early 1990's when Michael Hammer and James Champy published their best-selling book, "Reengineering the Corporation"

TQM – EMPOWERMENT

- HRM and TQM

Total quality management (TQM) has far-reaching implications for the management of human resources. It emphasizes self-control, autonomy, and creativity among employees and calls for greater active cooperation rather than just compliance.
Indeed, it is becoming a maxim of good management that human factors are the most important dimension in quality and productivity improvement.

- Involvement: A central idea of Human Resource utilization

At the heart of the TQM is the concept of intrinsic motivation-involvement in decision making by the employees. Employee involvement is a process for empowering members of an organization to make decisions and to solve problems appropriate to their levels in the organization.
The Lean (Toyota) systems, utilizing JIT techniques are more productive, smaller and more efficient, increases worker pride and involvement on shop floor.

- Defining Employee Empowerment

The dictionary definition of empowerment is to invest people with authority
Empowerment should not be confused with delegation or job enrichment. Delegation refers to distributing and entrusting work to others. Employee empowerment requires that he individual is held responsible for accomplishing the whole task. The employee becomes process owner- thus the individual is not only responsible but also accountable. Employee empowerment requires that the individual is held responsible for accomplishing a whole task.

- Suggestion System

Suggestion systems are designed to provide the individual with the opportunity to be involved by contributing to the organization. The key to an effective system is management commitment. It is the responsibility of management to make it easy for employees to suggest improvements. Stimulating and encouraging employee participation starts the creative process.

- Why Training is important in TQM based organizations?

As, at the heart of TQM is the concept of intrinsic motivation-involvement in decision making by the employees, it means more responsibility, which in turn requires a greater level of skill.
This must be achieved through TRAINING.

Total Quality Management (TQM) Tools

Total quality management (TQM) tools help organizations to identify, analyze and assess qualitative and quantitative data that is relevant to their business. These tools can identify procedures, ideas, statistics, cause and effect concerns and other issues relevant to their organizations. Each of which can be examined and used to enhance the effectiveness, efficiency, standardization and overall quality of procedures, products or work environment, in accordance with ISO 9000 standards (SQ, 2004). According to Quality America, Inc. the number of TQM tools is close to 100 and come in various forms, such as brainstorming, focus groups, check lists, charts and graphs, diagrams and other analysis tools. In a different vein, manuals and standards are TQM tools as well, as they give direction and best practice guidelines to you and/or your staff. TQM tools illustrate and aid in the assimilation of complicated information such as:

1) Identification of your target audience
2) Assessment of customer needs
3) Competition analysis
4) Market analysis
5) Brainstorming ideas
6) Productivity changes
7) Various statistics
8) Staff duties and work flow analysis
9) Statement of purpose
10) Financial analysis
11) Model creation
12) Business structure
13) Logistic analysis

The list goes on, though essentially TQM tools can be used in any situation, for any number of reasons, and can be extremely effective if used properly.

TQM Tools

The following are some of the most common TQM tools in use today. Each is used for, and identifies, specific information in a specific manner. It should be noted that tools should be used in conjunction with other tools to understand the full scope of the issue being analyzed or illustrated. Simply using

one tool may inhibit your understanding of the data provided, or may close you off to further possibilities.

1) **Pie Charts and Bar Graphs**

Used to identify and compare data units as they relate to one issue or the whole, such as budgets, vault space available, extent of funds, etc.

2) Histograms

To illustrate and examine various data element in order to make decisions regarding them Effective when comparing statistical, survey, or questionnaire results.

3) **Run Chart**

Follows a process over a specific period of time, such as accrual rates, to track high and low points in its run, and ultimately identify trends, shifts and patterns.

a) **Pareto Charts / Analysis**

Rates issues according to importance and frequency by prioritizing specific problems or causes in a manner that facilitates problem solving. Identify groupings of qualitative data, such as most frequent complaint, most commonly purchased preservation aid, etc. in order to measure which have priority.· Can be scheduled over select periods of time to track changes. They can also be created in retrospect, as a before and after analysis of a process change.

4) **Force Field Analysis**

To identify driving and restraining forces occurring in a chosen process in order to understand why that particular process functions as it does. For example, identifying the driving and restraining forces of catering predominantly to genealogists. To identify restraining forces that need to be eradicated, or driving forces that need to be improved, in order to function at a higher level of efficiency.

5) **Focus Groups**

Useful for marketing or advertising organizations to test products on the general public.

Consist of various people from the general public who use and discuss your product, providing impartial feedback to help you determine whether your product needs improvement or if it should be introduced onto the market.

6) **Brainstorming and Affinity Diagrams**

Teams using creative thinking to identify various aspects surrounding an issue.

An affinity diagram, which can be created using anything from enabling software to post-it notes organized on a wall, is a tool to organize brainstorming ideas

.**7) Tree Diagram**

· To identify the various tasks involved in, and the full scope of, a project.

· To identify hierarchies, whether of personnel, business structure, or priorities.

· To identify inputs and outputs of a project, procedure, process, etc

.**8) Flowcharts and Modelling Diagrams**

· Assist in the definition and analysis of each step in a process by illustrating it in a clear and comprehensive manner.

· Identify areas where workflow may be blocked, or diverted, and where workflow is fluid.
· Identify where steps need to be added or removed to improve efficiency and create standardized workflow

.**9) Scatter Diagram**
· To illustrate and validate hunches
· To discover cause and effect relationships, as well as bonds and correlations, between two variables
· To chart the positive and negative direction of relationships

10) Relations Diagram - To understand the relationships between various factors, issues, events, etc. so as to understand their importance in the overall organizational view.

11) PDCA
· The Plan-Do-Check-Act style of management where each project or procedure is planned according to needs and outcome, it is then tested, examined for efficiency and effectiveness, and then acted upon if anything in the process needs to be altered.
· This is a cyclical style to be iterated until the process is perfected. All of these TQM tools can be easily created and examined by using various types of computer software or by simply mapping them out on paper. They can also be easily integrated into team meetings, organizational newsletters, marketing reports, and for various other data analysis needs. Proper integration and use of these tools will ultimately assist in processing data such as identifying collecting policies, enhancing work flow such as mapping acquisition procedures, ensuring client satisfaction by surveying their needs and analyzing them accordingly, and creating an overall high level of quality in all areas of your organization.

The PDSA Cycle

The basic Plan-Do-Study-Act (PDSA) cycle was first developed by Shewhart and then modified by Dem
It is an effective improvement technique. Figure 5-3 illustrates the cycle.

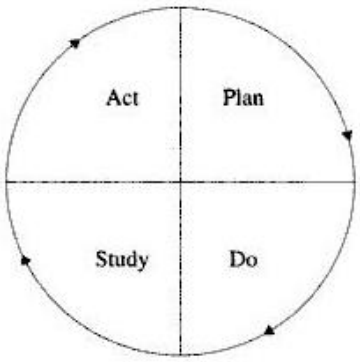

Figure 5-3 The PDSA Cycle

[6] Shewhart's cycle was called Plan-Do-Check-Act (PDCA).