

4.1 QUALITY CIRCLE:

A quality circle is a group of employees who meet regularly to identify, analyze, and solve problems related to quality and production. Quality circles are a key component of Total Quality Management (TQM) and are designed to improve organizational processes by using the collective knowledge of employees.

Here are some characteristics of quality circles:

Size

Typically 6–12 members, which allows for effective communication and collaboration while keeping the group small enough for active participation

Membership

Voluntary

Structure

A supervisor or other appointed leader runs the meetings, which are organized and documented with minutes

Objectives

To promote a culture of continuous improvement, increase employee engagement, and develop problem-solving, communication, and teamwork skills

Benefits

Can increase productivity and competitiveness, improve customer satisfaction, and raise awareness of quality control

The concept of quality circles originated in Japan after World War II and was influenced by the work of W. Edwards Deming and Kaoru Ishikawa. The first quality circle in the United States was registered at Lockheed Missile and Space Company in 1974.

Some challenges to implementing quality circles include: Lack of management support, Inconsistent meeting structure, Unclear goals and expectations, Insufficient training, and Limited resources.

QUALITY EDUCATION

Total Quality Management is a management approach that was instigated in the 1950s and has gradually become popular since the early 1980s. The term ‘quality’ is at the core of this philosophy. While defining total quality management, scholars took the opportunity to present their perceptions regarding this term in numerous ways; as a result, a good number of definitions appear before us with different connotations. Crosby states that quality management is a methodical way of ensuring that organized activities happen the way they are planned. Short & Rahim define TQM as a proactive approach, to confirm quality into the product, service and

design of the process and then to continually improve it.

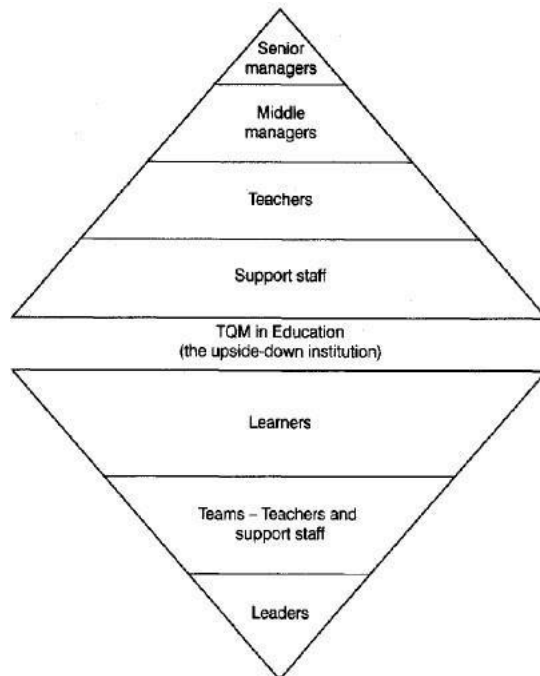
According to these definitions, TQM is a plan, a systematic approach to ensure quality and continuous improvement. Deming describes TQM as a never-ending cycle of progress in the system of production should change into gaining better performance and quality standards for the product. Yang perceives TQM as a set of practices that focuses on the systematic improvement, satisfying the customers' needs, and decreasing rework. TQM is a system and set of practices which are aimed at relentless quality improvement and better business performance. TQM views an organization as a collection of interrelated processes. It (TQM) is a method by which management and employees are involved in continuous improvement of the production of goods and services. Goetsch and Davis opine that TQM consists of relentless improvement activities, involving everybody in the business in a totally integrated effort towards improving performance at every level. Vinni comments TQM creates such environment in which all the assets are used ingeniously and effectively in order to provide quality service the institution needs to adapt in this fast paced world.

According to Witcher, TQM is the combination of three terms—Total: meaning that one is involved, including customer and suppliers; Quality: indicating that customer needs are met exactly; and Management: indicating that senior executives are committed. Oakland expresses TQM as an approach involving the whole organization for understanding each activity of each individual at each management layer. TQM strives to integrate all organizational functions (marketing, finance, design, engineering, and production, customer service, etc.) to focus on meeting customer needs and organizational objectives. Escrig considers TQM as a strategic action that focuses on managing the total organization to provide products or services that fulfill their customer requirements by utilizing all resources. TQM is the holistic management approach that incorporates all the organizational activities to satisfy customers' needs and achieving overall organizational objectives as outlined by Kumar et al.

Quality Education process with Education

Michael et al. comment that TQM can be defined as a general management philosophy and a set of tools which allow an institution to pursue a definition of quality and a means for achieving quality, with quality being a continuous improvement as determined by customers' satisfaction with the services they have received. It indicates the flexible aspect of TQM, i.e. it is applicable to any organization and subject to adjustment as per merit of the situation. With the help of TQM, an

academic institution would be able to develop its own definition of quality, benchmark, and quality improvement practices in the light of customers' requirement. Meirovich and Romar observe that the findings of the literature on the usefulness of TQM in education are differing. There are some authors who are very much confident about the applicability of TQM in education. According to Srivanci, they believe that the values of TQM are similarly appropriate in higher education.



The next level is teaching quality to students. Students are recognized as both customer and workers in the educational system. Administrators need to involve students in their own education by training them to evaluate the learning process and accept responsibility for their learning. Robert and Robert (1998) addressed the most influential factor in success or failure of a TQM implementation effort is universal endorsement. If management is not completely sold on TQM, it is unlikely that an implementation effort will be successful. Endorsing TQM represents a fundamental change in the way. Less than full support by anyone in the chain of authority essentially condemns the effort to failure.

TQM is usually accomplished by a series of small-scales incremental projects. The philosophy of TQM is large-scale, inspirational and all-embracing, but its practical implementation is small-scale, highly practical and incremental. Solid and lasting change is based on a long series of small and achievable projects (Edward 3rd, 2002). TQM requires the change entirely for organization.

Change of culture is notoriously difficult to bring about and takes into implement. It requires a change of attitudes and working methods. Two things are required for staff to produce quality. First, staff needs a suitable environment in which to work. The tools of trade, system and procedures should aid them in doing their jobs. The environment that surrounds staff has a profound effect on their ability to do their job properly and effectively. Second, encouragement and recognition of success and achievement should be deserved from leaders who can appreciate their achievement and coach them to greater success.

EARLIER EFFORTS OF IMPLEMENTATION OF TQM IN EDUCATION

TQM in education surfaced in 1988 at Mt. Edgcombe High School in Sitka, Alaska. When David Langford, the school's technology teacher/coordinator, applied total quality concepts in his classes. TQM has become increasingly popular in education, as evidenced by the plethora of books and journal articles since 1990. TQM has also spread into mainstream of educational organizations. The association for supervision and curriculum development, for example, devoted its entire November, 1992 issue of its Journal, "Educational Leadership" to quality movement in education. In support of the TQM initiatives in education, Crawford and Shutler (1999) applied Crosby model to suggest a practical strategy for using TQM principles in education.

Their strategy focused on the quality of teaching system used rather than on students, examination results. They argue that examinations are a diagnostic tool for assuring the quality of the teaching system. To satisfy the educational needs of students, continuous improvement efforts need to be directed to curriculum and delivery services. From such a perspective, various root causes of quality system failure in education have been identified. These include poor inputs, poor delivery services, lack of attention paid to performance standards and measurements, unmotivated staff and neglect of student's skill, Ali and Zairi (2005).

REASONS TO APPLY TQM IN EDUCATION

A lot of literature available points to a growing interest in applying TQM in education for a wide variety of reasons, Thakkar et al. (2006). Some of the reasons include pressures from industry for continuous upgrading of academic standards with changing technology; government schemes with allocation of funds, which encourage research and teaching in the field of quality; increasing competition between various private and government academic institutions and reduction in the pool

of funds for research and teaching, implying that only reputable institutions will have a likely chance of giving access to various funds. According to Crosby (1984) unless strategy is focused on the quality of the teaching system and improvement, goal of TQM cannot be fulfilled. TQM in education cannot be accomplished without everyone in the organization from top to bottom being committed to achieve results a passion for quality and decisions based on performance data, Kaufman, (1992). According to Corrigan (1995), unless an organization builds a customer driven, learning organization dedicated to total customer satisfaction TQM cannot be successful. "A set of fundamental core values forming building blocks of proposed TQM framework is leadership and quality cultures continuous improvement and innovation in educational process; employee participation; and development; fast response and management of information customer-driven quality and partnership development; both internally externally", Juran and Gryna (1980).

FOR SUCCESSFUL IMPLEMENTATION IN EDUCATION

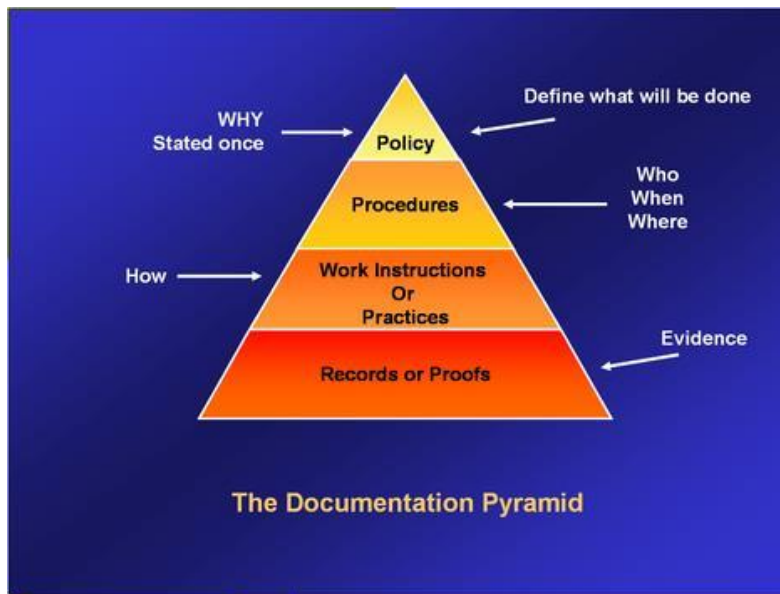
For the successful implementation of TQM in education quality circles are to be formed. A quality circle consists of small groups of people that meet on a regular basis to discuss problems to seek solutions and to cooperate with management in the implementation of those solutions. Quality circles utilize organized approaches to problem solving, operate on the principle that employee participation in decision making and problem solving improves the quality of work. In education quality deals with monitoring and identifying the areas that affect the levels of teachings. The past few decades were considered pioneering work on educational leadership, Bensimon and Neuman (1993), the leadership component deal with examining senior management personal of leadership and involvement in creating and sustaining a customer focus, clear goals, high expectations and a leadership system that would perform excellently.

It also examines leadership system and policies internally that would impact staff and students and public responsibilities establishing partnerships with industry parents and general community externally. Improvements in leadership effectiveness could be achieved through a participative management style that includes inputs from a comprehensive 360 degree feedback system from these internal and external stakeholders. The strategic planning of this element would examine how the institution sets strategic directions and how it determines key plan requirements with a primary focus on students satisfaction. This element examines the key aspects of process management including learner focused education design, education delivery services and business operations. It examines how key processes are innovatively and continuously improved. The performance results

of this element would examine student performance and improvement using key measures and indicators. This element examines how staff development and training is aligned along the objectives of the institution.

QUALITY OBJECTIVES AND QUALITY POLICY

A quality system is the method used to ensure that the quality level of a product or service is maintained. The system documentation can be viewed as a hierarchy containing four tiers, as shown in the following illustrations:



Define the term strategy?

In order to understand the concept of strategic management, first we need to understand the literal meaning of the word “strategy”. The definition is mentioned below:

1. The science and art of using all the forces of a nation to execute approved plans as effectively as possible during peace or war. The science and art of military command as applied to the overall planning and conduct of large-scale combat operations.
2. A plan of action resulting from strategy or intended to accomplish a specific goal.
3. The art or skill of using stratagems in endeavors such as politics and business

What is the relation of Strategic Planning and Total Quality Management?

When an organization chooses to make quality a major competitive edge (differentiation), it becomes the central issue in strategic planning. This is especially reflected in vision, mission and policy guidelines of an organization.

An essential idea behind strategic quality planning is that the product is customer value rather than a physical product or service. This feat cannot be achieved unless an organization creates a culture of quality and no strategy and plan can be worthwhile unless it is carefully implemented.

There are three types of quality statements:

1. Vision statement
2. Mission statement
3. Quality policy statement

The utilization of these statements varies from organization to organization. Small organization may use only the quality policy statement

1. Vision Statement: The vision statement is a short declaration what an organization aspires to be tomorrow. A vision statement, on the other hand, describes how the future will look if the organization achieves its mission.

Successful visions are timeless, inspirational, and become deeply shared within the organization, such as:

- ❖ IBM's Service
- ❖ Apple's Computing for the masses
- ❖ Disney theme park's the happiest place on the earth, and
- ❖ Polaroid's instant photography

2. Mission Statement: A mission statement concerns what an organization is all about. The statement answers the questions such as: who we are, who are our customers, what do we do and how do we do it. This statement is usually one paragraph or less in length, easy to understand, and describes the function of the organization. It provides clear statement of purpose for employees, customers, and suppliers.

An example of mission statement is:

Ford Motor Company is a worldwide leader in automatic and automotive related products and services as well as the newer industries such as aerospace, communications, and financial services. Our mission is to improve continually our products and services to meet our customers' needs, allowing us to prosper as a business and to provide a reasonable return on to our shareholders, the owners of our business.

3. Quality Policy Statement: The quality policy is a guide for everyone in the organization as to how they should provide products and services to the customers. It should be written by the CEO with feedback from the workforce and be approved by the quality council. A quality policy is a requirement of ISO 9000.

A simple quality policy is:

Xerox is a quality company. Quality is the basic business principle for Xerox. Quality means providing our external and internal customers with innovative products and services that fully satisfy their requirements. Quality is the job of every employee.

QUALITY INFORMATION FEEDBACK

Customer Feedback:

Should be continually solicited and monitored: Customer Feedback should be continuously solicited as customer preferences keep on changing. Let us remember those days when the original red Lifebuoy was selling like hot cake. Now people's preferences have changed. The organization has come up with many variations of Lifebuoy. The basic USP remains the same, 'health and hygiene' but concepts of, beauty and healthy skin is thrown in to satisfy the changed customer needs.

Customer complaints (feedback)

Customer feedback must be continuously solicited and monitored to reduce the dissatisfied customers as much as possible.

Purpose of Feedback:

Discover Customer Dissatisfaction: The feedback helps to know how satisfied or dissatisfied the customer is. A customer who does not complain and switches to another brand is more dangerous than a customer who complains. Customer dissatisfaction can be a big eye opener and help discover what more needs to be done for a product or service.

Discover Relative Priorities of Quality: Certain parameters of quality are more important than others. Whenever planning for a quality goal the organization should prioritize its goals.

HOW TO WRITE A QUALITY PLAN

Quality Assurance or Quality Control plans evaluate and/or modify an organization's procedures to help ensure they provide the desired results. Quality control plans are often viewed as a set of instructions that should be followed. They document the planning, implementation, and assessment procedures for a project, as well as any QA or QC activities.

Some areas may be more detailed than others, based on the project, process, or organization's needs. It is important to note that each plan is unique based on the organization's needs and their Quality Management System (QMS). However, quality control plans should always have a structure that permits improvements to the plan. This allows employees to offer input on how to improve efficiency and quality. In addition, the plan should be reviewed by others periodically, including stakeholders, to ensure the plan is comprehensive.



Quality control plans generally include detailed information on:

- An overview or introduction of the project or process detailing the background, need, scope, activities, and important dates or deadlines
- The organizational structure or org chart detailing necessary team members, including external vendors
- Each team member's responsibilities and qualifications necessary to fulfill stated duties
- Work verification (e.g., who is responsible for carrying out a task, as well as who is responsible for checking the work)
- Supplier standards (e.g., specify the standards the prospective suppliers must meet before they can bid on a contract, such as ISO 9001:2015)

- Testing parameters
- Performance standards and how performance will be documented
- Acceptance criteria
- Deliverables
- A feedback mechanism for internal and/or external customer feedback
- Quality control procedures
- Audits
- Training (e.g., overview, job-specific, or refresher training)
- Corrective action and preventive actions, including the person(s) responsible for CAPA
- Suggested corrective action
- Required notifications
- Any references or related materials, including performance ratings or performance reports

Compare Performance With Competition: Watching competitor activity is a good learning tool for any organization. This is a way of benchmarking us vis- à-vis others.

Identify Customer's Needs: There is a saying that salesman who discovers a customer need before everyone else is more likely to get the sales. The same logic holds for organizations as well. You can always reap the benefits of first mover advantage. Let us take example of Frooti. Probably Frooti is the first brand to identify the Indian taste and to make an effort to cater to that taste. No matter how many drinks with mango flavour has come Frooti remains the numerous undo in its segment.

Determine Opportunities for Improvement: Customer feedback also helps an organization in determining about opportunities for improvement.

TYPES OF CUSTOMERS

Internal Customer: The customer inside the company are called internal customers

External Customers: An external customer is the one who used the product or service or who purchase the products or service or who influences the sale of the product or service.

Tools of Customer Feedback:

- **Comment Card:** This can have simple open questions so that customer can answer it quickly.
- **Customer Questionnaire:** Design of questionnaire is of utmost importance to get timely and relevant information.
- **Focus Groups:** Focus groups are mostly used in B2B set up. Especially in pharmaceuticals industry, key opinion makers are made part of the trial. Their opinion holds sway over doctors of hinterland. It helps them get a word to mouth publicity as well.
- Toll Free Telephone Numbers
- **Customer Visits**
- Report Cards
- **Social Networking Sites:** There are certain sites where visitors can share good or bad experience with a product or service. These sites give real insight into customer's minds. On other social networking sites, like Twitter and Facebook, people share their experiences and sometimes, unknowingly may give opinion about a company. Now certain companies are having devoted teams to analyse these data.

Mass Customization: Mass customization is another good tool to know about changed preferences. Levi's gives a facility on its website which enables a potential customer to choose certain fabric, colour and design. Once the customer places an order Levi's gets the jeans stitched and delivered at customer's doorstep.

Service Quality: Organization Level

Identify Each Market Segment: Each market segment has its own dynamics, so customer needs tend to vary as per a market segment. For example in a diverse country like India, customers of north India will have different needs compared to those in south India.

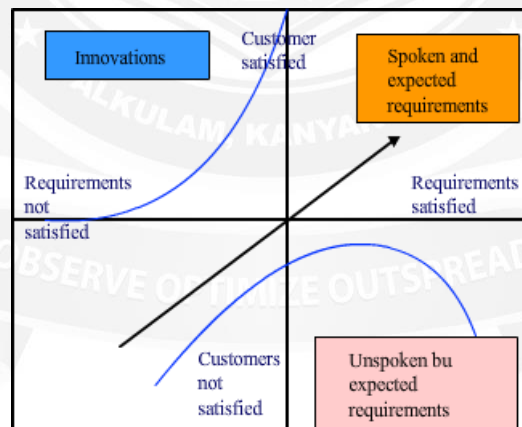
Write Down The Requirements: A very good example of chalking out requirements

of a particular market is shown during recent launch of a dark chocolate brand by Cadbury's in India. India is hot country so selling dark chocolates has its own issue of logistics management. Cadbury's is supplying these chocolates in insulated boxes to key retailers so that customer can get the right quality of chocolate.

Communicate The Requirements: Communicating your quality requirements is a way of convincing the front line people so that they will implement everything as per the original plan. Around 2000 the pharmaceuticals giant Pfizer launched a hepatitis-B vaccine. The product needed to be supplied through cold chain up to the vaccination point. All personnel in sales force were properly educated on this issue to ensure proper implementation of cold chain. This ensured that the product reached the end user at right temperature to provide desired efficacy.

Organize Processes: Every process should be well organized to ensure optimum output and resultant benefit to the customer.

KANO Model



KANO Model

Kano Model is very interesting depiction of how an unsatisfied customer can be turned to a satisfied customer by properly implementing quality goals. In bottom left quadrant lies the most unsatisfied customer. This can be because of many reasons. The product is not fulfilling customer need or the product is not matching his expectations. When the customer moves to the bottom right quadrant then he is just a mute buyer of the product. He may be buying the product because that is his necessity. The product is just fulfilling certain basic needs of the customer. This can be compared by how customers must have been feeling when Bajaj scooter was

the only major brand available in the Indian market. People had to choose from some very basic models like Bajaj Chetak, Rajdoot and Yezdi. Then came the onslaught of 100 cc bike. This gave more convenience to customers. In the late nineties many models arrived on the scene and some of them gave real customer delight taking the customer to the top left quadrant of the Kano model.

