

## **Total Quality Management. Explanation of Fourteen Points of Management by Edward Deming.**

### **Short biography of W. Edwards Deming**

W Edwards Deming was an American statistician who is associated with the rise of **Japan** as a manufacturing nation, and with the invention of **Total Quality Management (TQM)**. Deming went to Japan just after the War to help set up a census of the Japanese population. While he was there, he taught 'statistical process control' to Japanese engineers - a set of techniques which allowed them to manufacture high-quality goods without expensive machinery. In 1960 he was awarded a medal by the Japanese Emperor for his services to that country's industry. Deming returned to the US and was unknown for years until the publication of his book "Out of the crisis" in 1982. In this book, Deming set out 14 points which, if applied to US manufacturing industry, would he believed, save the US from industrial doom by the Japanese. The Fourteen Points of Management of Dr. W. Edward Deming represent for many people the essence of **Total Quality Management (TQM)**.

### **Deming's Fourteen Points of Management**

1. Create constancy of purpose for improvement of product and service. (Organizations must allocate resources for long-term planning, research, and education, and for the constant improvement of the design of their products and services)
2. Adopt the new philosophy. (Government regulations representing obstacles must be removed, transformation of companies is needed)
3. End the dependence on mass inspections. (Quality must be designed and built into the processes. Prevent defects, rather than attempting to detect and fix them, after they have occurred)
4. End the practice of awarding business on the basis of price tags alone. (Organizations should establish long-term relationships with [single] suppliers)
5. Improve constantly and forever the system of production and service. (Management and employees must search continuously for ways to improve quality and productivity)
6. Institute training. (Training at all levels is a necessity, not optional)
7. Adopt and institute leadership. (Managers should lead, not supervise)
8. Drive out fear. (Make employees feel secure enough to express ideas and ask questions)
9. Break down barriers between staff areas. (Working in teams will solve many problems and will improve quality and productivity)
10. Eliminate slogans, warnings, and targets for the workforce. (Problems with quality and productivity are caused by the system, not by individuals. Posters and slogans generate frustration and resentment)
11. Eliminate numerical quotas for the work force and numerical goals for people in management. (To achieve their quotas, people will create defective products and false reports)
12. Remove barriers that rob people of pride of workmanship. (Individual performance reviews are a great barrier to pride of achievement)
13. Encourage education and self-improvement for everyone. (Continuous learning for everyone)
14. Take action to accomplish the transformation. (Commitment on the part of both top management and employees is required).

## **Theory X and Theory Y (Douglas McGregor)**

Douglas McGregor in his book, "The Human Side of Enterprise" published in 1960 has examined theories on behavior of individuals at work, and he has formulated two models which he calls Theory X and Theory Y.

### **Theory X Assumptions**

The average human being has an inherent dislike of work and will avoid it if he can.

- Because of their dislike for work, most people must be controlled and threatened before they will work hard enough.
- The average human prefers to be directed, dislikes responsibility, is unambiguous, and desires security above everything.
- These assumptions lie behind most organizational principles today, and give rise both to "tough" management with punishments and tight controls, and "soft" management which aims at harmony at work.
- Both these are "wrong" because man needs more than financial rewards at work, he also needs some deeper higher order motivation - the opportunity to fulfill himself.
- Theory X managers do not give their staff this opportunity so that the employees behave in the expected fashion.

### **Theory Y Assumptions**

- The expenditure of physical and mental effort in work is as natural as play or rest.
- Control and punishment are not the only ways to make people work, man will direct himself if he is committed to the aims of the organization.
- If a job is satisfying, then the result will be commitment to the organization.
- The average man learns, under proper conditions, not only to accept but to seek responsibility.
- Imagination, creativity, and ingenuity can be used to solve work problems by a large number of employees.
- Under the conditions of modern industrial life, the intellectual potentialities of the average man are only partially utilized.

### **Comments on Theory X and Theory Y Assumptions**

These assumptions are based on social science research which has been carried out, and demonstrate the potential which is present in man and which organizations should recognize in order to become more effective.

McGregor sees these two theories as two quite separate attitudes. Theory Y is difficult to put into practice on the shop floor in large mass production operations, but it can be used initially in the managing of managers and professionals.

In "The Human Side of Enterprise" McGregor shows how Theory Y affects the management of promotions and salaries and the development of effective managers. McGregor also sees Theory Y as conducive to participative problem solving.

It is part of the manager's job to exercise authority, and there are cases in which this is the only method of achieving the desired results because subordinates do not agree that the ends are desirable. However, in situations where it is possible to obtain commitment to objectives, it is better to explain the matter fully so that employees grasp the purpose of an action. They will then exert self-direction and control to do better work - quite possibly by better methods - than if they had simply been carrying out an order which they did not fully understand.

The situation in which employees can be consulted is one where the individuals are emotionally mature, and positively motivated towards their work; where the work is sufficiently responsible to allow for flexibility and where the employee can see his own position in the management hierarchy. If these conditions are present, managers will find that the participative approach to problem solving leads to much improved results compared with the alternative approach of handing out authoritarian orders.

Once management becomes persuaded that it is under estimating the potential of its human resources, and accepts the knowledge given by social science researchers and displayed in Theory Y assumptions, then it can invest time, money and effort in developing improved applications of the theory.