Total Quality Management

( TQM )

What is **TQM** ?

TQM is a set of management practices throughout the organization, geared to ensure the organization consistently meets or exceeds customer requirements. TQM places strong focus on process measurement and controls as means of continuous improvement.

Why TQM?

TQM refers to an integrated approach by management to focus all functions and levels of an organization on quality and [continuous improvement](http://www.1000ventures.com/business_guide/im_cif_main.html). Over the years TQM has become very important for improving a firm's process capabilities in order to achieve fit and sustain competitive advantages. TQM focuses on encouraging a continuous flow of incremental improvements from the bottom of the organization's hierarchy. TQM is not a complete solution formula as viewed by many – formulas can not solve managerial problems, but a lasting commitment to the process of continuous improvement.

Principles Of TQM :

1- Be Customer focused:

what ever you do for quality improvement , remember that ONLY customers determine the level of quality , what ever you do to foster quality  improvement , training employees , integrating quality into processes management , ONLY customers determine whether your effort were  worthwhile.

 2 - Insure Total Employee Involvement :

 This done after you remove fear from work place , then empower employee ... you provide the [proper environment](http://www.bexcellence.org/Total-Quality-Management-Influence.html).

3 - Process Centered :

 fundamental part of TQM is to focus on Process thinking.

4 - Integrated system :

 All employee must know business mission and vision , must monitor the process .an integrated business system may be modeled by [MBNQA](http://www.bexcellence.org/Malcolm-Baldrige-National-Quality-Award.html) or  [ISO 9000.](javascript:na_open_window('win',%20'http://www.praxiom.com/index.htm',%200,%200,%20300,%20200,%201,%201,%201,%201,%201))

5 - Strategic and systematic approach :

Strategic plan must integrate quality as core component.

6 -  Continual Improvement :

using analytical and creative thinking in finding ways to become more effective.

7- Fact Based Decision Making :

decision making must be ONLY on data , not personal thinking or situational .

8-  Communication :

communication strategy , method and timeliness must be well defined.

Total Quality Management Tools:

Here , you will find collection of Total Quality Management Tools ,which will guide you through step by step to learn how to develop  each tool and examples .

We have grouped the tools categories to :

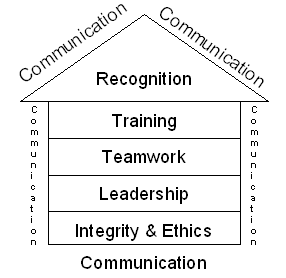
1-  The seven classic quality tools.

2-  Basic management & planning tools.

3-  Process improvement tools.

4-  Innovation & creativity tools.

But that don't mean you can't use this tool in other category , its your choice , after you understand the tools , to select the one that mostly helpful to solve your problem.

To be successful implementing TQM, an organization must concentrate on the eight key elements:

1. Ethics
2. Integrity
3. Trust
4. Training
5. Teamwork
6. Leadership
7. Recognition
8. Communication

Key Elements :

TQM has been coined to describe a philosophy that makes quality the driving force behind leadership, design, planning, and improvement initiatives. For this, TQM requires the help of those eight key elements. These elements can be divided into four groups according to their function. The groups are:

1. Foundation - It includes: Ethics, Integrity and Trust.  
2. Building Bricks - It includes: Training, Teamwork and Leadership.  
3. Binding Mortar - It includes: Communication.  
4. Roof - It includes: Recognition.

We can conclude that these eight elements are key in ensuring the success of TQM in an organization and that the supervisor is a huge part in developing these elements in the work place. Without these elements, the business entities cannot be successful TQM implementers. It is very clear from the above discussion that TQM without involving integrity, ethics and trust would be a great remiss, in fact it would be incomplete. Training is the key by which the organization creates a TQM environment. Leadership and teamwork go hand in hand. Lack of communication between departments, supervisors and employees create a burden on the whole TQM process. Last but not the least, recognition should be given to people who contributed to the overall completed task. Hence, lead by example, train employees to provide a quality product, create an environment where there is no fear to share knowledge, and give credit where credit is due is the motto of a successful TQM organization.

A core concept in implementing TQM is Deming’s 14 points, a set of management practices to help companies increase their quality and productivity :

1. **Create constancy of purpose for improving products and services.**
2. **Adopt the new philosophy.**
3. **Cease dependence on inspection to achieve quality.**
4. **End the practice of awarding business on price alone; instead, minimize total cost by working with a single supplier.**
5. **Improve constantly and forever every process for planning, production and service.**
6. **Institute training on the job.**
7. **Adopt and institute leadership.**
8. **Drive out fear.**
9. **Break down barriers between staff areas.**
10. **Eliminate slogans, exhortations and targets for the workforce.**
11. **Eliminate numerical quotas for the workforce and numerical goals for management.**
12. **Remove barriers that rob people of pride of workmanship, and eliminate the annual rating or merit system.**
13. **Institute a vigorous program of education and self-improvement for everyone.**
14. **Put everybody in the company to work accomplishing the transformation.**

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| **TQM Process Improvement and Problem Solving Sequence** | | | | | |
| **PLAN**  (PLAN A CHANGE) | | | **DO**  (IMPLEMENT THE CHANGE) | **CHECK**  (OBSERVE THE EFFECTS) | **ACTION** (EMBED THE FIX INTO  THE PROCESS FOR GOOD) |
| **DEFINE  THE  PROBLEM** | **IDENTIFY  POSSIBLE  CAUSES** | **EVALUATE  POSSIBLE  CAUSES** | **MAKE  A  CHANGE** | **TEST  THE  CHANGE** | **TAKE  PERMANENT  ACTION** |
| 1. Recognize that what you are doing is a "PROCESS"  2. Identify the commodity  being processed. - Process Inference  3. Define some measurable characteristics of value to the commodity.  4. Describe the "PROCESS" o Process Flow Analysis's o Flow charts o List of steps  5. Identify the "Big"  problem o Brainstorming o Checklists o Pareto analysis | 6. "BRAINSTORM" what is causing the problem.  7. Determine what past data shows. o Frequency distribution o Pareto charts o Control charts **-** sampling | 8. Determine the relationship  between cause and effect o Scatter diagrams o Regression analysis  9. Determine what the  process is doing now o Control charts - sampling | 10. Determine what change would help   * Your knowledge  of the process * Scatter diagrams * Control Charts **-** sampling * Pareto analysis   \*\*\*\*Then make  the change. | 11. Determine what change worked (confirmation).   * Histograms * Control charts **-** sampling * Scatter diagrams | 12. Ensure the fix is embedded in the process and that the resulting process is used.   Continue to monitor the process to ensure:  A. The problem is fixed for good.  and  B. The process is good enough  o Control charts **-** sampling  \*\*\*\*To ensure continuous  improvement, return  to step 5. |