CHAPTER 4
Impact of Total Quality Management
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4.1 - Introduction

The present research work is study on the “Impact of Total Quality Management in Higher Education - A Management Perspective Study”. This topic is opened with the Impact of Quality, Principles, Concept and Basic Approach of Total Quality Management. With the regards Education and TQM, Factors Promoting quality and excellence, Ways to Promote Total Quality, 14 Points of TQM, TQM Implementation in Higher Education explore for proper discussion.

4.2 - Impact of Quality

Quality has been the never-ending goal at the corridor of history about human being. All human efforts can driven the quality. The mundane to the higher realms of life quality is the inspiration for transcendence. Quality is also the source of craving behind the unfolding human civilization through years immemorial. Until now quality has successfully avoided the dragnet of definitions proving the inadequacy of human intelligence. Nowadays in current globalization age of competitiveness the consequence of teaching learning has become significantly more. The shortcoming in this aspect about higher education learning such as demands from the beneficiaries, limited material and human resources, issues of governance, management, globalisation and daunting challenges are become important. Therefore the issue on higher education to this national level has link immediate with overall global condition. The restriction about sources and impediment are likely to continue for some time to come.

4.3 - Concept of Total Quality Management

TQM is a topic of great important in the business, profession and academic institution. The TQM philosophy has develop by W. Edwards Deming. The concept can improve the flexible efficiency work team. It was incorporated before the 2nd world war. Over the year the author condense total quality management concept into fourteen points. It became top action item for educational institution management to accept TQM. Even though total quality management has mainly intend for the business and industry sector. But author express that the management principle can be applied equally for service sector also. Service sector includes education also.
TQM is basically enhancement of traditional way of working. In the worldwide competition it is a proven technique to guaranteed survival. The principles are bandied freely around in the discussion of the researcher. It is worth dwelling with each for a moment. Be customer focused means everything that do will be done by placing the customer in the centre. The stakeholder should regularly check customers attitudes and the internal and external customer concept. Do it right first time so that there is no rework. This essentially means cutting down on the span of defective work.

4.4 - Principles of TQM
There are five principles of TQM can be explained in Figure 4.1 as under.

Figure 4.1 : Five principles of TQM

1. Focus on Customer: Concentrate on the customer it means customer be focused.
2. Do it right: Do it right first time constantly improve Quality is an attitude not only inspection process.
3. Communication and educate: Tell staff and employees what is going on and train and educate them.
4. Measure and record: Measure the work of employee and make a record.
5. Do it together: Top management must be involved to empower the employee. Make the business a good place to work. Which organised by process not function.
4.5 - Basic Approach of TQM

Total Quality Management requires six basic concepts:

1. Establish performance measures for the processes.
2. Treating suppliers as partners.
3. Effective participation and utilisation of work force entire.
4. An untiring focused on the consumers, both internal and external.
5. A involved and commitment at management level. It can provide long term top level to bottom level institutional benefits.
6. Regular improvement of business and their process of production.

Quantitative data are necessary to measure the continuous quality improvement activity. So in this constant of basic approach of TQM it is much more required in education industry.

4.6 - Education and TQM

Education process all over and in particular in our country undergoing rapid changes in this area. There are many more areas such as opening new avenues in education, setting up of quality standards, efforts and styles of functioning which acquiring TQM. There is an urgent need for redesigning and rebuilding education system in our nation and which may help in strengthening the academic environment of the nation. The world has been racing ahead with newer concepts in quality management. To allow the students gain beneficially, it becomes necessary for the faculties to equip themselves with the latest knowledge in the quality management. The students have to be trained to accept these standards of quality. TQM in Higher Education deals with improving the quality of courses. It further refers input instructional processes and management processes. It provides institutional structure as well as student support services and link with world of work at institutions.

Total quality management is started for business, profession and factories. Now it is newly introduce and experiment in higher education worldwide. Institution can fulfill the task and achieve the goals with its ability of quality. Many colleges and universities applying TQM to enhance the higher education quality considering modern
tool. The student can be consider as customer since quality means conformance to requirements of the student. Therefore, to satisfy the students, it has to be quality conscious.

Administrators and stakeholders have started to establish quality sector to improve the quality and standards of their higher education. Recently, one philosophy has emerged in the concepts of quality and management, named as Total Quality Management. So they also ready to make change their educational system more effective. Total quality management has been successfully implemented in some Higher Education Institutions, and it has improved the quality of higher education in those institutions.

4.7 - Factors Promoting quality and excellence

The term quality is difficult to define because it is not an easy job. It can only be experienced and felt being intangible in nature. The term quality is subjective. Quality is never an accident so that it is always the result of high intention, intelligent direction, sincere efforts and skillful execution and represents the wise selection of various alternatives. The students may define quality in terms of the facilities provided by the colleges. The faculty may define quality in terms of their perks, salary, incentives. The teaching learning process whereas the management and the parents may understand quality in terms of the results and grades secured the students.

Hence, to achieve quality in higher education the management must set objective to be meet and work accordingly. There are various factors that help and contribute in promoting quality in higher education. These could be classified under five categories:

 **Management:-** Management is the key to all problems in the institution. It plays a vital role in the success of an institution or organisation. They should provide facilities to facilitate better education in it. Facilities like good library and laboratory facilities, facilities for faculty and students such as toilets, water, canteen, recreation, sports. It may be continuous appraisal and mechanism to receive feedback from faculty and students, facilitate the process of interaction of students and the faculty with the education industry. It further enhanced the
placement program, provision of book bank facilities, subscription of good journals for the library with trained employee. The management should be totally committed towards the objective of imparting quality education in the institutions.

- **Head of the institution:** The progress of the institution depends to a large extent on head of the institution i.e. Principal or Director. The Principal or Director should possess qualities of leadership. He should take initiative and should be competent. He possess patience and commitment as major virtues.

- **Parents:** Although the role of parents in this regards is not a direct one. But still parents have a lot to contribute. If students develop interest in studies, quality education can be imparted. This type of interest can be initiated from their homes itself. The seeds sown by the parents in the initial stage can then be nurtured by the institutions to help them grow as strong trees.

- **Faculty:** The faculty of the educational institutions must be qualified. They should possess good communication skills not only oral but also written. They should have the desire to teach, passion for continuous up gradation of knowledge. They should maintain contact with the industry. It necessary that faculty should be committed towards work and students.

- **Students:** The Students is a prime stakeholders in an educational institution. They play a vital role in achievement of the objective of quality education. They should have linking towards reading which will promote the extensive use of the library. They should have interest in learning and should be disciplined.

All the mentioned factors promote quality in education in the institutions.

### 4.8 - Ways to Promote Total Quality

1. **Customer focus:** The customer determines the quality of product or service. Therefore in this regard customer is student. Student is buying and learning professional course. Therefore it become duty of the stakeholders and other funding agencies to see the heavily subsidised with regard to cost. It is also equally strongly the duty of the other stakeholders and government to see that the quality is provided. Since education institution is by definition charitable.
2. **Development of staff members**: Total Quality Management rests on the shoulders of staff. Therefore human resource development on a continuing basis becomes the necessary part in this regard. Organizing faculty development programmes on a regular basis is one method of improving the quality of the faculty or staff.

3. **Continuous Quality Improvement**: Total Quality Management essentially looks at continuous improvement. Therefore emphasis should be laid on continues process improvement for improving the management. The requirement of continuing process improvement is linked with long term planning. Therefore Total Quality Management approach demands long term planning for the institutions that can be spelt out in medium and short term plans.

4.9 - **Benchmarking and TQM**

Benchmarking is a tool that can be exceptionally useful in a Total Quality Management program. Benchmarking is closely related to customer orientation. The organisations that one select as benchmarking partners are those, which excel at satisfying customer in a given area. It is an excellent source of ideas for quality improvement projects. It provides both ideas about ways of accomplishing tasks and specific goals in terms of levels of performance.

There are seven basic techniques in this regard. Benchmarking is not a new concept in this modern era. It shares many elements with a multitude of activities, ranging from competitive analysis and Total Quality Management to ancient warfare. Benchmarking can be confused with competitive analysis, but actually it different from competitive analysis. It shares many elements with competitive analysis. Benchmarking often seeks information in the public domain and looks for creative ways to obtain and analyse data. There are some benefits of Benchmarking which was explained as follows.

- Sharing information and data is often the first obstacle to be overcome in the Benchmarking process.
- It is particularly helpful in validating proposals for change in the organisation.
Benchmarking of ten results in creative imitation and the adoption of new practices that overcome previous hurdles.

This search for innovative breakthroughs and for diversity applied elsewhere is at the core of benchmarking benefits.

It is difficult to excel in all activities, so that by sharing information it will benefit to all parties.

Benchmarking in many areas trade secrets or sensitive information determines which is outcome of the process.

If the search for Good, Best or just Better practices is performed correctly, then the likelihood of successful outcomes is quite high.

It used in conjunction with other quality techniques or used alone, so that it can influence how an organisation operates.

Before initiating benchmarking, pitfalls are avoided and prerequisites have been met so success arises automatically.

There are two forms of Benchmarking. The first one is strategic and other one is functional or operational. Strategic benchmarking focuses on strategic marketing, organizational, financial and technological issues facing in an organisation. Functional or operational benchmarking focuses on the operational processes, practices and services offered by an organisation.

4.10 - Deming Cycle for TQM

Dr. Deming is one of the famous gurus in the context of quality. He drew below diagram on the blackboard during the first meeting with Japanese union of scientists and engineers. This figure 4.3 is known as the Deming Cycle, but Dr.Deming very first called it Shewhart Cycle. Thereafter this diagram was famous as Deming Cycle. The diagram graphically describe the step action which use every day to manage business and profession. It is considered as a methodology in the frame of total quality management references. Nowadays this cycle is almost an active part of the quality work in every institution and organisation. This diagram shows there are four steps in order to complete one action such as Plan, Do, Check and Act as per figure 4.2.
Making changes that are needed to more close to develop procedure which ensure continue of plan that were successful is act. In fact, this cycle highlights the importance of continuous improvement in every action. It was further clearly reveals that which step or steps might went wrong in every action.

4.11 - TQM Implementation in Higher Education

Concept of Quality and Impact of TQM has already defined. So that total quality management is really a good technique. However there were several applicable and useful points. This points can be used by every institution in the definition to improve the quality work. Now the second important task is TQM approach i.e. implementation. For the implementation of TQM a model presented. This will help in order to make the total quality management applicable for every institution as shown below figure 4.3.
Figure 4.3: TQM model for implementation in higher education

Deming cycle is for continuous improvement and the proposed model is for improving the quality. Therefore, combination of this model and cycle with some changes will offer the model for continuous improvement of the quality. For this purpose, the phases defined by the total quality management model will be set up in Deming cycle with some changes. Even though total quality management is about continuous improvement for quality by itself as shown in above model 4.4. The proposed model here will be a four step cycle, which its components are described as under.

1. **Plan step** in Deming cycle is divided by two further steps, first step is called Studying. This part is about doing a research of what total quality management really is and top management should fully understand the concept. Its objectives and they must accomplish their plan. The next step in plan step of this cycle is named as preparing. It is about performing an internal assessment of the quality work and defining methodologies, values and tools. Even more, there must be some clearly defined objectives and visions in Plan Step.

2. **Do step** in Deming cycle is about starting. It may called plan and implement solutions. In this step, there must be some training to all levels about terms like Quality, Core Values, Methodologies, TQM and tools. The distribution of some customer surveys to both internal and external customers is desirable. In this step two further
steps described that is start and expand. Moreover, Quality Council must be formulated. The some quality improvement teams should be formed. And some measures must be established. The college or university board should perform a benchmarking in order to recognize and reward improvements.

3. **Check step** in Deming cycle has been called as evaluation step. This check step has to do with evaluation of the plan and do steps. Here, the most effort should be set up for checking the actions that what have done. Further make sure that the work is in a right direction to achieve goals and objectives.

4. **Act step** in Deming cycle is the final step. In this model it is divided by two steps. In the first step, if there were found some problems according to checking step. The required changes must be applied to the system. Therefore, those solutions and actions done well should be standardized. This will prevent from non motivational changes within the defined systems.

4.12 - TQM Process

In the institution of education the Total Quality Management process brings with it commitment to quality, commitment to employees, and commitment to the institution. Principals, administrators, faculty and teachers, as parts of the educational partnership, really want good things to happen for students with quality. Those who contribute to the system should be involved, with a clear understanding of the purpose the employees and the students. The strategic planning and environment, that is go to make it a success. TQM is an approach to improve the flexibility and effectiveness of the institution as a whole. The improved performance is directed towards satisfying cross functional goals as quality, manpower development, cost and quality of work life. These activities eventually lead to increased students and employee satisfaction. The process to introduce Total Quality Management in colleges or university should have the following processing steps.

✓ **Administrator as a Role Model:** Administrator should completely identified self with the institution. They are always thinking of making it a better and better institution every day. They must fight with all strength and all the vested interests which want to come in the way of realizing the vision of an ideal institution. It must also be clear from the side of administrator or principal of the institution that he is committed to total quality. This commitment should be
communicated in meetings with employees and students. It must be practiced in the institution. The process of pursuing this agenda should be continuous and never lost sight of. The administrator must be by word of mouth and by action visibly demonstrated.

✓ **Mission and Passion:** Total quality is an ideal technique which has to be communicated to others. The determination and announcement of mission statement is the foremost task on which the whole Total Quality Management will depend. The statement helps everyone to focus on the central theme of goals. There is no or minimal conflict in it. The statement gives directions to the institution. Everyone shares a passion to move and continuously close to the ideal vision. Action of each one of them will be directed and moved by a common philosophy with achievement of quality. The students, the faculty, the employees and the administrators push the college in one direction.

✓ **Accountability:** The institute must develop the system in which every group such as student, faculty, researcher, manager, administrator is accountable to all other groups and members of each group are accountable to one another. Accountability is defined in terms of clearly stated objective criteria. In this regard students are accountable to teachers because they have to submit regular assignments. They are subject to regular and continuous open internal assessment. It should accountable to taxpayer who wants them to receive their education by hard work. It should develop a system in which faculties are accountable to students through instruction surveys. They are accountable to management through self assessment and assessment of teacher by outside the institution. It has to develop a system in which managements are accountable for their work through assessment by accreditation process. In this way researchers are prepared to be assessed by outside agencies and funding agencies for their research work. Moreover all accountability at all levels has to be in terms of criteria laid down sufficiently in this regard.

✓ **Environment factors:** The further important step is identification of the factors of internal and external environment. It has a bearing on the institution building. These include factors effecting the work environment in the institution such as proper cleanliness, teaching aids, lighting, projectors, lab materials, computer labs, canteen, gardening, sports and water. The factors helpful in image building
of the institution are industry-institution interaction, conferences, workshop, seminars, debates, public relation including media management. In managing total quality, attempt should be to involve both internal and external environment factors. Involve students who are direct customer to help create environment for better learning and activity process. Involve outsider of institution for mutual benefit. In conclusion, there is a need to develop self motivation for total quality management in everyone who matters. Liberalization and globalization have set new trends in domestic and global competitive environment. So that to a great disparity between what is taught and what is needed at the work place. Due to the socio-economic, cultural and technological transformation which has taken place during past decade. Everyone newer demands being placed upon educational institutions. Educational system can effectively react to these internal and external challenges and opportunities only when it highlights on total quality. The institution should engage paying attention to the needs of internal customers such as teachers, board members, and other co-staff. While at the same time the institution in the delicate balancing act of ensuring quality to external customer such as students, parents, taxpayers.

✔ Feedback: There is a need for continuous performance appraisal of all the subsystems as well as the system as a whole because Total Quality Management is a continuous process. The quality standards may be fixed in advance and performance of quality compared both in terms of quantititative and qualitative. The standards may also be evaluate as the graph of performance rises. Therefore an independent assessment machinery should be created in the form of a Quality Coordinator or Total Quality Management committee. The machinery should be such as may have high moral credentials and faith of everyone. It must be completely independent of the management and administrators.

✔ Human Relations: There is a need to stimulate quality in the whole setup, including the human relationship. All individual employees, small or big must be viewed as important human beings with psychological, physiological, social and ego needs. Establish systematic and continued communication among everyone to develop human relations. The informal relations must be tuned to help the formal institution. Develop skills in conflict resolution, problem
solving and negotiations while displaying greater tolerance for and appreciation of conflict.

Therefore quality education is all about systems that lead to good academic culture. It must be excellent academic result. Moreover progressive and adaptive management required at the institution. The clear and transparent administration, prominent profile of outgoing students and review and modification of inputs exists at the end. All stakeholders have a prominent role play in TQM. Total Quality Management in educational institutions is the necessity of the hour. It must be tried in colleges and universities higher education for maximum performance of the students and the employees. It has become more necessary because the entry of the private sector in education arises. It must also be implemented for institutional image building. Total Quality Management will help achieve excellence, which only can guarantee the survival of institutions in a highly competitive world.