CHAPTER III

HUMAN RESOURCE MEASUREMENTS AND INDICATORS OF HUMAN RESOURCE QUALITY

3.0 Introduction

In the previous chapter, the linkage between Human Resource Quality and TQM has been analyzed. It has also been established that there has to be a proper mechanism to assess the changes in HRQ due to the implementation of TQM. Such assessments will enable the organization to identify the weak points and step up its efforts for improving HRQ. In this chapter, a brief review of different methods available for HR measurements has been presented along with discussions on various indicators of HRQ.

3.1 Background Note

The assets of an organization could be broadly classified into tangible assets and intangible assets. Tangible assets include all the physical assets which could be plant and machinery, investments in securities, inventories, cash, cash equivalents and bank balance, marketable securities, accounts and notes receivables, finance receivables, equipment on operating lease, etc. Intangible assets include the goodwill, brand value and human assets of a company. The human assets involve the capabilities, knowledge, skills and talents of employees in an organization.

Hitherto organizations did not give much importance to value their human assets. Moreover, it was considered a difficult task, as there were not any defined parameters of valuation. Further, organizations did not think proper to value human resources, as these were never treated as an asset. It was felt that all investments related to employees, including salary as well as recruitment and training costs were only expenditure. In addition, stake holders of the company, it was perceived might not accept the concept of placing a monetary value on human resources.
The first recognition of importance and value of human assets came about in the early 1990s. This was the time when there was major increase in employment, technology and other knowledge-based sectors. In the firms in these sectors, the intangible assets, especially human resources, contributed significantly to the building of shareholder value. The critical success factor for any knowledge-based organization was its highly skilled intellectual workforce.

Soon after, the manufacturing industry also seemed to realize the importance of its people and started perceiving the employees as strategic assets. For instance, if two manufacturing companies have similar capital and use similar technology, it is only their employees who are the major differentiating factor. Therefore, the need for valuing human assets besides traditional accounting of tangible assets becomes highly significant.

3.2 Approaches to HR Measurements

Recently, the HR profession has made great progress with measurement and evaluation. Fig 3.1 illustrates the approximate time frame for the use of particular measurement approaches. Human resource must be measured. But what is the right approach? There is no unique answer to this question. A brief review of HR measurement approaches have been presented in the following sections. Although each one is presented separately, the techniques, processes, and focus of some of the approaches overlap very often. The early approaches include those tried-and-true approaches. Some of these approaches are still being tried by many organizations. A brief description for all this approaches has been presented in the following sections.
Fig 3.1 - shows different HR measurement approaches starting from 1960s

3.2.1 HR Management by Objectives (MBO)

The evaluation process of measuring progress toward HR performance objectives gained popularity in the 1960s because of the widespread use of MBO. The HR department develops specific objectives and evaluates performance against those objectives. Objectives are based on what management wants accomplished or on what is perceived to be necessary to achieve the stipulated level of performance. Measures of turnover, absenteeism, job satisfaction, employee health, and compensation expenses are quantifiable and are considered objectives for many HR functions. Whatever measures are determined, they must be related to organization performance in order to represent meaningful approaches to reflecting the contribution HR makes to the organization.

3.2.2 Employee Attitude Surveys

Many organizations still use employee attitude surveys to evaluate the effectiveness of their HR departments. These surveys attempt to link employee
attitudes to organization performance. The organizations reporting as more profitable than most of the industries, were high users of employee surveys. On the other hand, those organizations describing themselves as less profitable rarely used surveys. Other studies of organizations using employee surveys have proven positive relationships between organization performance and the attitudes of employees. Although this is one method to collect information regarding organization performance, it is often used in relation with other methodologies.

3.2.3 HR Case Studies.

Presenting results in a case study format to selected audiences is yet another approach. For example, an organization may report the success of a labour-management program in a case study report to all employees. These case studies have significant value and can be presented with little cost. They are developed using data about HR performance, reaction from individuals, or interviews with participants involved in HR programs or services.

However, the HR case study approach has some weaknesses. It does not represent a balanced measure of the performance of the HR function. It only provides some evidence that certain programs are successful. It usually does not represent an ongoing evaluation of any particular program or the overall function on a one-shot examination. It is very often criticized as subjectively based, and a program's success is usually judged by those providing the data that is to be included in the case study. Finally, quantitative data are not always a part of these studies. With all these weaknesses, the case study approach of evaluation is an important part of an organization's overall measurement and evaluation programme.

3.2.4 HR Auditing

A human resource audit is an investigative, analytical, and comparative process that attempts to reflect the effectiveness of the HR function. It undertakes a systematic search that gathers, compiles, and analyses data in depth for an extended period, usually one year, instead of with daily formal and informal reports. The use of HR audits has increased significantly. One reason for this is a commitment to moving the HR function from service to the strategic arena.
HR auditing is an extension of traditional auditing, which until recent years was limited to the financial practices of the organization. There has been a tremendous expansion in the extent, scope, and types of information being audited. In addition to auditing has now moved into production, operations, sales, quality, data processing and engineering beyond its traditional human resource area. It has become a critical analytical tool to assess how well—or how poorly—an activity is performed. HR auditing provides the necessary baseline data so that actions can be taken to improve HR performance. HR auditing is a vital modus operandi that can help improve the efficiency of the HR function; it does.

3.2.5 HR Key Indicators

In some HR evaluation efforts, key measures are developed that reflect the major efforts of the HR function. In some cases, these measures are linked to organizational performance. The best-known and established method of HR evaluation is the key indicators approach. It uses a set of quantitative measures such as accident frequency rate, absenteeism rate, turnover rate, and average time to fill requisitions. Key indicators come from areas such as; Employment, Compensation administration, Diversity, Employee benefits, Learning and development, Work environment/safety, Performance, Labour relations, Careers and Overall effectiveness, etc.

Although this approach of tying key measures to organizational performance seems sound, there is little empirical evidence to show this direct connection. This area requires additional support, further research, and study.

3.2.6 HR Cost Monitoring.

Although most executives are aware of the total cost of payroll and benefits, they do not realize that change in HR practices can result in huge increase in costs. One approach to evaluating HR performance is to develop HR costs and use them in comparison with cost standards. Some organizations compare these costs with other internal costs; these comparisons, however, could possibly reinforce complacency. Comparisons with other similar organizations may be more effective. Examples of HR costs monitored by organizations include:
• Employment
  - cost per hire
  - orientation cost
• Learning and development
  - cost per employee
  - total costs as a percent of payroll
• Benefits
  - costs as a percent of payroll
  - Healthcare costs per employee
• Compensation
  - compensation expense as a percent of operating expense
  - total compensation costs
• fair employment
  - cost per complaint
  - cost of litigation
• labour relations
  - cost per grievance
  - cost of work stoppages
• safety and health
  - accident costs
  - costs of citations/fines
• overall HR
  - HR costs as a percent of operating expenses
  - Turnover costs

Tracking costs alone is not a guarantee of a direct link to organizational performance. Even though costs comparisons are helpful, standard HR cost data are yet not available. From a practical approach, HR costs monitoring is necessary as input for other approaches to evaluation. For example, in the benefit/cost analysis, HR cost data is required for comparisons.

3.2.7 HR Reputation

Some HR professionals believe that HR function effectiveness should be judged by receiving feedback from those it is designed for often referred to as clients
Constituencies depend on, or exert control over, the HR function. Proponents of this approach argue that effectiveness is a value judgment. Even objective criteria are only one step removed from subjectivity. Someone has to determine what level is considered ineffective. For these proponents, it is more important to measure the perception of the function in the mind of constituents.

It is important that the HR function is perceived as effective and its clients and users are satisfied. However, there is not much evidence of a relationship between levels of satisfaction among constituencies and overall organizational performance. This process ignores HR outcomes that may direct impact on the bottom line.

**3.2.8 Competitive HR Benchmarking**

A few organizations have developed key measures that represent the output of the HR function. The measures are compared with measures from other organizations regarded as having best practices within a given industry. This process, known as competitive benchmarking, began as an important development in the American quality movement. Even though there is keenness to know the process, few companies understand what they are doing when they undertake a benchmarking study. Some see the process as merely a comparison of processes, which ensures functional similarity with other companies. Others feel the process as seriously as possible and view it as a learning strategy that can improve overall HR effectiveness. Although benchmarking has proven successful in quality and other areas, it is slow in developing within the human resources function. There is only a slow progress.

**3.2.9 Return On Investment (ROI)**

Arguably the most convincing approach to HR evaluation is to compare the cost of HR programs with the benefits derived from them. In most cases, the cost of HR programs can be developed or monitored. Although, there is confusion concerning ways to allocate specific costs, overall program costs can usually be pinpointed. The difficulty lies in determining program benefits. In many cases, expert input is used to assign monetary values to benefits derived from programs, particularly for intangible benefits. Consequently, this approach is sometimes avoided as an evaluation tool.
The ROI process is experiencing success in the HR field and even more so in training and development, quality, technology and change management. This approach to measurement and evaluation is used in the private and public sectors around the world. The process is built around the basic financial equation, earnings divided by investment, or net benefits divided by costs.

There have been deliberations on measuring the return on investment (ROI) in human resources (HR). Some individuals characterize ROI as inappropriate. Others vehemently attribute ROI as the answer to their accountability concerns. The truth lies somewhere between the two extreme views. Understanding the drivers for the ROI process and the inherent weaknesses and advantages of ROI makes it possible to take a rational approach to the issue and implement an appropriate mix of evaluation strategies within the HR function.

3.2.10 HR Effectiveness Index

A few organizations have attempted to develop a single composite index of effectiveness for the HR function. One such example of use of an index was developed and used by the General Electric in the 1950s. This Employee Relation Index (ERI) was based on eight indicators selected from a detailed study of employee behavior. Among the indicators were absenteeism, initial dispensary visits, terminations, grievances, and work stoppages.

Another index attempt was the Human Resource Performance Index (HRPI), which uses massive data banks made available by human resources systems. According to its developer, the HRPI has been successfully used to evaluate HR functions such as selection, compensation, development, and retention. No attempt was made to validate this index against organizational performance.

The most comprehensive study about this issue was conducted to develop and test a Human Resources Effectiveness Index (HREI). The study, involving seventy-one organizations from eight industry segments, provided additional empirical evidence of the relationship between HR performance and organization's effectiveness. Six measures of HR dependent performance were identified for use in the study:

- HR expense/total operating expenses
- Total compensation/total operating expenses
• Total cost of benefits/total operating expenses
• Training and development expenses/total employees
• Absence rate
• Turnover rate

The HREI represented a composite of the six measures, and significant correlations were developed with revenue/employees, assets/employee costs, operating income/employee costs, and operating income/stockholders' equity (ROE).

This index is appealing because it is simple to compute and easy to understand. It is also useful for comparing one organization with another and can be used for interval control and goal setting.

3.2.11 Human Capital Measurement.

In the early 1960s and 1970s a novel approach to evaluation was taken: human resources accounting (HRA). Interest in this approach diminished in the early 1980s. However, the approach has recently been recharged. This concept, currently labeled human capital measurement, attempts to place a value on employees as assets in an organization and to measure improvements or changes in these values using standard accounting principles. It is an extension of the accounting principles of matching cost and revenues and of organizing data to communicate relevant information in financial terms. Human resources are viewed as assets or investments of the organization and methods of measuring these assets are similar to those for measuring other assets.

Although the concept of measuring human capital has regained popularity, it is not without criticism. The concept developed slowly, mainly due to the controversies surrounding three important issues: (1) if human beings are indeed assets, (2) what costs should be capitalized, and (3) what methods are most appropriate for establishing a value for employees with the eventual allocation of such value to expense. There are legitimate problems concerning the concept that employees can be owned or controlled by an organization, which is prerequisite for defining them as assets. Even with these concerns, however, promising signs indicate many corporations will begin listing the financial value of their human assets on the balance sheet. This action can lead to benefits that greatly outweigh the cost of implementing an accounting system to measure human capital.
3.2.12 HR Profit Centre.

According to some researches and practitioners, the ultimate approach to evaluation is the profit-centre approach. This concept requires shift from the traditional view of the HR department as an expense centre in which costs are accumulated, to view HR as an investment that can achieve a bottom-line contribution and, in some cases actually operate as a profit centre. Increases in the investment in HR through additional staff, programs, and resources are expected to improve the performance of the organization. This is an important shift in the perception of the HR function.

The underlying premise of this approach is that user departments such as production, operations, sales, and engineering are charged for the services of the HR department and, in some cases, have the option of using external services in lieu of those offered by the HR function. In effect, the HR department makes a profit, break-even, or experiences a loss. Assuming the services are priced on a competitive basis, the profit represents a financial return on the investment allocated to the HR function.

Adoption of this approach requires the HR department to become client-oriented and quality conscious in delivering services and programs. Some organizations have expanded this concept to include selling HR services to outside clients, thus generating additional income for the organization. Although the profit-centre approach has made some progress and is generating considerable interest, some legitimate barriers exist in its implementation. The profit centre represents a significant departure from the rational HR management practices, and because of this, it may never be fully implemented in most organizations.

In the above sections an attempt has been made to present a review on HR measurements comprising of early approaches, value added approaches and leading edge approaches. In the following section, some approaches which are not included in Fig 3.1 have been discussed. In these approaches, the major thrust is to assess HR based on cost and related considerations.
3.2.13 Historical Cost Method (HCM)

According to this method, the costs, which were incurred on the development of human resources, were with an intention to obtain future benefits. Therefore, these costs were not to be treated as expenditure, but as investments, future revenues or assets. The expenditure incurred by an organization on recruiting, selecting, training and developing the employees has to be capitalized and shown in the balance sheet as assets, as the humans possess some skills, knowledge and experience which could be turned into value for the organization. Nevertheless, some critics argued that costs did not reflect value and true value could be known only by the difference between real performance and the total cost incurred, associated with the human resources of the organization. This model was implemented by RG Barry Corporation in the US during 1968 to 1974.

3.2.14 Replacement Cost Method (RCM)

RCM was put forward by the Flamboltz and was known as the Flamholtz method. According to this method, the cost incurred by an organization on replacing the earlier employees and strengthening the organization has to reflect the human resources value of both the employees and the organization. Replacement could mean personal replacement of the employee with another employee or replacing the particular skills of an employee with those of another. Critics argued that it was difficult to assess the replacement cost of the employees, as the value which they generated over a period of time and their contribution to the organization was difficult to measure in relation to the cost incurred to employ them. It was also felt that replacement cost was applicable and valid only for key employees in an organization. It was also thought that the availability of multiple alternatives for replacement might make the assessment and choice of the best alternative very difficult.

3.2.15 Opportunity Cost Method (OCM) or the Competitive Bidding Model

Hekimian and Jones proposed OCM. It was also known as the competitive bidding model. According to this model, the potential monetary value to be generated by an employee was to be estimated by allocating the employee to an
In which he/she is best suitable. In other words, the opportunity cost of key employees in the organization was assessed in relation to their performance and in accordance with the organizational goals. The investment managers used to bid for the employees and the highest bid for an employee was considered his price, which was to be reflected in the balance sheet. The bid price was a measure of the employees' competence and experience, and the value that he would generate for the organization. Critics argued that competitive bidding involved assessing the future contribution of an employee to the organization's goals and may force more individuals to dissociate themselves from the bidding process, thereby making it difficult for the organization to make adequate assessment and measure their value. They further argued that the bid price placed on an employee may be based on the perception of the bidder, which may not give a correct estimation of the employee's true value. The value to be generated by an employee was relative and hence the measurement may be ineffective.

3.2.16 Standard Cost Method (SCM)

According to SCM model, the costs of recruiting, selecting, training and developing a particular class or grade of employees were standardized. These costs were determined and evaluated over the years to get the total value of the human resources in an organization.

3.2.17 Goodwill Method

This model was developed by Harmonson and was also called the Harmonson model. According to this model, the additional profits earned by an organization during a particular period of time were compared to the industry's average rate. The HR value was measured by the following formula:

$$HR \text{ Value} = \text{Goodwill} \times \frac{\text{Amount invested in HR}}{\text{Total Investment}}$$

The critics on various grounds questioned this model. The additional profits or revenues generated by an organization during a particular period may be influenced by other external variables and could not be linked to human resources.
The amount invested in securing the customers, suppliers and the people's image may not be a measure of the goodwill of the organization. They further noted that a limitation to this model was its invalidity in the case of the organization's profits or revenues being less than the industry average. Also, this model could not be used unless all the variables and relationships that affected the company's goodwill were correctly defined.

3.2.18 Behavioral Model

Rensis Likert developed this model. This model envisaged a set of factors through which the psychological and sociological conditions of the employees in the organization determined their productivity. These conditions are to decide the performance of the organization in the long run. The investments in human resources are integrated that socio-psychological factors or conditions could not measure the value of HR as an asset to the organization. Moreover, according to carbs, the various relationships in the organization could not be correlated to its performance, as it was difficult to establish a relationship for every organizational performance. When there was no valid relationship, the true HR value would not be reflected by the HR performance.

3.2.19 Economic Model

The economic model was the most popular and widely followed. The model was comparatively easy to use. This model was also known as the Ley & Schwartz model. According to this model, the present value of the future earning capacity of an employee, from the time of joining the organization till retirement, was estimated. Limitations to this model included a possibility of an employee leaving the organization or dying before the end of his/her scheduled tenure. In such cases, the computation of the employees' future earning capacity became very complex.

3.2.20 Jaggi & Lau Method

According to this method, the value placed on an employee was arrived at by taking into account the employees' past performance in relation to the future i.e., retirement, death and service performances. The present value of the future
services of an employee was taken as the value generated by the employee. This method was criticized on the ground that past performance was not an indicator of the future. It was argued that in a technological industry, the past performance did not necessarily reflect the future potential. This model did not consider or evaluate the range of services provided by the employees.

### 3.2.21 Mayers & Flowers Method

This model argues that an employee's attitude and general outlook determined his productivity in the organization. The value of the human asset was arrived at using the following formula:

\[
\text{Employee's Value} = \text{Employee's attitude index} \times \text{wages payable to the employee}
\]

According to this method, the attitude of an individual employee was more important than the overall attitude of a group, since it was the individual employees who together made a group. This model received criticism on the ground that several factors other than attitude influenced the behaviour of the employees. Moreover, it was felt that measuring the attitudes of individual employees was a complex issue.

### 3.2.22 Research Evidence for Measuring HR

Macduffie and Krafcik (1992) studied 70 automotive assembly plans representing 24 companies in 17 countries worldwide. This study indicated that manufacturing facilities with lean production systems are much higher in terms of both quality and productivity than those with mass production systems. The HR strategy of mass production system was to create highly specialized and deskilled work force, while that of lean system was to create a skilled, motivated and flexible work force that could continuously solve problems. The study concluded that the success depends on commitment of employees, decentralization of the responsibilities, multiskilling and employee security.

Ostroff (1995) develop an overall HR index based on the aggregate ratings of all HR activities of a firm. On the basis of this index, firms where grouped in these categories. The firms that scored higher in HR index consistently out performed than
ose with a lower index on four financial measures: market/book value ratio, productivity ratio, market value and sales.

Macudeffie (1999) observed from his studies that innovative HR practices are likely to contribute to improve economic performance only when 1) employees possess knowledge and skills managers lack 2) employees are motivated to apply the skill and knowledge.

Huselid (1995) used two scales – 1) to measure employee skills and organizational performance and 2) to measure employee motivation. The first scale involved a broad range of practices intended to enhance employee knowledge, skills and abilities and provide mechanism to use those for performing the roles. The second scale measured how well the appraisal systems were and linked to compensation and merit.

Well borne and Andrews (1996) studied the survival rate of 136 non-financial companies. They developed and used a scale to measure the value the firm placed on human resources. A second scale developed by them measures how the organization rewarded its people.

"A number of studies spanning different organization operating in various service industries provide evidence for a positive relationship between employee attitude, customer service and satisfaction and profits" (Pfeffer 1998). Schneider and Bowen (1985) reported in a study of bank branches that when the banks had sufficient numbers of quality people to perform its task, customers reported receiving higher levels of service.

A study by Johnson, Ryan and Schmit (1994) at the Ford Motor Credit reviled that attitude concerning work load, team work, training and development, satisfaction with the job were all related to customer satisfaction. Schmit and Allscheid (1995) found that customer satisfaction and perception of service quality were significantly related to measures of employee attitude, employee welfare, open and participative work environment.

Although there are many approaches to bring accountability to the HR function, making use of a variety of tools and based on a variety of assumptions, HR departments still have difficulty achieving success with current approaches. Unfortunately, there are few success stories about comprehensive HR evaluation programs that show the contribution of the function. Many researchers question the quantitative approach to evaluation, suggesting that a return on investment in
Employees must be approached cautiously and judiciously, and that any such return to be the result of activities initiated by others rather than the HR staff. Some professionals even question the requirement of bottom-line results from HR programs by arguing that it is not possible to isolate monetary benefits an organization may receive from an HR program. Although there is an important trend toward HR accountability, a major problem is that evaluation approaches have been unable to deliver what top management and even HR practitioners want them to deliver: objective data showing the contribution of the HR function to organizational effectiveness.

From the review of research evidence presented above it is observed that all these studies try to assess partially or to some extent the contribution of human resource (employees) to the organization. However there is no approach essentially targeted towards assessing the impact on the quality of human resource in the organization due to the on-going TQM efforts. The present research is an attempt to bridge this gap and to develop an instrument to measure human resource quality. The literature survey has enabled the investigator to identify the various indicators of human resource quality. In the following sections detailed discussions are presented on HRQ and its indicators.

3.3 Human Resource Quality (HRQ)

Human resource is the most important resource in the running of any industry or corporate house. Human resource of an organisation includes different types of staff members from top to bottom in the organisational hierarchy. It is a must to improve the quality of human resource of an organisation to make the staff members suitable to the changing needs of organisation. Human development is the expression used for describing such activities. Human development envisages a qualitative change in the life style of work force, in their attitude, in their mind set and in the total output of the organisation or corporate house in question. There are several definitions for Human Development.

The basic purpose of development is to enlarge people’s choices. In people, these choices can be infinite and can change over time. People often value achievements that do not show up at all, or not immediately, in income or growth figure. In the wider sense, these choices include greater access to knowledge, better
nutrition and health services, more secure livelihoods, security against crime, physical violence, satisfying leisure home, political and cultural freedom and sense of participation in community activities. The objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives. (Maubus Jhaq).

There is a wrong notion that development is directly co-related to increasing national income. "Human development is about much more than the rise or fall of national income. It is about creating an environment in which people can develop their full potential and lead productive, creative lives in accordance with their needs and intensity" (UNDP: Human development report 2003). Development is thus about expanding the choices people have to lead lives that they value. And it is thus much more than economic growth, a means of enlarging peoples’ choices (Ibid). The most basic capabilities for human development are to lead long and healthy lives, to be knowledgeable, to have access to the resource, needed for a decent standard of living and to be able to participate in the life of the community.

Since the developed countries in the west have given much more importance to the above parameters, they are ranked in the top of the ladder of Human Development Index. Canada has been described by UNDP as the best country to live in for seven consecutive years. This is not because the GDP of Canada is the highest in the world. If we consider the GDP and per capita income as the major parameters to measure development, Canada would have not been there in the first place of HDI. That place would have been given to Kuwait or Sweden. But Canada was described as the best place to live in by UNDP only because UNDP has had a long list of parameters to reach in to such conclusion.

It is a fact the HDI of developing countries is very low because of the increasing population. Several developing countries are unable to provide their people better living condition. People’s negative approach is also an important factor for the lower rank of developing countries in human development ladder. When one thinks of the human development index in an organisation, it can be observed that it is based on the quality and effectiveness of the employees and efforts of management to improve working climate and to infuse motivation and belongingness among them. Even at the organisational level, human development should be compensated with human freedom and human right. It is in a democratic set up, people and employees can think freely. It can be seen that how quality and
The effectiveness of human resource available in an organisation is useful for improving organisational performance.

3.1 Quality

Organisations and companies succeed or fail based on the quality and effectiveness of their employees. The revolution in information technology affected the functioning of all organisations. Naturally the changing trends make it absolutely necessary for the employees to adopt with the new scenario. Such impacts demand (1) the need for every one in the organisation (including organisational development professionals) to continually develop and update skill, 2) development of technical problem solving and decision making abilities through the organisation and (3) speed, directness and immediacy of information exchange both within the organisation at all levels. (William M Lindsay and Joseph A Petrik TQ and OD 1997)

Quality is an attitude of mind and a way of life where 'excellence is a journey, not a destination' (Murthy, D.B.N 2001). Quality can also be defined as the reflection of what value a customer expects in the product/service being offered to him. It is a fact that the organisation and companies succeed or fail based on the quality and effectiveness of their employees. Today's successful firms recognise that to compete in global market, they must have world class human resource/employees who are active participants in strategic and operational decision. (Dr. Shrif A Mazen and Conceptual design for a strategic human resources quality management system)

Human resource quality of an organisation is directly related to development of organisation itself. Organisation's development can be defined as an attempt to achieve corporate excellence by integrating the desires of individuals for growth and development with organisation goals. (Development by W.M.Lindsay P.4)

It can be seen that there are several factors that are involved in the improvement of Human quality in an organisation. They are; 1) Workmanship Value (WV), 2) Management Attitude (MA), 3) Employee Motivation (EM), 4) Ability and Skill Attainment (ASA), 5) Cohesive Work Force (CWF), 6) Motivational Programme (MP), 7) Orientation and Training (OT), 8) Communication Effectiveness (CE), 9) Employee Responsibility (ER), 10) Employee Involvement (EI), 11) Attitude towards
Change (AC), 12) Grievance Rate (GR), 13) Accident Rate (AR) and 14) Defect Rate (DR).

Above factors have been identified by a detailed review on the linkage between TQM and HRQ. These factors can be grouped under (1) Organizational culture (2) Quality of work life and (3) Employee satisfaction. In the following paragraphs all these indicators of the human resource quality have been discussed.

### 3.3.2 Workmanship Value

Values are acquired from societal institutions (family, economic and political systems) and cultural contexts. They are initially learned in isolation, in an obsolete fashion. As an individual matures, he/she integrates them to their value system, also based in part on personality factors (Rokeach 1973). A relatively small number of value dimensions seem to generalise across national cultures (Hofstede 1980). Thus the role of values is pivotal in understanding cultural differences in organisational behaviour.

Because of values are learned early in life and occupy a central position in cognitive structure, they are difficult to change during adulthood (p 598).

Values represent a sound system's effort to encourage its members to behave in ways that foster the system's welfare. As such values are enduring beliefs about how an individual ought to behave (Rokeach 1973). The type of value and their specificity depend on the particular social system. The subset of values that are relevant to the work and workmanship can be called as workmanship value.

These values are achievement, concern for others, honesty, working hard, positive outlook, helping others and fairness (Ravlen and Meglino, 1987). Because values describe socially desirable behaviour, one's choice of behaviour depends on the centrality (i.e., relative importance) of his or her specific values. Values are therefore holding hierarchical form (Rokeach 1973).

These values can characterise individuals as well as social systems such as organisation. An organisation's system of values is said to underlie its organisational culture. An organisation imports their values on individuals through avenues that include organisational socialisation (The Blackwell Encyclopaedia of Management Vol IX Human Resource Management p.395).
Today, employees are asked to be the point of contact for the customer, to be
team players and to provide effective and efficient customer service. Unless
gility is internalized at the personal level, it will not become rooted in the culture of
an organization. Quality should begin at individual level. Employees who embrace
gility as a personal value often go beyond what they are expected to do or they
provide extraordinary service. They also innovate the process and become creative
in making continuous improvement. TQM practices should be able to bring about this
change in attitude and develop a habit of total quality in their performance. This
value may be termed as workmanship value. Values are the building block of culture
and improvement. Values bring about change in culture. The only way to improve
workmanship value is through extensive education of all employees and exemplary
leadership at all levels of management.

13.3 Management Attitude

What is meant by attitude? Attitude is a state of mind. But in management
context, this definition will be very limited. There are three elements underlying the
concept of attitude. These are emotion, belief and behaviour. These factors are
basically based on the psychological approach. The dominant approach
classifying the structure of an attitude is in turn of the three components. The
effective component of an attitude is an emotion, feeling or sentiment, the person
has toward something. The second component of an attitude is, the cognitive
component, is the actual belief or knowledge the individual persons to have about
something. Finally, the behavioural intention component of attitude reflects how the
individual intends to behave toward something. These components are not discrete
phenomenon that are formed sequentially but instead interact among themselves
and are manifested in variety of forms and mechanism (The Blackwell,
Encyclopaedia of Management).

An alternative view of attitude is called situation model of attitudes. (Salankik
and Pfeffer 1997). This suggests that attitude represent socially customised relations
based on social information available in the work place. Any given persons attitude
are seen as being a function of social cues about the object of the attitude that are
provided by `significant others` in the workplace. (Blackwell Encyclopaedia, p-20).
Attitudes are of interest in an organisational setup because of their presumed connection with workplace behaviour. Commonsense suggest that attitude will affect behaviours. In reality, this relationship is not straightforward. Only specific attitudes actually predict specific behaviours. For example, a strong attitude about one's pay being too low may cause that person to resign for a position with higher pay (p-20, Blackwell Encyclopaedia of Management, Vol.I). Several research studies have established that employee's satisfaction is an important element in the successful running of an organisation. Management should take into account this factor and should evolve a strategy to keep its employees satisfied. In the era of globalisation, there is cut throat competition among national and multi-national corporate houses and there are plenty of chances of migration of quality labourers from one corporate house to another. Thus management attitude should be positive, supporting and it should take parental care of employees, who might be in dilemmas and troubles, due to the socio-cultural and economic factors prevailing in the society.

Modern management has taken up this issue seriously and there are several strategies even to discover employees' unrest and unhappiness. Thus it is observed that there is a paradigm shift in the management attitude to employees from the earlier concept of master-slave system to parents-children approach.

TQM culture can be built only by an enlightened top management – all those decision makers and event makers in the organization. Management includes owners, board of directors, unit heads, heads of department, sectional heads, office bearers of unions and association. All these functionaries have the capability to influence the culture in the organizations. They do it through the roles they perform and their style of functioning has a longer impact on culture creation. The management should necessarily follow an attitude of employee development. The style of management should be more developmental than critical. Benevolent style of managers may contribute to good work culture but is short lived to the extent that the particular manager exists in the organization. Critical attitude of the management creates moral problems and motivational issues. Top management should have developmental attitude to employees. Such managers believe in empowering the subordinates to such an extent that they become autonomous and independent in working out their growth and competence. These managers consider their main job as building competencies of work force. They are system oriented and professional.
They allow employees to learn from their mistakes and solve problems themselves leading to TQM culture.

13.4 Employee Motivation

"If companies are to survive, they will have to change from management by movement to management by motivation". Frederick Hergbey.

"If you treat people well and they have the responsibility and authority, they will produce. People should be interested and excited about what they are doing and they will perform well", Alan G Hassenflu, CEO, Hasbro Corporation.

As a manager or worker, every employee should understand how to motivate others, how others are trying to motivate you or enable you to participate effectively in the organization’s activities. Every employee has physiological, security, social and psychological needs. Needs are also called motives because they motivate us to act. Motivation means the various drives within or the environmental forces surrounding, the individuals that stimulate them to behave in a specific manner.

The job of a manager in the organisation is to get things done through employees. To do this the manager should be able to motivate employees. But the problem is how to motivate employees. Because employees are human beings and in order to motivate them, we should appreciate and understand the human nature of employees. It can be seen that motivation is a skill which can be and must be learnt. This is essential for any business to survive and succeed. Work motivation can be considered as a process to energise employees to the work goal through a specific path.

13.5 Ability and skill attainment

In a competitive business environment, managers should have several abilities to lead the team of his staff members as a unit to motivate them to keep the flock together and to visualize the future trends. They should have skills and abilities to manage people, to build constructive relationships with their fellow members and strategic partners and to think and act strategically. The important management skills are: 1) Leadership skills, 2) Motivation skills, 3) Relationship building skills, 4) Strategic management skills, 5) Critical concentration skills and 6) Problem solving skills.
Managers can prepare an inventory of their competencies and consciously focus on improving their areas of weakness. Managers' ability to motivate staff comes from their power to administer rewards and punishment. Poor managers tend to depend more on punishment to get results. They may create more problems than it solves. Next, managers should develop relationship-building skills. They have to develop the skills needed to communicate with their peers, customers and to contribute as equal team members.

Another requirement of the change-ready manager is the ability to make strategic decisions. Managers spend much of their time making discussions regarding the projects that their team will work and the clients and stakeholders that they will serve.

Managers need to have adequate problem solving skill. In the organisational realm, problem will crop at any moment and the manager should be able to solve them. The ability to perform at high levels, making timely decisions without losing sight of the bigger picture and/or long term objectives is becoming increasingly critical for managers. Perhaps, the most significant challenges facing most global organisations are basically centred on identification, selection, and development of individuals who are capable of performing at the middle and senior managers at higher level.

For a TQM culture to set in, employees (both management and workers) require the proper knowledge tools and skills. People being the most important asset, developing ability and skill in employees is the responsibility of the management. Most firms view training as a requirement for only the newly hired employees. The need for continuous learning can not be undermined as the changes required in the organization are also continuous and never ending. All employees should be trained in statistical tools for solving problems. Training results in improvement in quality of service/workmanship and adds to workers' morale. It also removes barriers between workers and supervisors.

Companies committed to total quality, heavily invest in education and training of the staff, so that they attain the ability and skill to match with the changing needs. When employees are creative and empowered the need for new knowledge and skill arise. The ability of the employees to update the skills depending upon the changing work, definitely contribute to changes in work culture.
Cohesive workforce means the unity of work force. Workmen need to have unity so as to make collective bargaining positive. Even though, the modern management does not believe in master-slave relationship, there can be incidents of extreme exploitation. Employees should have unity to organise a trade union, which should represent whole employees in all discussion with the management.

International Labour Organisation has stated that the organisation of workers and employers on an occupational basis is one of the most significant features of modern industrial societies. The Indian Trade Union Act of 1926 defines a trade union as any combination whether temporary or permanent formed primarily for the purpose of regulating relations between workman and employers and not for imposing restrictive conditions on the conduct of any trade or business and includes any federation of two or more trade unions.

There are three fundamental principals for trade unions.

1. Unity is strength,
2. Equal pay for equal work or for the same job.

Trade unions have two functions, (1) Negotiation and (2) Representation. Negotiation is a powerful tool being used in resolving many important issues like salary, bonus and all other benefits and privileges of the worker. Secondly the trade unions are the representatives of their members before the management. They represent the common issues as well as individual member issue for redressal. If any employee feels that he is not being treated fairly or is deprived of equal justice, he can seek the help of the union as a bonafide member.

A cohesive work force is a must for the welfare of employees as well as for organisational health. It can be seen that united workforce is a boon for an organisation, if it is lead by good leaders. In India, especially in few states; trade unionism became a curse to the industry. This is because of the inability and vested interest of leaders.

In order to make trade unions a catalyst for better employee - employer relationship, there is a necessity of leaders who can infuse duties and responsibilities on employers. In such a situation, cohesive workforce could be a capital for the organisation concerned.
TQM is a company wide effort through full involvement of the entire workforce and focuses on continuous improvement to achieve customer satisfaction. According to Feigenbaum, TQM is "an effective system for integrating the quality development, quality maintenance and quality improvement efforts of the various groups in an organization so as to enable marketing, engineering, production and service at most economical levels which allow total customer satisfaction. The core principles of TQM are:

1. A focus on the customer,
2. Participation and team work,
3. Employee involvement and empowerment and
4. Continuous improvement and learning.

These principles highlight the importance of the workforce and their involvement. Quality improvement can be achieved only if one can use the knowledge and creativity of the entire workforce. This presupposes building of a cohesive workforce which will strive to achieve continuous and quantum improvement. Managers give freedom and encouragement to employees enabling them to contribute individually and in teams. By training employees to be creative and rewarding good suggestions, managers can develop employees' loyalty, mutual trust and thus a cohesive workforce. The systems and procedures formulated and established should ensure participation in groups/teams. A cohesive workforce may be defined as the workforce who contributes positively to the organization in teams with mutual trust. Individual differences sink naturally while team spirit and loyalty prevails in the entire organization. One should be able to notice a participative work culture. Such participative work culture and cohesive work force can be developed in an organization, if the systems established by management facilitate

1. Recognition of teams and individual accomplishment,
2. Sharing success stories throughout the organizations,
3. Encouraging formation of employee involvement teams, and
4. Providing financial and technical support to develop employees' ideas.

Encouraging team work among the employees encourages the involvement of the total work force in attacking systemic problem such as cross functional barriers. Today, the use of self-directed and self-managed teams is growing. This team spirit contributes to cohesive work force and change the organizational culture.
3.3.7 Motivational Programmes

Quality of work life (QWL) is related to employee productivity and motivation. There are a number of measures and programmes that can be used to make the work environment more conducive to worker motivation and productivity.

Robbins (1993) refers to a set of motivational theories as the task characteristic theories. Included in this group are the requisite task attributes theory, the job characteristics model and the social information-processing model. These theories suggest that an environment with a set of task attributes such as variety, autonomy, responsibility, knowledge and skills, required social interaction and optional social interaction will bring about a high degree of motivation to the people. The task characteristic theories support that QWL and motivation are interlinked.

Motivation and human behavior are major elements in human resource development and management. The system, with in which employees work, can seriously affect motivation. In the total quality environment, managers need to take on new roles as coaches and facilitators and their skills in motivating employees become crucial. Motivation is defined as the art of creating conditions that allow every one to get the work done at their peak level of efficiency. Motivation is also defined as an individual's response to felt the need. Motivating factors such as achievement recognition and responsibility lead to personal satisfaction and sustained motivation for continuous improvement and sustainable QWL.

3.3.8 Orientation and Training (OT)

Training may be defined as a planned programme designed to improve performance and to bring about measurable changes in knowledge, skills, attitude and social behaviour of employees for doing a particular job. Now-a-days, training has an additional purpose of facilitating change. And management training is basically to equip managers with such knowledge. Skills and techniques are relevant to managerial task and functions.

When learning events are planned in a systematic fashion and are related to events in work environments, they are called training programmes. From this point of view, the training process is defined as the systematic acquisition of skills, rules, concepts or attitudes that result in improved performance in the work environment.
Training programmes can be planned to result in effective supervision or consistent technicalities.

Orientation is a process of acquainting new employees with the existing culture and practices of the organisation. It includes activities of introducing a new employee to the organisation and the work unit. The focus of the orientation is to make the induction process smooth and in breaking initial anxieties of the new recruits. This involves a gamut of activities like, familiarising the new members with the organisation's objectives, history, philosophy, procedures and rules etc.

Orientating a person with a system process, and culture of the organisation is the most difficult proposition, reason being one need to unlearn many experiences and change the mindset of the participants to prepare them to learn the new things. Orientation as a process has three stages,

- a general orientation,
- a departmental orientation,
- A specific job orientation.

Training and education of employees at all levels is a pre-requisite and a vital component for the success of TQM. Lack of well planned training programmes result in inadequate knowledge. Employees with insufficient training and education fail to respond to changes and lead to poor implementation of TQM and hence poor QWL. Investment in people is fundamental to the development of QWL. It means actively facilitating growth and development of individuals. An extensive capability and commitment to training must be an integral part of the organization's business strategy.

Training policy should be;

1. to establish continuous training as the norm,
2. such that training will be a life-long process,
3. to update existing skills, replace redundant skills and train new skills, and
4. Provide for multi-skill ness to cope with change.

For the success of TQM and to build an effective QWL, the organization should direct its efforts to create career plans which encompass not only training proposals but also areas of work experience, job goals and personal development. The above policy would formalize the human resource development programme. In the context of TQM, training function has the objective of improving the competencies, attitudes and also enables use of TQM tools. Training, to be effective
and give desired results, should be need based, well-planned/evaluated and monitored. The dimensions of training in the context of TQM depicted by Ohlemeyer and Clarke (1997) are as follows:

![Diagram of Dimensions of Training in the Context of TQM]

All the four dimensions are important in a TQM oriented company and the organizational environment should facilitate cooperative/fast learning through individual initiative to promote QWL.

### 3.3.9 Communication Effectiveness (CE)

There is a need to provide accurate and timely information for decision-making at all levels in the organization and also for receiving speedy feedback on the work situation and performance in order to create awareness, generate understanding, acceptance and commitment to change. Creating effective communication channels is the most important factor in creating a healthy work environment. Employees will be able to understand and appreciate the problems of others only if proper communication network exist. Quality problem or poor quality of work life arises because of the absence of communication networks between the departments, customers and the employees and the suppliers. Employees may need to communicate with the suppliers to reduce their own difficulties and ensure quality. A visit of the employees to the suppliers' work place will be helpful to understand the problem and develop strategies to work out changes to meet the requirements. The lack of effective communication prohibits the progress of TQM efforts and leads to poor QWL. Well known communication vehicles include company newspapers, briefs, bulletins, videos, briefings, meetings, management by walking about. Computer networks also provide a channel for immediate organization-wide information.
3.3.10 Employee Responsibility

Employees should have responsibilities to the institution. They are there in an institution only as the institution exists. If an institution is closed, its employees are becoming shelter less. They are losing their livelihood. Employees should act in a responsible way so as to improve the goodwill of an institution. Here we can also think about employee's loyalty and commitment. But it is noticed that employees may not show interest in the making of the organisation, if they are not informed of institution's activities. We have to infuse belongingness among them. This can also generate positive feeling in employees towards organisation.

Research indicates that the following can influence employee's positive feelings;

1. Participation in goal setting.
2. Performance feedback.
3. Supportive communication with immediate supervision and upper management.
5. Objective measures of performance.
7. Quality of supervisory relationship.
8. Favourable development opportunities.
9. Clearly stated guidelines defining appropriate work behaviour and job demands.

If employees are motivated and are kept informed about company’s plans, they would definitely show responsibility to organisation.

In this context, it can be mentioned that the key to the success of the Japanese industries, especially car industry is the empowered workforce and teamwork involved. Employees were given the responsibility and authority to stop a process if the quality failed to meet the standard specified. This system was later adopted by Ford who has to face challenges from Japanese car manufacturers.

There can be several obstacles when company try to shift from a traditional style to participative one. These obstacles are;

1. Resistance to change,
2. Mis-trust of the management’s motives among the workers,
3. lack of clean expectations from workers,
4. lack of participative skills among employees
5. Lack of executive commitment.

We have to try to minimise these barriers. Tools and techniques are important to TQM, but the primary requirements to achieve total quality is more an attitude of mind, based on pride in his job, in the self, in the organization and requires a total commitment from every employee at all levels. Every employee should be responsible for quality products and services. A well-trained and properly motivated employee who considers the job as his primary concern certainly will be responsible to give a quality output.

3.3.1 Employee Involvement

The shrinking global market has led to stiff completion in the business and industrial arena. The entry of a number of new companies, both local and global into various markets has given the customer a wide array of product choices. Many of these new companies are able to produce the same or similar products at almost the same or lower costs. Thus customers today have a wide range of products to choose from. These products not only meet their specifications closely but also their budgets. Competition has extended far beyond the manufacturing or private sector. Today, the service, government and non-profit sectors also face stiff competition.

The need to grow and succeed in an increasingly competitive market has seen the implementation of various quality initiatives in different organisations. Problem-solving and process improvements are two vital aspects of the quality initiatives, and proactive actions are being taken to prevent problems. Total quality management (TQM) is a continuous process that strives to increase customer satisfaction, lower costs, and minimise defects and variations in every aspect and every process of the business.

TQM involves a number of catchwords like Just-In-Time, quality circles, employee involvement, continuous process improvement, empowerment, Kaizen, self-directed work groups and world-class quality. Basically, the philosophy of TQM is to involve every employee in the organisation along with its suppliers and distributors to improve product quality and enhance customer satisfaction.
One of the important concepts of TQM is employee involvement. This is a relatively new method, which is in contrast to conventional management practices, wherein management takes all decisions and workers just follow them to accomplish their jobs. This top-down management styles is slow and inflexible with little room for competition. Survival in today's time-starved, customer driven market requires rapid response times from manufacturers and other businesses to the ever-changing customer needs.

Employee's involvement is a system wherein employees are encouraged to use their expertise and knowledge to suggest methods for improvements in their work areas. These suggestions could pertain to improvements in the job, the product, the work atmosphere or the company as a whole. Many companies have ventured into a participative style of management by involving employees in the problem solving and decision making process.

When Ford faced continuous threat of competition for Japanese car manufacturers, it ventured to study how the Japanese were excelling in their performance efficiency. It established a task force to study the Japanese manufacturing process. Results showed that the key to Japanese performance and efficiency was their empowered workforce and the teamwork involved. Some of the most successful companies are those that have achieved a close relationship between workers and the managers. The policies in these companies fostered teamwork, participation, continuous learning and flexibility. However, the change from conventional management practices to the new style was not achieved overnight. Learning and implementing participative management requires a lot of effort and time. Implementation of employee involvement systems requires many changes in the existing company practices.

While change of any kind is difficult for the workers, when suddenly asked for inputs, they tend to doubt the motives of the management. Similarly, they are unsure of the extent of inputs required and the importance placed by the management on these inputs. Poor experience in participative activities is also a hindrance. Above all it is vital for the management to remain continuously committed to the cause of TQM and employee involvement.
3.3.12 Attitude Towards Change

Change is the essence of universe and there is no organization that is not affected by change. Change is an inevitable part of organizational life and recently a crucial concern for all organizations. Any kind of change inevitably boils down to change in the mindset and behaviour of the people. This is more so in the context of TQM. Global and social changes are both pervasive and persisting. Change entails two major activities – one becoming aware and sensitive to change, and the other to create strategies and implement them to cope with the change. Organizations are no exception to this universal phenomenon of change. Successful organizations are making major changes by adopting total quality management programmes in their business process. TQM efforts succeed only if the people have the right attitude towards change. Conversely, implementation of TQM necessarily brings about a positive attitude towards change. This positive attitude of human resource is absolutely necessary to meet the challenges of ever-changing business environment.

Khandwalla (1988) defines an organization as a particular pattern of tasks, techniques, structure and people. Tasks mean goals and the whole hierarchy of goals and subtasks required to secure them. Techniques are systematic procedure for converting inputs into outputs. Structure is the network of roles. In people are included particularly the skills and attitude of the member of the organization. Organizational change means any one or more of the task, the techniques, the structure and the people of the organization. Implementation of TQM leads to major changes in people, culture and process resulting in a transformed organization. Thus the human resource (people) in the organization should have continuously positive attitude towards change.

3.3.13 Grievance Rate

Broadly speaking, grievance means, any real or imaginary feeling of dissatisfaction and injustice which an employee has about his employment relationship. According to Dale B G (1999) "grievance is any dissatisfaction or feeling of injustice in connection with one's employment situation that is brought to the attention of management". According to Michaud J Jucious, "a grievance is any
discontent or dissatisfaction, whether exposed, expressed are not whether valid or not, arising out of anything connected with the company that an employee thinks, believes or even feels is unfair, unjust, inequitable”.

Thus a grievance reflects dissatisfaction and discontent or a feeling of injustice.

There are four causes of grievances.

1. Grievance arising out of working condition
2. Grievance arising out of management policy
3. Grievance arising out of alleged violation of;
   a. Collective bargaining agreement,
   b. Company rules and regulations.
   c. Central or State laws,
   d. Responsibilities of management.
4. Grievance arising out of personal maladjustments.

The best way to approach for the redressal of grievances is to understand the grievances of the employees itself. This is possible by methods such as: 1) Exit interview, 2) Opinion survey, 3) Gripe boxes, 4) Open transparent policy Gupta C B (2003)

Management has to establish methods by which an aggrieved employee can express his feelings of dissatisfaction with his job, working conditions or with the management and a means of ensuring that there are some measures of promptness in the handling of the grievance.

Every organisation requires proper procedure for handling employee’s grievances. Grievances handling procedure is a formal process of settling grievance and it usually consists of a number of steps arranged in a hierarchy. The number of steps arranged in a hierarchy, a typical grievances procedure is shown below.
There are several advantages for the above grievance redressal procedure. They are:

i) A systematic grievance redressal procedure will bring grievances into the open, so that the management can know them and take necessary action to settle them.

ii) It helps in preventing grievances from assuming dangerous proposition.

iii) It provides the workforce a formal opportunity to express their fears, anxiety and dissatisfaction. Such release of emotion helps improve the morale and productivity of employees.

According to Michall Amstrong, a well designed and properly structured grievance redressal procedure provides:

a. A channel or a vehicle by which any aggrieved employee may present his grievance.

b. A procedure which ensures that there will be a systematic handling of every grievance.

It is evident that systematic grievance redressal channel will enhance the satisfaction level of employees.
### 3.14 Accident Rate

Workers spend a great deal of time in industrial settings. They are exposed to various hazardous situations. In several occasions, they are prone to accidents. Such hazardous situations will have telling effect on the employee satisfaction as well as on employee productivity. Similarly workers are exposed to different types of accidents. “Due to rapid industrialization, mechanical, chemical, electrical and radiation hazards have increased. Every year lakhs of employees are injured in factories, mines, ports, railways etc. leading to partial or total disablement” (Gupta, C.B 2003). Because of these reasons, industrial safety has been given much importance in modern management. “Safety measures prevent accidents and ensure regular flow of work. Safety also helps to improve the morale and productivity of workers. It contributes to team work and sense of belongingness among the employees”. (Ibid. p-6.11)

Industrial accidents cause a great loss to both the employer and the employees. These losses are mainly due to,

- a) Cost of compensation to be required for employees.
- b) Cost of medical aid
- c) Cost of training a new worker
- d) Cost of lost time when work stops due to an accident.
- e) Cost of investigation in to the accident.
- f) Cost of supervision and inspections.
- g) Cost to the Government in terms of factory inspectors and public health services.
- h) Cost of spoilage at materials.
- i) Cost of damage to the machinery
- j) Cost of wages payable during injury.
- k) Cost of loss of morale
- l) Cost of lost to the worker and his family

There are three main causes for industrial accidents. They are;

1. Un-safe conditions
2. un-safe Acts
3. Miscellaneous causes.
Unsafe conditions include work related or technical causes. These are the
greatest causes at accidents in industry.

Unsafe Acts occur due to lack of knowledge and skills, bodily effects and
tory attitudes. Some examples are:
1. Operating without authority
2. Failure to listen to warning
3. Using unsafe speeds

Miscellaneous causes: Young, un-trained and in-experienced workers cause
more accidents than old, trained and experienced workers. Alcoholic and drug
addicted workers are more accident-prone.

The employees are accident-prone and if the manager's attitude towards the
affected employees is un-sympathetic, it will reduce the satisfaction level of
employees. Employees would feel that Management is not at all bothered about
them and employees will lose balance.

3.15 Defect rate

Crosby under the “Absolutes of quality management” states that there
quality performance standard is zero defects. A fundamental premise is that poor
workmanship is the first issue to be addressed to improve quality. Crosby (1984)
asserts that “mistakes are caused by two factors, lack of knowledge and lack of
attention”. Education and training can eliminate the first cause and a personal
commitment to excellence (zero defects) and attention to details will cure the
second. Defect rate of product/service is an important indicator of quality. Defect rate
may be judged by the extent of sales return and defective parts/complaints from
customers. If an employee receives the feedback that the product/service for which
has been a contributor is defective, the employee feels unhappy and as a result
employee satisfaction level decreases. Thus the defect rate may be considered as
an important indicator of employee satisfaction.
Conclusion

In this chapter, the different approaches that exist for human resource measurement have been discussed. A critical review of the existing human resource measurement approaches lead to the conclusion that there is a necessity for evolution of a unique instrument to assess the changes in human resource quality consequent upon implementation of TQM. A detail review of indicators of the human resource quality has been provided in this chapter. The above reviews of literature and discussions with experts in the field have finally enabled the investigator to propose a model for measuring human resource quality in organizations.