CHAPTER I

TOTAL QUALITY MANAGEMENT AND HUMAN RESOURCE QUALITY-AN OVERVIEW

1.0 Introduction

Quality of product/service has become probably the most important element to keep the customers happy on a continuous basis. Customer’s needs and wants do keep changing. To keep pace with the changing demands of customer’s organizations have to develop a quality culture. Further, product/service quality directly depends on the human resource quality in any organization. Large number of organizations world over embrace TQM to become competitive in the ever changing business environment TQM efforts bring about changes not only in product and process quality but also in human quality. In this chapter, an overview of Total Quality Management (TQM) along with linkage of Human Resource Quality (HRQ) and TQM, the scope and objectives of this research are presented and discussed.

1.1 Total Quality Management (TQM)

The concept of Total Quality Management (TQM) was born almost two decades ago with the core ideas of W.Edwards Deming, Joseph Juran, Philip Crosby and Kaoru Ishikawa. Since then it has become an acceptable management philosophy, finding its way into every sector of business. In the increasingly competitive environment TQM is essential for not only success and growth but even for survival of organizations. Quality management has been defined as ‘a philosophy or an approach made of a set of mutually reinforcing principles and techniques’ (Brown, Hitchcock and Willard [1944]). The leaders of business and industry world over took quality seriously starting from 70’s and introduced TQM principles in their organizations to gain competitive advantage.
1.2 TQM in India

Indian organizations, which for long enjoyed relatively stable environment, have been subjected to drastic changes due to new economic policies of government of India since 1991. Indian economy was opened up and with this new policy; the process of competition and globalization has been initiated. These drastic changes in external environment started forcing Indian organizations to have a paradigm shift in the way they manage organizations.

The economic liberalization in India has made available in the market global quality goods and services and this has shaken many an industry which has hither to been complacently existed with poor/shoddy quality products and services. On the yardstick of competitiveness, Indian industry performance has been more or less abysmal. Among the 59 countries, which were ranked by world competitiveness report 1999 (conducted by World Economic Form), India occupied a low 52nd place on overall competitiveness and 37th place on innovative capacity. The total cost of poor quality is as high as 25% of India's manufacturing sector turnover. In these days of mass customization (capacity to manufacture products in batches with out compromising on cost, speed or product standards), Indian corporates are increasingly finding it difficult to compete with foreign manufactures who can re-engineer their manufacturing processes to produce just what the customer wants. It is the quality factor that has emerged in the forefront. Today total quality is no longer a choice; it is a foregone conclusion. In the wake of globalization and emerging competitive scenario, many corporates in India have undertaken quality practices.

1.3 Why TQM?

With the emerging knowledge based industries it is the knowledge base of employees that can ensure success. Apart from technology hard or soft, much of the knowledge is about quality. The paradigm of quality as a core competence has to be embraced by all types of Indian industries – large, medium and small. Philph Crosby one of the quality gurus, once said, "My recommended agenda for India would be quality leadership in government business and education".

Implementation of TQM brings changes in organization’s culture and climate. Employees learn to accept changes, enjoy working in teams and develop a habit of
continuous improvement and quality orientation. TQM thus definitely brings in changes in the way the people think and act. People become innovative and proactive in facing challenges. If people practice quality, they take the concept with them wherever they go at home, in society. Success of TQM practices depends on these changes in human resource quality.

1.4 Evolution of TQM

Quality management started with simple inspection based systems. Under this system, one or more characteristics of a product are examined, measured and tested and compared with specified requirements to assess its conformity (Kanji, Asher [1993]). This system is an after-the-fact process, which has no prevention components other than the possibility of identification of non-conforming products. The next stage, quality control stage, concentrates on product testing and documentation. Quality control measures led to greater process control and lower incidence of non-conformance. The third stage, the quality assurance stage comes with the change away from product quality towards system quality. This stage is marked by the organizations developing quality manuals, procedures, work instructions, quality planning and conducting quality audits. The basic difference observed in this case is that quality assurance is prevention based where as quality control is inspection based.

At Total Quality Management stage, quality management principles are applied to all aspects of the business. TQM is defined by ISO as “Total Quality Management is the management approach of an organization centered of quality, based on the participation of all its members and aiming at long term success through customer satisfaction, and benefits to all members of the organization and to society”. Total Quality Forum of U.S.A defines TQM, as “TQM is a people focused management system that aims at continual increases in customer satisfaction at continuously lower cost. TQM is a total system approach (not a separate area or program) and an integral part of high-level strategy. It works horizontally across functions and departments involving all employees, top to bottom and extends backwards and forward to include the supply chain and the customer chain”. TQM calls for the principles of quality management applied in every branch and every level of production in the organization. Organizations embracing the process of TQM.
must have clear vision, superb supplier and customer relations and the vision that quality is not only just product/service quality but also the quality of the whole organization including sales, finance, human resource and all other functions. Quality gurus such as E.Deming, Crossby, Juran, Feigeubaurm, Ishikawa, Taguchi and others have developed basic principles in the area of quality management. There is a broad agreement among the gurus that all aspects of quality management should focus on quality improvement.

1.5 Impact of TQM on Human Resource

TQM provides a historically unique approach to improving organization effectiveness that has a solid conceptual foundation and at the same time offer a strategy for improving organizational purposes that take into account how people and organization actually operate (Hackman & Wageman [1998]). According to Deming (1996) TQM is a dynamic process involving all levels in an organization to promote never-ending improvement in the effectiveness and efficiency of all eyelets of business. TQM has become the mantra for organization to survive in the environment of ever growing competition. According to Crossby [1989] 'quality as a key attribute that customers use to evaluate product and services, has emerged as a vital point of management focus in many parts of this world'. Many corporate enterprises have found that the key to competitive success lies in emphasizing product and service quality as a strategic issue when doing business (Pulat [1994]). TQM is a holistic concept involving all levels and function of the organization. To put it briefly it is "doing things right first time and every time". Organization supported by a leadership, which keeps in place policies and systems, can only achieve the total customer satisfaction. TQM is thus a way of thinking and working by the people in the organization and not merely a collection of tools. For TQM to succeed a cultural shift in the organization is called for with fundamental changes in values, structure, the way people work together and the way people feel about participation and involvement. Atkinson [1996] argues that cultural change is the secret in implementing TQM. TQM philosophy stresses three core principles, which underline the importance of human resource.
1. All employees can contribute effectively to improvement and the managers should provide all employees the opportunity to contribute. This requires provision for time, training, and access to information and teamwork.

2. Customer satisfaction is the ultimate goal of all organizations. Customer satisfaction will be possible only through employees in the organization-ensuring product and service quality through customer-oriented culture.

3. Process is important as results. Adherence to laid-down process and procedures is absolutely necessary in the context of TQM. This adherence can be achieved only through the human resource in the organization.

"People are the prime movers of an organization. Organizations are established operated and sustained by people. All corporate strengths are dependent on people". B.Godrej (Business Today January [1996]). Recent research and surveys from west indicate importance of human factor in successful organizations (Rao [1999]). TQM practices focus on cultural change, commitment of employee to quality and teamwork, which are seen as difficult to achieve. This is because of the incompatible culture, which may include values and norms oriented towards short-term production and quick fixes, discrete activities and pursuing departmental goals.

To transform the organizational culture to meet the changed environment, the only effective route is sincere and effective implementation of TQM which essentially is focused on people and systems. It is now an accepted fact that no matter how modern and sophisticated technology and machines that we have, one cannot achieve the optimum result until and unless the employees manning them are motivated to develop the sense of involvement and pride of workmanship.

Among the many segments of TQM such as quality planning, quality control, quality surveillance, quality audit, quality assurance etc, Quality Improvement Teams (QITs) and Quality Control Circles (QCCs) are participative group activities among employees at all levels. To bring in organization-wide shift for being able to face successfully emerging challenges, the strategy should be to practice TQM effectively and operate both QCCs and QITs.
TQM is managing company's business in all aspects using the principle of quality management. It becomes a way of life for the people. The impact of TQM efforts can be classified in three broad areas-company culture, QWL and employee satisfaction. A supportive company culture means that people within the organization have customer focus, team approach, quality orientation and an attitude of continuous improvement. The teamwork and team spirit are very important for the success of TQM. TQM is a never ending journey. With changing environment and consumer demands one needs to constantly look for continuous improvement. Implementation of TQM leads to major changes in people, culture and processes resulting in a transformed organization. Top management commitment, widespread training, workers involvement, recognition of merit and teamwork are widely accepted as fundamental guidelines for successful implementation of TQM (Dawson [1988]). Implementation of TQM activities naturally bring in qualitative changes in HR. The model/diagram shown below summarizes the efforts and impacts of TQM leading to tangible and intangible benefits. The intangible impacts specifically are pertaining to changes in Human Resource Quality (HRQ). The boxes in the diagram connected with dotted lines provide a comprehensive view on factors leading to changes in HRQ.
Total Quality Management (TQM) → A people focused management system

Segments of TQM

- Quality Planning
- Quality Control
- Quality Audit
- Quality Circles
- Quality Improvement

TQM Approach to Quality

- Product Quality
- Process Quality
- Human Quality

Training
Empowerment
Team Work

TQM Tools

TQM Focus

- Leadership and Team Building
- Motivation and Pride in Work
- Hygiene and House Keeping
- Personality Development
- Skill Up gradation
- Quality Improvement Tools
- Kaizen
- Quality Circles

Benefits of TQM

Intangible (improvement in Human Resource Quality (HRQ))

- Enrichment of QWL
- Attitudinal changes
- Better harmony
- Better communication
- Effective team working
- Better human relations and trust
- Participative culture
- Enhanced job knowledge and interest
- Greater sense of belonging
- Sense of achievement and recognition
- Challenging work
- Greater responsibility
- Self esteem and satisfaction

Tangible

- Quality of product/service better
- Productivity higher
- Cost lower
- Better house keeping
- Better safety
- Better profitability

Impact of TQM

This research aims to develop an instrument to assess HRQ

Self Development

- Analytical thinking
- Data based decisions
- Team work
- Communication skills
- Eligibility for promotions
- Change in mind set
- Habit of listening to others
- Consensus method of decision making
- Amenability to changes
- Higher motivational level
- Attitude of problem prevention

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1.6 Scope and Objectives of the Study

There is a growing interest in the literature with regard to relationship between HRM and TQM as well as the relationship between these two approaches with business performance. Prior empirical research (see for an overview e.g. Delery and Doty [1996], Reed et al [1996], Guest 1997, Boselle et al [2001]) suggests significant effects of TQM and HRM on the performance of the organization. The majority of research in this area is focused on the effects of HRM/TQM at the organizational level (Arthur [1994], Huselid [1995], Macduffe [1995], Choi et al [1998], Wiele Valder [1998], Hendricks and Singhal [2001]). In practice, human resource manager or quality manager is asked to fill in a questionnaire, most often one list of questions representing the whole organization. The research on the perception of individual employees might give another new stimulus to the discussion of effectiveness of TQM/HRM in an organization (Guest [1999]).

Paauwe and Richardson [1997] not only gives an overview of prior research on the relationship between HRM and business performance, but also make a clear distinction between HRM results (satisfaction, motivation, absenteeism, retention, trust and involvement) and hard business performance indicators like profit and sales volume. In the TQM literature there seems to be general understanding regarding type of TQM activities that contribute to the development of business excellence. Dale [1999] enumerates the following practices relevant to organizational excellence from a TQM perspective: leadership, training, involvement, participation of employees, cooperation and customer focus. Most of these themes can be found also in current HRM literature. Various authors indicate explicitly so-called best practices that will deliver sustainable competitive advantage for the organization. Arthur [1994] focuses on decentralization, participative leadership and excellent wages. The business excellence models defined in relation to the international and national quality awards stimulated the development of best practices from a TQM point of view (Blackburn et al [1993], Puay et al [1998]). The first recognition of importance and value of human assets came about in the early 1990's. This was the time when major increases in employment; technology and other knowledge based sectors started. The critical success factor for any knowledge-based organization is its highly skilled intellectual work force. If two organizations have similar capital and
technology, it is only the employees who are the major differentiating factor. Therefore, the need for assessing the quality of human assets besides traditional accounting of tangible assets has become very significant. In an attempt to produce a tool that is psychometrically sufficient (valid, reliable, discriminative and useful), Smitt S [1990] emphasized the issue of behavior in assessing employee performance and devised the Behaviorally Anchored Rating Scales (BARS). BARS allow supervisors to rate employees on observable behavioral dimensions. In behavior based appraisal, employees are assessed on what they do in the job. Performance appraisal with in a quality driven environment/in TQM based organizations should be focused on behavior. There are several HR measurement approaches for valuing human resource based on behavior, HR cost, return on HR investment etc.

Fortunately the HR profession has made much progress with measurement and evaluation in recent years. There is no argument that human resource quality must be measured but to determine the right approach is a significant challenge. There are many approaches to assess the performance of human resource using a variety of tools and techniques. All these measurements are linked mainly to the performance of the organization. It often viewed that if the organization perform successfully, the people in the organizations also do well. TQM aims at people who are committed, flexible, willing and able to work in teams in a cooperative manner. Organization wide training and development programs undertaken while implementing TQM ensure cultural and attitudinal changes in HR. The diagram presented in section 1.5 clearly shows the details of tangible and intangible impact of TQM. The intangible impacts are mainly in the form of qualitative changes in HR. There are several scientific and quantitative methods to assess the tangible impacts of TQM. However from the literature survey and review of literatures, it is understood that there is no comprehensive instrument available for assessing the qualitative changes in human resource. Further this impact of total quality management on the human resource is rarely assessed. The present research is an attempt to bridge this gap. The objectives of this research are as follows.
1. To design and develop an instrument for assessing Human Resource Quality in different organizations and to find out the Human Resource Quality Index (HRQI).
2. To critically evaluate and assess the changes in organizational culture consequent on the implementation of TQM practices in selected organizations using the instrument.
3. To find out the impact of TQM practices in the quality of work life in selected organization.
4. To assess the impact of TQM efforts on employee satisfaction in selected organizations.
5. To assess the changes in HRQI in a few selected organizations.

The instrument/model was developed by extensive literature survey and was tested in ten organizations. An attempt to assess the changes in human resource quality, consequent on implementation of TQM practices has also been made using the model. It is planned to present the research work as detailed below

1.7 Thesis Plan

The second chapter of the thesis has been titled as “Review of Literature on TQM and HRQ” and in this chapter; a detailed literature survey is presented tracing the development of quality management practices world over beginning from the 70’s. An attempt is made to present different human resource measurement practices chronologically. A review of latest research conducted linking TQM and HR will also be presented.

The third chapter is titled as “Human resource measurements and indicators of HRQ”. In this chapter an attempt to review the existing approaches to measure human resource has been presented. This is basically aimed at identifying the gap existing as far as assessment of human resource quality is concerned. Finally the indicators of HRQ have been identified from literature survey and detailed discussion has been presented to illustrate the significance of these indicators.

The fourth chapter has been titled as “Organizational culture, quality of work life and employee satisfaction”. This chapter consists of discussions on the impact of TQM on organizational culture, quality of work life and employee satisfaction. Further
the linkage of the indicators of HRQ with the above three variables has been established.

The fifth chapter has been titled as "Tool design and Methodology design for its use". In this chapter, the gap in research to assess the impact of TQM on HRQ has been discussed. Secondly the objectives of study are enumerated and the research methodology adopted has been discussed in detail in this chapter. Finally the HRQI model is presented along with the details of the instrument design (questionnaire design). Finally the sequential steps involved in this research have been presented with a help of a flow diagram.

The sixth chapter has the title as "Sample selection survey and results". The details of the sample units selected have been discussed. A brief profile in respect of each of the ten organizations in the sample is also upended. Discussions on the major findings of the research are also provided.

The seventh chapter is titled as "Data analysis and interpretation". In this chapter data has been analyzed and presented along with discussions on reliability of the instrument. The results of the significant test conducted are also presented. Finally the data has been analyzed organization wise and appropriate interpretations and conclusions have been presented.

The eighth chapter has the title as "Conclusions and Recommendations". In this chapter conclusions and recommendations based on the research findings have been presented. The scope for future research in improving the instrument along with limitations also has been provided.

References and appendices have been incorporated at the end of the thesis.