APPLICATION OF TQM CONCEPT IN GRADUATE EMPLOYABILITY: A STRATEGIC FRAMEWORK

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ABSTRACT: In the era of globalisation and complexities of labour market, the success of any higher education institutions (HEIs) depends upon their strategy to produce high quality employable graduates. The employability can be viewed from four stakeholders` perspectives: employer, graduate, teaching community and society. To satisfy all the stakeholders, HEIs are required to adopt new mechanisms and hence the current paper sets forth a framework for the application of TQM. This concept encompasses a 360 degree approach in maintaining, delivering high quality at all levels and continuously improving with the help of feedback. This framework is based on the models, principles and theories of TQM both in industry and HEIs. It contains a number of strategies for enhancing graduate employability. The paper will also provide key success factors (KSFs) in making the application of TQM in HEIs an outstanding success especially in the context of graduate employability. Besides, for implementing this framework, a strategic model and guidelines will also be presented.

1. INTRODUCTION

In a knowledge-based economy, graduates must bring more than the specialized knowledge to the job. The Higher Education Institutions (HEIs) focus their efforts on the programmes that will encourage and foster skills and qualities in addition to ensuring a sound understanding of subject matter. Many HEIs have adopted an outward-looking approach and work in close association with industries and employers. The HEIs identify specific generic competencies that graduate should develop to enhance their employability. For example, the Kellogg Graduate School of Management treats students as "partners". Similarly the Indian Institute of Technology (IIT) and the Indian institute of management (IIM) are providing a rigorous, relevant and rewarding education along with skill set and competencies meant to develop leaders for a global marketplace. Graduate employability and the quality of education have become a central concern for contemporary HEIs.

The reasons for conducting research on life after graduation are due to:

a. Increasing importance of quality of education and quantifying quality

b. Competition in the job market

c. Internationalisation of jobs

d. Mushrooming growth of HEIs

e. Mismatch between availability of employable graduate and employer's (industry) requirements

f. Methods followed to make graduates employable

Looking at the above-mentioned reasons the current paper provides an informed literature review of a) employability and higher education; b) skills and competencies for becoming employable; and c) linkage between graduate employment and quality of education. The review is carried out from a range of published sources. The paper also provides insight into the concept of Total Quality Management (TQM) in HEIs and its application in graduate employability. The basic argument of the paper is that obtaining feedback after employment and enhancing the skill of the graduates are not sufficient for graduate employability. Furthermore, quality of education does not mean inspection, assurance or audit rather TQM, which is the success weapon in industries and HEIs. The paper is divided into three sections: A. Literature Review; B. System's Model of Employment; and C. Application of TQM.

A. Literature Review

a) Employability

Dacre and Swell (2007) have defined 'employability is having a set of skills, knowledge, understanding and personal attributes that make a person more likely to choose and secure occupations in which they can be satisfied and successful'. Yorke (2006) has viewed employability as a 'multi faceted characteristics of individual'. Researchers like Harvey (2001), Brown et al. (2003) and McQuaid and Lindsay (2005) have argued for a better understanding of the concept. The understanding of employability may change from being 'the propensity of the individual student to get employment to an institutional achievement'. Harvey (1999) defined the propensity of the graduates that constitute graduate employability in more general terms as 'attributes that employers anticipate will be necessary for the future effective functioning of their organisation'. Aamodt and Havenes (2008) used the concept of 'job mastery' as employability. Storen and Aamodt (2010) have viewed employability as the benefit and usefulness of the study programme for career and work tasks'.

From the above review, we may conclude that employability is making the student job worthy by providing domain /technical knowledge along with requisite knowledge, skill and abilities (KSA).

b) Employability Skills

A new study from Oklahoma State University reveals that three qualities employers value in the industry: communication skills, critical thinking skills and writing skills (ANI, 2011).Employability skills are those basic skills necessary for getting, keeping and doing well on a job and they can be divided into three categories: basic academic skills, higher – order thinking skills and personal qualities (Robinson, 2000). Employability skills are also known as job readiness skills, the term also refers to the skills required to acquire and retain a job and recent usage of the term is often describes the preparation

or foundation skills upon which a person must build job-specific skills (Saterfiel and Mclarty,, 1995). As for Zinser (2003), career and employability skills include areas such as managing resources, communication and interpersonal skills, team work and problem solving skills and acquiring and retaining a job. Bush and Barrick (1987) categorised employability skills as: personal values, problem–solving, decision-making skills, relations with other people, communication skills, task related skills, maturity, health and safety habits and commitment to job. Shafie and Nayan (2010) have identified three major employability skills: personal attributes, team work and self management. UniSA from its employer feedback survey in 2009 identified three major employability skills: written skills and oral communications; ability to apply knowledge; and solve problems (www.unisa.edu.au). Lee (2007) identified that employers prefer workers who have generic competencies like interpersonal skills, leadership skills, team work, oral and written skills. Crebert et al. (2004) presented the findings of Griffith Graduate Project that importance of teamwork, being given responsibility and collaborative learning as main factors for developing generic skills. Quek (2005) conducted a case study on a group of graduate employers in Malaysia. In the study, the employers expressed the importance of interpersonal skills, knowledge-acquiring skills, flexibility, value-improving skills, practical orientation abilities and cognitive skills as major contributors toward success in work performance.

From the above review following are identified as most important skills for employability:

1. Communication skills (oral and written)

2. Problem Solving Skills

3. Team working skills

4. Interpersonal skills

5. Leaderships skills

6. Decision making skills

Apart from skills, employability also depends on graduate generic attributes. HEIs are integrating generic attributes in course work to produce employment ready graduates. For example, Curtin University has developed nine Curtin Graduate Attributes (Yen et. al., 2009) as below.

1. Apply discipline, knowledge, principles and concepts

2. Think critically, creatively and reflectively

3. Access, evaluate and synthesise information

4. Communicate effectively

5. Use technologies appropriately

6. Use life long learning skills

7. Recognise and apply international perspectives

8. Demonstrate cultural awareness and understanding

9. Apply professional skills

c) Employment and Quality of Education

The purpose of the review is to identify the linkage between quality of education and employment potential of the graduates. Literature suggests that employability is one dimension of quality education (Storen and Aamodt, 2010). Green (1994) defines purpose of higher education in the context of quality as 'providing the skilled manpower required'. Harvey and Knight (1996) have described five ways to define quality and one amongst them relates to 'fitness for purpose' and here fitness in the context of education is student satisfaction for the mission determined purpose i.e. employment in most cases.

HEIs who are active and concerned about graduates adopt different methodologies to get feedback. The most commonly used method is employer's feedback. Thus, HEIs receive the feedback from the employers about the performance of their graduates and the areas which needs improvement like specific skills. By means of questionnaires HEIs get the feedback from employers. The best examples are UniSA, Monsha University, Curtin University, University of Leicester, Lubin University of Technology. In India, industry-academic meetings are conducted by HEIs to get their feedback and also to know the expectations. Furthermore, Indian universities like IGNOU have designed online platforms to identify the student satisfaction and employer satisfaction.

When we review the institutional practices about quality and employability, in most cases quality is linked with processes like review, accreditation, audit or evaluation. All these are post-process improvement plans but not integrating quality in each stage of the process. Certainly quality could be discussed from different points of view and aspects and research shows TQM is the holistic approach to this. The following sections of the paper will discuss further details about TQM in education.

B. System's Model of Employability

Apart from the above mentioned review of literature, a survey was conducted to identify the current position of employability and its linkage with the quality of education. The survey consisted of a questionnaire and also by direct discussion with all the stakeholders (students, graduates, employers, parents, and teachers) of HEIs. The number of HEIs covered was twenty five across India and they belong to all fields like business management, engineering, arts, science, commerce, agriculture and also medicine and nursing. The questionnaire was designed to know the expectations, the process, the output and the consequences. The survey has resulted into a System's Model of Employability (Figure 1).

This model can be considered by HEIs for the purpose of employability of their graduates

The models consists of five phases like 1. Expectations; 2. Input; 3. Process; 4. Output; and 5. Mapping. Feedback is a continuous process at every stage. Different activities are given below.
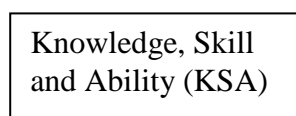
Knowledge, Skill and Ability (KSA)

STUDENT

Figure 1. System's Model of Employability

1. Expectations: Before joining any HEIs, students have certain expectations from the institution Based on their performance in previous academic endeavour and their competencies they chose the HEIs for further studies. Likewise, the students, their parents, employers and society expect quality education from the HEIs. There are a number of parameters they consider before taking admission exams like: infrastructure, faculty, collaboration with industry, career orientation services, R&D activities, accreditation status, recognition, alumni, location, admission requirements, course fees and timely declaration of results. If all these match the expectations then they take admission in a particular HEI and stream of specialisation. From here starts the role of HEI. Attracting the students and industries for placement / employment ideally starts at this phase. HEIs conduct counselling sessions to guide the students for selecting the correct stream that matches with their competencies and strengths.

2. Input: During this stage, depending upon the above mentioned parameters the students selects the HEI and takes admission. After the admission, it is the responsibility of the HEI to provide quality education and nurture the students so as to reach their career goal. These days HEIs are innovating new areas of specialisation like interdisciplinary studies, synergising multiple specialisations, developing soft skills across all streams and levels. At this stage there may also be a range of parameters that are/ can be followed by HEIs. For example, Vision, mission and planning, institutional culture, human resource development, programme development, student support, learning resources.

3. Process: This is the centre stage of the entire education system. To develop the knowledge, skill and abilities (KSA) of the students HEIs institutionalise different innovative mechanisms. Use of ICT is very prominent these days. The institutes follow the set norms and standards of the affiliating bodies and follow the curriculum accordingly. The parameters in this stage are: delivery mechanism, teaching learning process, continuous evaluation method, maintaining discipline. The HEIs use their own resources for imparting knowledge, also they use of external resources like visiting faculty from industry and academia. During this stage, the HEIs are aware, what the students intend to do after graduating: e.g. join a company, start their own business or choose their own profession.

4. Output: After attaining the requisite KSA, it is the time to certify the student's worthiness of becoming a graduate. Depending upon the stream HEIs institutionalise evaluation methods like term-end exam, project evaluation, practical testing of soft skills, and readiness for employment. Using these as parameters and depending upon the performance of students, the HEIs certify the students as graduates with some grades. In between the final results and last part of the studies the HEIs do job fairs, campus placement, industry academic collaboration, internship. These methods help a lot in employability of graduates, which is the objective of any of the stakeholders of the education system.

5. Mapping and Feedback: Mapping the performance with the objectives should be a continuous process. Mapping can be done for students, employers, institute itself, also for society. For example, student's expectations can be mapped with programme delivery and by this HEIs come to know about their performance. Similarly HEIs can become a bridge between employers and students and map their potentialities. Even after employment mapping can be done. Usually feedback is taken after the output but ideally as a TQM driven

institution, it should be a continuous process. In the preceding sections, we have already discussed about feedback mechanisms that are usually adopted by HEIs. Mapping and feedback compliment each other and lead to continuous improvement in terms of new programme development, use of new technology for delivery, new avenues for employment, areas for improvement, new skill requirement etc.

C. Application of TQM

If we look at the System's model and the concept of TQM, they are almost similar in their approach. The following sections will give an overview of the concept of TQM and its application in HEIs. Following which a strategy is presented for applying TQM in the context of employability.

Traditional Quality Management and TQM

Total quality is different from traditional quality in the sense that the customer determines whether a product / service is totally qualitative or not. If quality is achieved in totality, it leads to customer satisfaction which is the focus of TQM and also of every organisation. The differences between traditional management and TQM are highlighted in the Table1.

Definition of TQM

TQM is an integrated organisational approach to bring continuous improvement in products, services, and processes by using proper tools, technology and training to meet customers' expectations on a continuous basis through total employees' involvement.

Principles of TQM

There are variations in the language and scope of TQM program. Different quality experts highlight upon different TQM principles. For instance, some have identified four common TQM principles:

i) Do it right the first time to eliminate costly rework;

ii) Listen to and learn from customers and employees;

iii) Make continuous improvement on everyday matter; and

iv) Build teamwork, trust and mutual respect

Tools of TQM

TQM is nothing but QA plus continuous improvement (CI) leading towards delighting the customers (Figure 2). There are a number of tools, techniques and models of TQM available. However for HEI requirements, TQM tools and techniques are very useful. Tools and techniques of TQM can be categorised depending upon their usability and utility. Broadly they can be categorised as: a) Tools for quality improvement and b) Tools for Problem solving. The category (a) is generally used by teams/groups and (b) is used at individual level.

SL. No	Aspect	Traditional Quality Management	TQM
1.	Quality definition	(a) products meet specification (b) focus on post product inspection	(a) products fit for customer use (b) focus on building quality into work process
2.	Customers	Ambiguous understanding of customer requirements	Systematic approach to seek, understand and satisfy internal and external customer
3.	Errors	A certain margin of error, waste and rework is tolerable	No tolerance for errors; do it right the first time and every time approach
4.	Improvement emphasis	Technological break - through such as automation	Gradual but continuous improvement of each function
5.	Problem solving	Unstructured problem solving and decision making by individual managers and specialists	Participative and disciplined problem solving and decision making based on hard data.

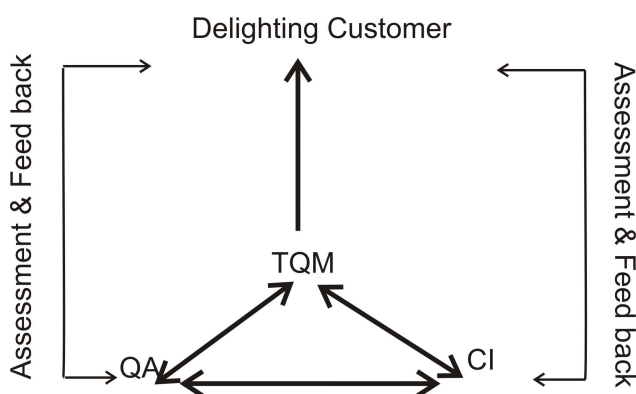**Table 1.** Traditional Quality Management and TQM (Source: Sharma (2002)

Figure 2. TQM

Category (a): It comprises the following popular techniques.

1. Flow chart

2. Arrow diagrams

3. Histograms

4. Run / control charts

5. Affinity diagram

6. Brainstorming

7. Nominal group technique (NGT) / Light voting

8. Lotus diagram

Category (b): It comprises of the following popular techniques.

1. Fishbone diagram

2. Check sheets or Graphs

3. Pareto analysis

4. Scatter diagram

5. Force field analysis

6. Stratification

7. Tree diagram

8. Matrix chart

9. Programme chart

Strategy for TQM Implementation

Literature shows quality culture is prevalent in HEIs and TQM culture is also seen in few HEIs (Padhi, 2010). Particularly TQM in the context of employability of HEI graduates hardly any study is carried out. The author has made an effort to bring out a Strategy for TQM implementation in HEIs in the context of employability of graduates. The components which can be added in the existing quality practice of HEIs to make a TQM HEI are as follows.

• Environment analysis

• Customer need analysis

• Use of CI tools and techniques

• Assessment and Feedback

• Evaluation

• Accountability

If these components can be synergised with the existing quality culture then total quality culture (i.e. TQM) can be attained. To attain TQM, a systematic and consistent process needs to be followed in each stage of the above mentioned System's Model. The following four pronged strategy provides way out in this regards (Box 1).

- Environment (internal & external) analysis (Where are we now?)

- Vision, mission, goal, and objectives (Where we want to be?)

- Policy, Plan, strategy, tools & techniques (How we will get there?)

- Assessment, evaluation, feedback and improvement (Did we get there?)

Box1: Four Pronged Strategy to implement TQM in HEIs

Strategic Framework

On learning different models of TQM in HEIs and experiences from industries, the author proposes a strategic framework (Figure 3) for implementation of TQM in HEIs particularly in the context of employment. The framework would dwell upon a four pronged strategy (Box1).

Figure 3. Framework for TQM Implementation in HEIs in the context of Employment
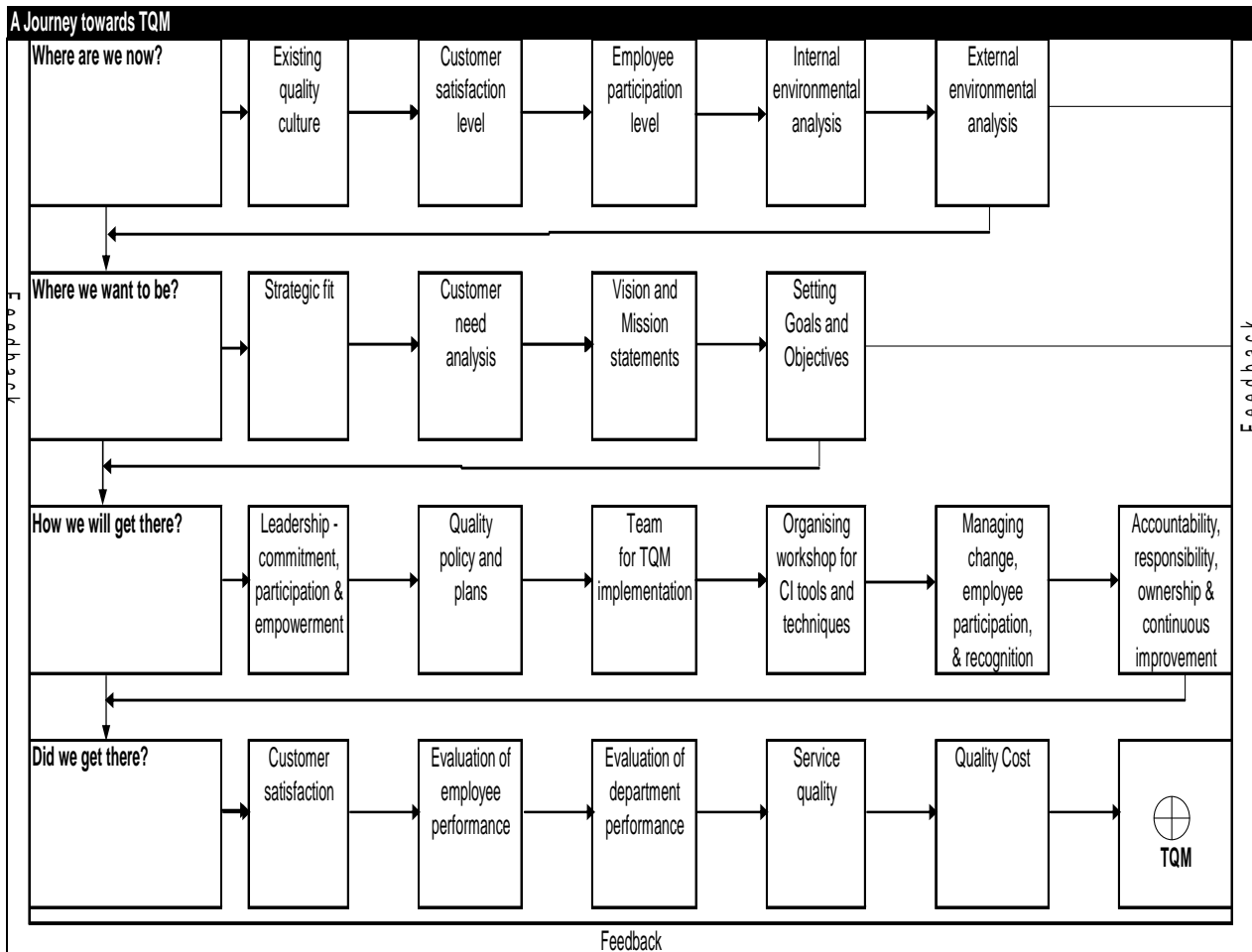
The figure shows the stages and its sub stages as follows.

Stage 1: Where are we now?

a. Existing Quality Culture

It is crucial for the institution to know the existing quality culture before moving ahead with anything else. We are already aware that HEIs have resorted to some quality culture but total quality culture is still a distant reality. Still to confirm it the HEIs can take an account of their existing quality profile by using a questionnaire. The questionnaire was developed by Crosby (1987) that can been modified by the author as per the suitability of HEIs. The sample questionnaires which are

developed by the author for use in other sections, the author can be contacted for sample of them.

b. Customer Satisfaction

Delighting customer is the ultimate aim of TQM. Customer of any HEIs includes students, industry/employers, parents and society. There are both internal and external customers. So, before starting TQM implantation, it is imperative to know the existing customer satisfaction level. Hence, to know the satisfaction level a questionnaire is developed by the author.

c. Employee Participation

Existing employee participation refers to the degree that the employee (Faculty, Administrative Staff, and Support Staff) shares information, knowledge and power throughout the institution. The level of participation ranges from an employee providing the information without knowing the problem to a work team having control over all the phase of decision-making process. Employee participation is promoted at all levels to cultivate commitment and involvement of employees to different participative group activities. Apart from the above, power is delegated in different degree at all levels across the institution so that the individual responsibility is discharged in commensurate with authority. The employee participation level can be assessed by using a questionnaire.

d. Internal Environmental Analysis

Internal environmental analysis helps an institute to know its own departments' strengths and weaknesses. It is as important as external analysis in strategy formulation. Basically there are four types of approaches that institutions follow for internal environmental analysis: resource-based approach; performance analysis approach; value chain analysis; and functional analysis approach.

e. External Environmental Analysis

The key external factors affecting strategy formulation can be of six broad types: customers; economic; social and cultural; political and legal; technological; and competitive. The external factors do not directly touch upon the short run activities of the institute but can influence its long run strategic decisions.

Figure 4. Sample Value Chain Analysis in HEIs.
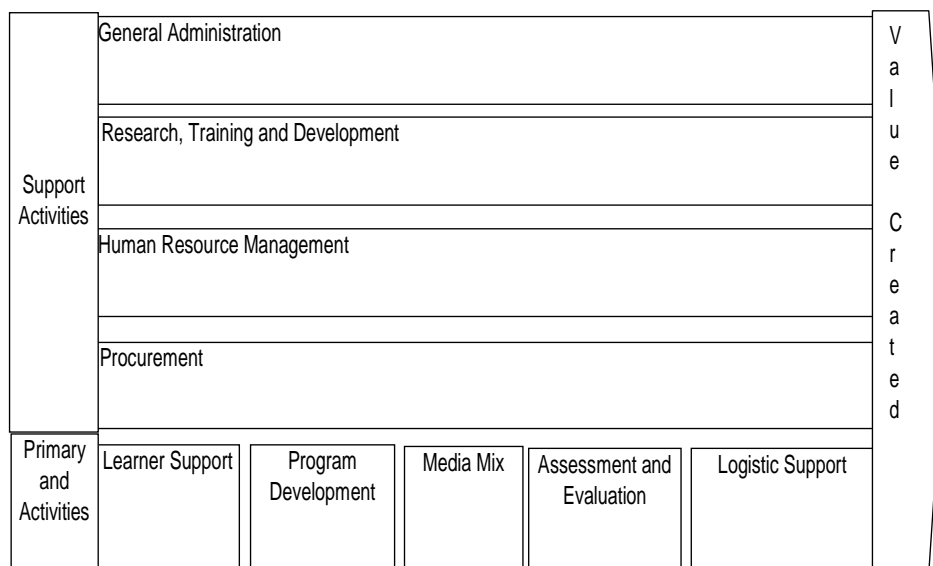
The external factors can be analysed in different ways, the most notable being the PEST (Political, Economical, Social and Technological) framework (Table 2). The institute should identify and examine the possible impact of the external factors and analyse its outcome. This information helps the institution to build a roadmap through which it can develop various strategies to exploit opportunities and reduce the threats. The result of PEST analysis varies from country to country depending upon variations in the PEST scenario among the countries.

Another way of doing external environment analysis is by using Porter's five forces model (1979). This model suggests that competition extends beyond the institute to include new entrants, substitutes, customers and suppliers. A strong force may be regarded as a threat, while a weak force may be regarded as an opportunity for the institute.

Stage2: Where we want to be?

a. Strategic Fit

A systematic way of integrating internal and external environment analysis helps to find a 'strategic fit' between what the environment wants and the institution has to offer and vice versa. SWOT (Strengths, Weaknesses, Opportunities and Threats) / TOWS (Threats, Opportunities, Weaknesses and Strengths) analysis or Situational analysis is an important tool for analysis of strategic fit. SWOT analysis is a common management technique used mainly for organizational diagnosis. SWOT stands for strengths, weaknesses, opportunities, and threats. It is an effective way of identifying strengths and weaknesses, which can lead to examination of the available opportunities and possible strengths. There are several ways of carrying out SWOT analysis like fill in blank SWOT sheets, open discussion or through data collection by questionnaire administration or tests. Table 3 is a sample of SWOT analysis.

b. Customer Need Analysis

Satisfying customers and creating customer enthusiasm through understanding their needs and future requirements is the crux of TQM and all institutions are dependent on having

satisfied customers (Dale, 2003). Understanding customer needs and wants is not an easy task. It is more difficult for a service provider to correctly understand the customer's needs.

c. Vision and Mission

Vision statement outlines what an institute visualises to be in the future. It is more specific of objectives and goals. The strategic point for TQM is to set a shared vision. Hence, the institution by involving all the stakeholders should make the vision statement. Once the vision statement is ready, several mission statements have to be articulated. The vision statement can galvanize the people to achieve defined objectives, even if these may appear to be little stretched out. It needs to be SMART i.e. Specific, Measurable, Achievable, Relevant and Time bound.

Mission is always futuristic and directional – statements of purpose of an institution. It typically explains what it provides to its customers. Externally, it provides institutional identity and internally unanimity of purpose. The important elements of a mission statement are: philosophy – beliefs, aspirations and values of the institution; services /products; customers; market or geography of operation; technology; employee; and public image. There should be a well-documented mission statement of the institution. Each mission may have several tasks in the form of goals.

Political	Social
Political stability	Population growth rate
Government policy on education	Literacy rate
Impact of laws	Career attitudes
Impact of environmental regulations	Attitude towards change
Decision-making structures	Society expectation
Government fund/grants	Demographic profile
Economic	**Technological**
Economic growth and stability	Automation
	Technology incentives
Interest rates	Rate of technological change
Inflation rate	
	Perception of technological change
Trade agreements	Cost of technology
Budget allocation	Information and communication technologies
Per capita income	

Table 2. Sample PEST Analysis in HEIs.

Table 3. Sample SWOT/TOWS Analysis for HEIs

SWOT / TOWS ANALYSIS	Opportunities Collaborations with international institutions Introduction of latest courses Up to date course material Use of different medium of course material Develop staff skills and capabilities Placement of graduates Encouragement of e – learning Accreditation	Threats Loss of identity Loss of strength and reputation Competitive market Mushrooming growth of DEIs Absence of accreditation Retention of efficient staff High average of staff learning to superannuating Pressure fro teacher and staff union Outdated course material
Strengths Enthusiastic management team Excellent result Timely result Ample no. of courses Flexibility High quality course materials Efficient student support system Support of Government Counselling	**Stategy - 1 (SO)** Example : The institution can leverage its stregnth 'Excellent result' to exploit the oppertunity for 'place of graguates' a strategic fit.	**Stategy - 2 (ST)** Example : The institution can leverage its stregnth 'Efficient student support system' to ward off the threat 'loss of identity' a strategic fit.
Weaknesses Poor faculty and staff Lack of recognition Inadequate and outdated course Poor examination result Weak student support system Absence of counselling Insufficient budget	**Stategy - 3 (WO)** Example : The institution can overcome its weakness 'lack of recognition' with the emerging oppertunity for 'accredition' a strategic fit.	**Stategy - 4 (WT)** Example : The institution can minimise the weakness like 'poor faculty and staffs' to avoid threat of competition.

Vision and mission statements are foundation stones for implementing a successful strategy. Vision and mission statements should not only be developed but should also be properly communicated to all the stakeholders of the institution. These are the long term objectives of the institution and if clearly prepared will not require changes. A good vision statement reflects what the customer wants rather than what the institute offers to the customers.

d. Setting Goals and Objectives

Goals are missions unbundled. Each goal contributes to the achievement of mission. Goals determine the tasks, programmes, activities and processes of an institution. The term 'objective' is used to refer to what is to be achieved and cover the range of desired outcomes to achieve a goal. The objective could be short-term or long-term, critical or non critical, strategic or operational. Based on the inputs from 'strategic fit' the institution could frame its objectives for implementation of TQM.

An objective to be acceptable should be flexible and appropriate for the planning horizon, it should be measurable and achievable, and if it is achievable it should be challenging enough to be motivating, and it should be suitable to the current position of the organization and suitable in the context of the organization's mission. A well-stated and meaningful objective should be understandable to all stakeholders.

Stage 3: How we will get there?

Before implementing TQM, it is essential to make an objective assessment about the readiness of the institute for implementation. The process climate of an institution adds evidence in support of / against TQM implementation. The process climate may be exploitative, impoverished, supportive or total quality. Although the total quality climate is the most desirable one, the supportive climate also nourishes the TQM effort. In order to assess the process climate of the institute a survey can be made by administering a well-structured

questionnaire developed by Petrik and Quinn (1996). TQM can be implemented by using eight steps (Figure 5).

a. Leadership

Leadership plays a vital role in the implementation of TQM in any organization / institution. It is the responsibility of the top management to take the initiative or recognize the demand of an initiative for TQM. While TQM is a participative management with a concern for all the persons of the institution, it needs someone or a group to think continuously on quality issues and mobilize others and so on.

b. Quality Policy and Plan

Articulation of quality policy is dependent upon the current status and goal of the institution. The quality policy differs according to the situation of the institution: crisis, normal running or already in good position. In a broader context, in quality policy specific interventions are chosen and quality plan provides instruments and practice of interventions.

Figure 5. TQM Implementation Flowchart
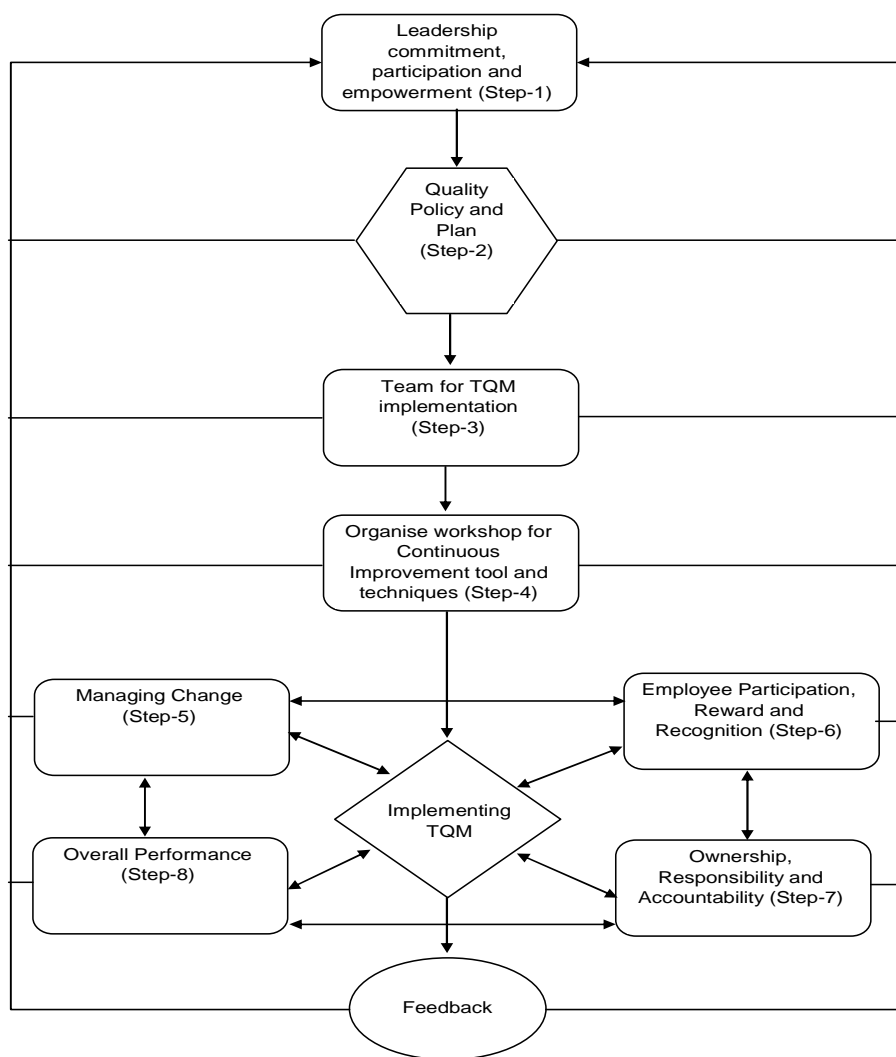
c. Teamwork

Good teamwork constitutes the basis of TQM. Teamwork requires the spirit of cooperation, complementation and synergetic relationship among members. Work teams have a much greater chance of being effective, if they are nurtured and facilitated by the institution. In order to make teamwork TQM oriented, the institution can take the following measures:

- Creating purpose of the team associated with the institution strategy.
- Creating a culture in the institution that values team participation and autonomy.
- Providing appropriate training to team members.
- Reinforcing teamwork.

d. Organising Workshops

To appreciate the need for TQM, and to make aware about the CI tools and techniques, institutions should arrange regular workshops. The TQM facilitators and the top management should ensure that all the employees are aware of the tools and techniques. Pocket books, leaflets, manuals should be prepared and distributed in these workshops.

e. Managing Change

Any institution wishing to implement TQM must be clear at the outset that TQM is not merely a management technique; it is also a change management programme. No matter how technically or administratively perfect a proposed change may be, people may make it or break it. People make it when they perceive it as a 'basket of opportunities', and break it when they perceive it as a 'bundle of threats'. People are the creatures of habit and it is highly difficult for them to try new ways of doing things at workplaces. Therefore, they resist changing and resistance occurs at all levels. Implementation of TQM and the accompanying changes in the process bring large-scale transformation. Sometimes, it becomes too difficult for people to adapt to such changes; therefore they do resist TQM implementation. However, failed TQM efforts would be very costly in terms of money and resources, lowered probability of achieving goals, decreased employee loyalty etc. Therefore, resistance must be carefully managed. 'Managing resistance to change' is one of the most troubling and challenging tasks faced today. The TQM manager must learn the skills of juggling tasks, striking a delicate balance between individual and collective actions, paying attention to the context as well as process of TQM etc. Some strategies like employee empowerment and recognition can be effective to manage resistance to change.

i. Empowerment

"Empowerment is moving decision–making down to the lowest level, where a competent decision can be made" (Hodgettes, 1996). The keys to empowerment are through sharing of information, freedom of action, involving employees in decision-making etc. Therefore, as TQM is a change initiative, employees should be made responsible for its implementation, share power with them through participative management, providing training for new skills required for TQM implementation etc. The institution should formulate a good empowerment plan and implement it.

ii. Rewards and Recognition

Rewards are the centrepiece of institutional life. Both extrinsic (financial, material and social) and intrinsic (self-granted and psychic, such as deriving pleasure from the work itself, experiencing a sense of competence, or self-determination) rewards motivate people to join and contribute to the quality efforts of an institution. However, the relative importance of extrinsic and intrinsic rewards is a matter of personal values and tasks.

f. Accountability

Accountability often used synonymously with such concepts as answerability, enforcement, responsibility, blameworthiness, liability and other terms like account-giving etc. Implementation of TQM and subsequent goals and objectives increases accountability for all the employees including top management. TQM makes every employee responsible for institution–wide quality practice. The institutional level vision and mission are cascaded down to the divisional and functional level by setting goals and objectives at each functional level. Consequently individual employee's target is also set. The employee target can be directly linked with the performance management of the institute. By this, the institution creates a cycle between individual employee's performance and overall institutional performance. The framework for accountability is given below.

Stage 4: Did we get there?

a. Overall Institutional Performance

Overall performance of an institution is assessed taking into account the performance of key variables like (Box 2):

- Service quality
- Customer satisfaction
- Functional performance
- Employee performance

Key variables are both intra- and inter-dependent. Employee performance leads to functional performance which in turn drives quality and customer satisfaction.

Box 2.Overall Performance

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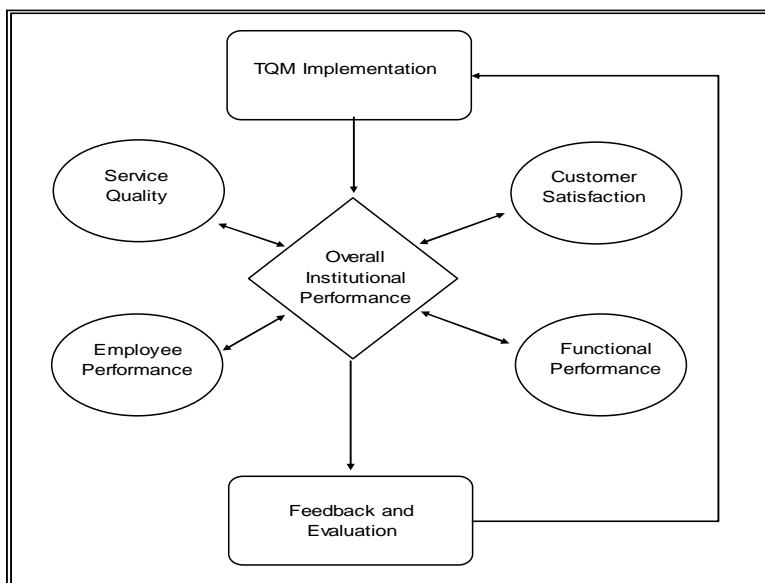
b. Evaluation of TQM Implementation

Evaluation is the process of assessing the outcome. It provides insight for improvement by matching the best practices and performance with the target process and outcome. As TQM is based on the philosophy of continuous improvement, evaluation plays an integral part of the implementation process. Evaluation can be carried out by using the existing standards (ISO, MBNQ etc) or by setting one's own institutional standards. To make evaluation a continuous phenomenon, internal procedures are recommended. This process should be carried out continuously and aligned with the other steps of planning and implementation to get the best result.

Ideally it should contain the following steps:

1. Identification of the key parameters

2. Data collection

3. Designing questionnaire

4. Data analysis and interpretation

5. Feedback for improvement

c. Cost of Quality

The common myth is 'quality is expensive' but the reality is 'quality is free', as the book name of famous TQM guru, Philip Crosby indicates. The critical component of TQM is cost consciousness in terms of quality improvement and management. From this angle, effective resource utilization is very important. Unless qualitative output is achieved, any amount of investment will be futile.

Cost of quality has two important components: cost consciousness and cost management. Cost consciousness implies developing sensitivity about costs and likely returns keeping quality as the focal point and cost management as the natural corollary to cost consciousness, which implies investment decisions.

Barriers to TQM Implementation

In order to implement TQM successfully, it is also necessary to know the reasons why TQM fails. The following is a list of barriers, obstacles, pitfalls, institutions have faced while implementing TQM. Even though this is not an exhaustive list, it does include the frequently faced barriers.

- Lack of top management commitment
- Lack of communication
- Inability to establish a TQM framework
- Insufficient knowledge about TQM
- Lack of institution-wide definition of quality
- Failure in formalising strategy for implementation
- Inability to change institutional culture
- No encouragement for team work, empowerment
- Lack of trust
- Belief that TQM costs more
- Lack of motivation
- Lack of training and education
- Improper resource allocation
- Lack of belief in customer satisfaction
- View of TQM as quick fix

Key Success Factors (KSFs) for TQM Implementation

Three foundation stones of TQM have been identified: customer focus, continuous improvement and team work. All three are necessary for implementing and surviving TQM in an institution, if any one is missed then TQM will get destabilized. Apart from these 18 KSFs have been identified for making TQM a success in any institution. The KSFs are:

1. Awareness

2. Vision

3. Leadership

4. Innovation

5. Ethics

6. Perception

7. Communication

8. Mental State (Stress and Delight)

9. Reward and Recognition

10. Maturity and Breadth

11. Attitude and Morale

12. Customer satisfaction sensitivity

13. Resources

14. System feedback coordination

15. Empowerment

16. Training

17. Quality Policy and Guidance

18. Organisational structure and processes

2. CONCLUSION AND GUIDELINES

The existing practice and research indicate that HEIs are very much active and concerned about employability of their graduates. They adopt different strategies for this. The most conspicuous strategy is obtaining employer's feedback about employability and introducing new programmes and methodologies of teaching learning. The HEIs also offer new areas of KSAs. Some of the HEIs also conduct student satisfaction surveys. However, looking at the current scenario of employment, there is a need for continuous improvement and to exceed customer's demand. For this the author is proposing adoption of TQM as the best strategy which aims at quality assurance, continuous improvement, feedback and customer delight. TQM encompasses a 360 degree approach in maintaining, delivering high quality at all levels and continuously improving with the help of feedback. This framework is based on the models, principles and theories of TQM both in industry and HEIs. Simultaneously the HEIs can adopt the following guidelines for graduate employability.

1. Importance of System's Model of Employment.

2. Application of TQM in graduate employability.

3. Awareness of expectations of all the stakeholders.

4. Time bound and continuous feedback and mapping as integral function in the entire process.

5. Involvement of all the stakeholders during design and development of new programmes.

6. Internship/apprenticeship should be made compulsory for all the programmes.

7. Establishment of industry academic collaboration throughout the process.

8. Time bound and continuous feedback and mapping as integral function in the entire process.

9. Employee empowerment, delegation and reward.

10. Introduction of the concept of OWNERSHIP.

11. Exceeding customer satisfaction-the ultimate goal.

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