Chapter 9

Miscellaneous topics

Total Quality management

Total quality management (TQM) is a structured approach to overall organizational management. The focus of the process is to improve the quality of an organization's outputs, including goods and services, through continual improvement of internal practices. The standards set as part of the TQM approach can reflect both internal priorities and any industry standards currently in place.

Industry standards can be defined at multiple levels and may include cause to various laws and regulations governing the operation of the particular business. Industry standards can also include the production of items to an understood form.

A core definition of total quality management (TQM) describes a management approach to long-term success through customer satisfaction. In a TQM effort, all members of an organization participate in improving processes, products, services, and the culture in which they work.

Necessity of TQM

- 1. To build and develop best organization
- 2. To involve full potential of human capabilities
- 3. To continuously reduce the cost
- 4. Improve the qualities
- 5. Developing product based on customer satisfaction

Characteristics of TQM

- 1. It is customer oriented approach
- 2. Provides best qualities of product
- 3. It is a continues process
- 4. It involves in every organization
- 5. It aims customer satisfaction

Principles of TQM

1. Customer Focus

All organizational activities are directed towards producing goods and services that will satisfy the present and future customer requirements. Being aware of customer requirements and always satisfying them is the integral part of TQM.

2. Leadership

Organization should have good and effective leaders who provide unity of action and direction to all those working in the organization. The leaders should strive the organizational efforts towards achievement of overall goals.

3. Involvement of People

Structures, systems and technology by themselves do not provide quality unless people who run the organization fully exploit their abilities to work for the organization's progress and benefits.

4. Process Approach

Organizational goals can be achieved when resources and activities are managed as a process. "A process is a combination of methods, materials, manpower and machines that, taken together, produce a product".

5. Systems Approach to Management

An organization should be viewed as a system with interrelated set of activities that link the internal organizational environment with its external environment and help to efficiently achieve the goals in terms of quality products.

6. Continual Improvement

TQM is not an end. It is the road to achieving the end, the quality improvement. It is a continuous process of incremental change that aims at improving organization's operational efficiency according to improvement in competitors' policies and customers' requirements.

7. Factual Approach to Decision-Making

Managers should know their current quality standards in order to improve upon them. The decision to improve depends upon available information and its dissemination to all concerned and, therefore, it is necessary that right and accurate information is available to managers through effective information systems.

8. Mutually Beneficial Supplier Relationships.

The organization and its suppliers should work for mutual benefit of each other to provide value to overall organizational activities.

Elements of TQM

- 1. Ethics Ethics is the discipline concerned with good and bad in any situation. It is a two-faceted subject represented by organizational and individual ethics. Organizational ethics establish a business code of ethics that outlines guidelines that all employees are to adhere to in the performance of their work. Individual ethics include personal rights or wrongs.
- 2. Integrity Integrity implies honesty, morals, values, fairness, and adherence to the facts and sincerity. The characteristic is what customers (internal or external) expect and deserve to receive. People see the opposite of integrity as duplicity. TQM will not work in an atmosphere of duplicity.
- 3. Trust Trust is a by-product of integrity and ethical conduct. Without trust, the framework of TQM cannot be built. Trust fosters full participation of all members. It allows empowerment that encourages pride ownership and it encourages commitment.
- 4. Training Training is very important for employees to be highly productive. Supervisors are solely responsible for implementing TQM within their departments, and teaching their employees the philosophies of TQM.
- 5. Teamwork To become successful in business, teamwork is also a key element of TQM. With the use of teams, the business will receive quicker and better solutions to problems.

Implementation of TQM

TQM is not an easy task as requires a total change in culture, shifting of responsibilities to manage and continues participation of all quality improvements

- 1. Identification and preparation.
- 2. Management and understanding
- 3. Scheme for improvement
- 4. Critical analysis

Statistical process control (SPC):-

is defined as the use of statistical techniques to control a process or production method. SPC tools and procedures can help you monitor process behavior, discover issues in internal systems, and find solutions for production issues. Statistical process control is often used interchangeably with statistical quality control (SQC).

Statistical process control (SPC) is a method of quality control which employs statistical methods to monitor and control a process. This helps to ensure that the process operates efficiently, producing more specification-conforming products with less waste

Total Employee Involvement

TEI is concerned with Teamwork- Enthusiasm- Initiative towards achieving our organizations success.

"TEI is based on trust, integrity, two-way commitment and communication between us and our employees", says the Director of Corru Cartons India Pvt Ltd. It is an approach that increases our productivity, quality, and organizational performance. It motivates our employees and make them enthusiastic to work better and better.

Just In Time Concept

Just in time is defined as "a philosophy of manufacturing based on planned elimination of all wastes and of continues property

Just-in-time (JIT) manufacturing, also known as just-in-time production or the Toyota Production System (TPS), is a methodology aimed primarily at reducing times within the production system as well as response times from suppliers and to customers. Its origin and development was in Japan, largely in the 1960s and 1970s and particularly at Toyota

Advantages of JIT

- 1. Requires lower stock
- 2. Work capital is tied up in stock
- 3. Less time is spent on the checking of product

Disadvantages of JIT

- 1. Maximum stock is kept for reworking
- 2. If stock is not delivered on time whole production schedule is delayed
- **3.** There is no spare finished product

Elements of JIT

- 1. Reduced setup times
- 2. Reduce local sizes
- 3. Reduced lead times
- 4. Prevention maintenance
- Flexible work
- 6. Implement of zero defect quality program

Intellectual property rights

Intellectual property (IP) is a category of property that includes intangible creations of the human intellect. There are many types of intellectual property, and some countries recognize more than others. The most well-known types are copyrights, patents, trademarks, and trade secrets. Early precursors to some types of intellectual property existed in societies such as Ancient Rome, but the modern concept of intellectual property developed in England in the 17th and 18th centuries.

Patent infringement

Patent infringement typically is caused by using or selling a patented invention without permission from the patent holder. The scope of the patented invention or the extent of protection is defined in the claims of the granted patent. There is safe harbor in many jurisdictions to use a patented invention for research. This safe harbor does not exist in the US unless the research is done for purely philosophical purposes, or in order to gather data in order to prepare an application for regulatory approval of a drug. In general, patent infringement cases are handled under civil law (e.g., in the United States) but several jurisdictions incorporate infringement in criminal law also (for example, Argentina, China, France, Japan, Russia, South Korea).

Copyright infringement is reproducing, distributing, displaying or performing a work, or to make derivative works, without permission from the copyright holder, which is typically a publisher or other business representing or assigned by the work's creator. It is often called "piracy". While copyright is created the instant a work is fixed, generally the copyright holder can only get money damages if the owner registers the copyright. Enforcement of copyright is generally the responsibility of the copyright holder. The ACTA trade agreement, signed in May 2011 by the United States, Japan, Switzerland, and the EU, and which has not entered into force, requires that its parties add criminal penalties, including incarceration and fines, for copyright and trademark infringement, and obligated the parties to actively police for infringement. There are limitations and exceptions to copyright, allowing limited use of copyrighted works, which does not constitute infringement. Examples of such doctrines are the fair use and fair dealing doctrine.

Trademark infringement

Trademark infringement occurs when one party uses a trademark that is identical or confusingly similar to a trademark owned by another party, in relation to products or services which are identical or similar to the products or services of the other party. In many countries, a trademark receives protection without registration, but registering a trademark provides legal advantages for enforcement. Infringement can be addressed by civil litigation and, in several jurisdictions, under criminal law.