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**Total Quality Management in Educational Process Focused on Quality
Improvement of Institute with Customer Satisfaction & Teaching Improvement**

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Abstract

Quality is the link that attract customers. The Technical Institutes are processor which introduce quality products (technocrats) in the market. Changing scenario has compelled for Quality improvement in the institutes and this can be achieved only by improving conditions prevailing in the institutes. Traditional methods of designing disregard the voice of customers as well as disregard the competition. Thus lacking in commitment of improvement. Improvement in the practical knowledge imparted through improving quality assurance of labs which satisfy the students. Improvement in Teaching staff so that pure knowledge reaches to passing out generation.

Total Quality Management (TQM) is recognized as an important management philosophy and is widely used in industries. Over the last few years, TQM has been applied in the education industry.

Keywords: Quality, TQM

Introduction

Customer satisfaction is the motto of business. Today every organization has to study what is customer demand? What do customer wish to experience when he is dealing with you? Satisfaction of customer is main aim which every organization tries to achieve.[7]

A technical institute tries to fulfill demands of both internal customer (student) as well as external customer (industries).

The internal customer are processed in the institute so that they fulfill demands of market .i.e. external customer (industries). Changing requirements of customer poses the need for renovation of practical knowledge being provided by the institute, thus it has become very essential to ensure and assure the quality of products which are being processed by the institute .

The quality of these products basically depends on conditions of our labs and theoretical knowledge imparted to them, this inturn depends upon how quality of knowledge is maintained by the institute.

The present work on TOTAL QUALITY MANAGEMENT in education process enlightens same path, so as to fulfill the demands of market and to improve quality of education.

Customer Satisfaction

Today main of every organization is to satisfy the customer. Customer is the most important avenue for maintaining an excellent business relationship. It is important to focus on customer satisfaction because it plays important role in the quest of any business to

increase its market share and profitability. Attitudes and buying patterns of future customers can be affected by the degree of satisfaction of current customers. A dissatisfied customer stops buying any poor quality products; also discourage other customers from buying the same. This sets the negative image of organization in the market, effects profitability and competitiveness.[8]

Following points are recommended for customer satisfaction

- 1) Exclusive Programs: In this a team of executive should be hired for periodic visit to customer to understand its needs.
- 2) Training Programs : In such programs proper training should be provided to the employer so that he may closely understand needs of customers, proper set up of channels, communication, product knowledge should be the of such programs.
- 3) Education: Customer awareness programs, product knowledge should be the part of this program.

Levels of Customer Satisfaction



Quality

Success of any organization depends mainly on three factors; profitability, productivity and quality, among these qualities is most important. The word quality has different connotations when used under different circumstances. Basically it is defined as:

- Conformance to applicable specification and standards.
- Fitness for use.
- Satisfaction of customer wants, need and expenditure at competitive cost.

Expression for quality

$$Q = P/E$$

Q=Quality
P=Performance
E=Expectation

If $Q > 1$, then customer has a good feeling about product or service.

The word quality has multiple meanings:

- Of a product or service is the perception that the client has of the same one.
- Group of inherent properties to an object that allow to appreciate it as equally, better or worse than the rest of objects of those of its species.
- Group of qualities that can be defined as good, bad or to regulate.
- Group of inherent properties to an object that you/they confer him capacity to satisfy implicit or explicit necessities.
- Group of properties and characteristic (implicit or established) of a product or service that confer him their aptitude to satisfy some implicit or established necessities.
- Should be defined for example in the context that is considering, the quality of the postal service, of the dental service, of the product, of life, etc.[1,2,10]

Concept of Total Quality

The failure of a product either causes direct financial loss or inconvenience to the customer/ user . In context to Technical institute failure of product in the market may lead to loss of reputation of organization which ultimately provide the path for its shutdown another aspect of defective product in market will impose lot of rework to institute which ultimately lead to heavy financial burden on institute. Under TOTAL QUALITY concept all parts of the organization are responsible for its success and failure. The policy of organization should be of continuous improvement of its product.[2]

The key principles of total quality are :

- 1) Adoption of policy of continuous improvement.
- 2) Input should be limited.
- 3) Provision of latest methods for identification and solution of problems.

FOLLOWING TECHNIQUES CAN BE APPLIED TO IMPROVE QUALITY OF PRODUCT

- QUALITY FUNCTION DEPLOYMENT
- TAGUCHI METHOD
- POKE YOKE
- SIMULATION
- FAILURE MODE AND EFFECT ANALYSIS

Total Quality Management In Education

TQM is a philosophy and system for continuously improving the services and/or products offered to customers. Now that the technologies of transportation and communication have replaced national economic systems with a global economy, nations and businesses that do not practice TQM can become globally non-competitive rather rapidly. This march towards non-competitiveness can be avoided if citizens are helped to become TQM practitioners. Therefore, the potential benefits of TQM in a school, district or college are very clear:

1. TQM can help a school or college provide better service to its primary customers--students and employers.
2. The continuous improvement focus of TQM is a fundamental way of fulfilling the accountability requirements common to educational reform.
3. Operating a no-fear TQM system with a focus on continuous growth and improvement offers more excitement and challenge to students and teachers than a "good-enough" learning environment can provide. Therefore, the climate for learning is improved.

Concept of total Quality Management

TOTAL Quality Management (TQM) was first espoused by Dr. W. Edwards Deming in the late 1950's. His ideas were not accepted by US industry but were heartily endorsed by Japan in their recovery from World War II. Largely as a result of the implementation of TQM, 'Made in Japan' has changed from a derogatory term to high praise. [12]

TQM Principles

The one factor that is the most influential in the success or failure of a TQM implementation effort is universal endorsement, in particular at the top. 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 one does business. Less than full support by anyone in the chain of authority essentially condemns the effort to failure.

It was also very important to get the endorsement of the students as well as those up the chain.

To earn the student's endorsement, we had to make them part of the solution. TQM is a participative management philosophy, and the students had to participate throughout the effort. We therefore had to teach them about TQM and then show them how we were changing things in the course. Without that education process, we would not have had the support of the students that we enjoyed. Once the commitment is made to implement TQM, one of the first steps is to identify the customers' or stakeholders. To do this, you must treat the educational process as a system; all elements and the interactions between those elements must be addressed. Process improvement should begin and end with the customer [11].

Deming's 14 Points

1. Create constancy of purpose.(aim)
2. Adopt a new philosophy(strategy)
3. Cease dependence on mass inspection(search)
4. End the practice of conducting business on cost alone..(developing trust)
5. Constantly improve processes(kaizen)
6. Institute training(kaizen)
7. Institute leadership(market survey)
8. Drive out fear(opportunity)
9. Break down barriers(high thinking)
10. Avoid obsession with goals and slogans(enhancement in quality)
11. Eliminate numerical quotas.(generalization)
12. Remove barriers to pride of workmanship
13. Organization-wide involvement(total involvement)
14. Define management's responsibilities to make it happen.(reality)

STEPS OF IMPLEMENTATION for improvement of faculty(kaizen approach)

1. IDENTIFICATION OF PROBLEM(Aim)
(NEED OF CUSTOMER)
2. Need of market(survey)
3. Search of program(availability)
4. Selection of suitable program me(suitability)
5. Turning into action(reality)
6. Evaluation on basis of requirement(result)

Conclusions

TQM can be a powerful tool in the educational setting even though it was developed with manufacturing processes in mind. The key elements to a successful implementation are (1) gain the support of everyone in the chain of supervision, (2) identify your customers, (3) focus on refining the process, and (4) use Deming's 14 Points as a guide and checklist during the implementation effort. The final result will be a more efficient operation and a teamwork attitude rather than an 'us versus them' attitude between faculty and students.

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