CHAPTER – 2
Chapter 2
Quality Circles – Concept and Philosophy

A commercial organisation exists to make a profit for its backers to provide employment for those involved. It aims to achieve this through competitiveness and success in the marketplace. To achieve this, it is a must to optimise the twin factors of selling price and demand. Selling price is determined by the utility of the product or service in relation to alternative choices available to the consumer. The attractiveness of the service itself is determined by the combined ability, talent, and attitudes of the employees. These factors influence the production cost and hence the pricing ability and, therefore, profit margin of each unit of sale. (Hutchins, 1992)

It is this ‘people’ aspect of quality which provides the sparkle to those organisations who know how people should be treated, and it is through people that the breakthroughs and advances can be made. However mechanised we become, people will still be the dominant factor. Even in the highly automated factories of Japan, they are under no illusions as to the importance of this fact.

Unfortunately, it is the motivational and involvement side, which has proved to be the most difficult for most management to comprehend. One of the key reasons for the failure is that very few managements have ever challenged the fundamentals of the system of management they operate.

Most Western developments in job design have only involved cosmetic changes which, because they lack substance, have been difficult to sustain. This includes many manifestations of job enlargement and job enrichment.

Many people are often puzzled by the use of the word ‘quality’ in connection with the concept of Quality Circles (QCs). Some claim that many of the problems tackled by the Circles are not ‘quality’ problems. This is because they do not realise that the word ‘quality’ has different connotations to different people and in different situations, and these differences are quite important for a proper understanding of the philosophy of QCs.

Most people have too narrow a perspective vis-à-vis the meaning of the word ‘quality’. They associate it with defects in products: scratches, cracks, missing parts,
and so forth, but quality is certainly much more than that. Quality is a measure of the achievement of customer satisfaction. Customer satisfaction has several dimensions such as fitness for use, reliability, value for money, after sales-service and support, packaging, customer information and training, maintainability, variety, speed of service, civility of service at all levels, image of the organisation and customer confidence in the organisation. All these factors added together form an image of the organisation in the eyes of the customer. This image may be good or bad. The confidence of the customer will be determined by it and that will be a major influence on the organisation’s share in the market.

Perhaps, the dangerous misconception about quality is the belief that it has some kind of absolute value. It should be remembered that quality is not an absolute entity but a relative one. The quality standard of a product or service is judged by the consumer but is set by the best performer. In Deming’s words ‘your customer determines your quality not you’. If there be any ultimate quality goal, it can only be perfection; a perfect product, perfect service, perfect packaging, perfect instructions, perfect organisation, perfect staff, and so on. Of course perfection is impossible and consumer demands are always changing but it does mean that it is always possible for one organisation to be better than other and improvements can be continuous and unlimited. Perfection in this context means ‘perfect satisfaction’ and not necessarily ‘perfectly defect free’ or ‘perfectly to size’. These forms of perfection, if not required by market forces, only serve to increase cost; which may cause disadvantage to producer and customer alike. Quality is, therefore, a dynamic process, which enables the good to survive. To be successful, it is necessary to attempt to be better than the competitor(s) across the entire spectrum of the organisation’s activities at all levels and at all times.

According to Nigam (2005) there are four phases of quality and Total Quality Management (TQM) is considered as the final phase.
The four phases are:

1. **Quality Control**

Quality Control is a system of means for economical production of commodities or rendering of services of the quality that meets the buyers' demands. Quality Control is often abbreviated to QC. Also, since control employs statistical approaches, it is sometimes specifically referred to as Statistical Quality Control (SQC). In Quality Control, the product is checked for dimensions. If it lies within the control limits, it is accepted. Hence, the target is just to keep the dimensions as far the acceptance level and the product inspection is usually done by drawing sample. There are bound to be rejections as quality check is only the final stage without taking into consideration the process.

The Japanese approach specifically requires the total involvement of all people at all levels for Quality Control to exist. Quality Control there is heavily committed to the development, training and involvement of people unlike the Western approach which is heavily committed to the establishment of sophisticated systems, plans, and procedures and inspection. This is carried out in practical terms through the coordinated activities of QCs or similar groups such as task force and project group. Collectively, these are referred to as 'small group activities' (SGAs). QCs become one of the vehicles to reach quality control and make quality management effective.

2. **Quality Assurance**

In this producer guarantees the product/service. In case of mass production, the customer specification is translated into engineering specification by the R&D people. Then, with proper process control (PPC), the quality is assured to the customer.

3. **Company Wide Quality Control (CWQC)**

To effectively implement Quality Control, participation by and cooperation of all the members of the organisation, involved in market research, R&D, production planning, designing, production preparations, purchasing and subcontracting, manufacturing, inspection, sales and after-sales service as well as finance, personnel and training. Quality Control, thus, implemented is called CWQC. In this, quality is assured in all functional areas of the organisation. Quality not only remains the domain of production shop floor but is extended to ancillary units and vendors through systems like JIT, self-certification, etc.
4. Total Quality management (TQM)

TQM is a phase in which internal forces of an organisation drive towards quality. It is not dictated by any particular issue but it leads to is a change in culture. The members of the organisation gradually develop a feeling of being members of a greater family in which every one can express his/her views. There develops a sense of belonging. The word ‘I’ is replaces by ‘WE’. The heart and soul of a person is here to achieve excellence. There is participation, commitment and a feeling of pride in each individual of an organisation.

QCs are an integral part of TQM. Those show how the pillars are brought in congruence for achieving quality.

The four pillars of the QCs are shown in the diagram below.

Source: Nigam (2005)

QCs take up the behavioural problems of the work force which mostly relapse after some time. Two types of problems are generally taken:

- Problems concerning functional aspect
- Problems concerning behavioural aspect

These problems can be solved if the engineers, supervisors and workers come together. In a QC, the domain area concerned is the work force. The essence of QCs is to bring the craftsmanship or self-control element back to groups of people rather than individuals. The aim is to provide all the means by which employees can control their own performance, both individually and in group-based activities.

The concept goes far beyond simple problem solving, although problem solving is usually the point where they start. Hutchins (1992) mentions that the results currently
being achieved in Japanese organisations would have never occurred if the Japanese had seen QCs as merely problem-solving mechanisms.

A look at the definitions of QC

According to JUSE (1970), QCs are small groups, from the same workplace that operate autonomously and carry out quality-control activities. The members of these small groups learn on their own and teach one another as part of a CWQC movement. The circles use QC methods to involve the entire work force in continuously improving the management of the workplace.

In their major work, Japanese QCs and Productivity, Ross and Ross (1982) have defined a QC as a small group of employees doing similar or related work who meet regularly to identify, analyse, and solve product-quality and production problems and to improve general operations. The QC is a relatively autonomous unit (ideally, comprising about ten employees), usually led by a supervisor or a senior employee and organised as a work unit.

It is a group of employees from the same area who usually meet for an hour each week to discuss their quality-related problems, investigate causes, recommend solutions, and take corrective actions when they have authority. (IAQC, 1980)

It is a small group of people doing similar work, meeting to identify, analyse and solve product-quality problems. They usually meet for about one hour each week in or near their area of work. Membership is strictly voluntary and anyone who wishes to join is welcomed as a member. Each person is free to decline membership. An active QC will attract more people in the long run. (Ingle, 1985)

It is neither a “system” nor a “fad” or “programme”. It is a way of life, a change in the way one’s mind is set. It will not change the management or organisational structure, but it will change the way one relates to people within the work environment. (Ingle, 1985)
A QC is a small group of between 3 and 12 people who do the same or similar work, voluntarily meeting together regularly for about one hour per week in paid time, usually under the leadership of their own, identifying problems in their work, presenting solutions to management and, where possible, implementing solutions themselves. (Hutchins, 1992)

The issues briefly touched upon below are worthwhile for understanding the basic theme of QC.

**QC Size**

According to Udpa (1992), the optimum number of members in any QC is about 8 to 10. If the QC is formed with less than 5 members then the QC would lose its vitality as, due to high rate of absenteeism a QC may become inactive. At the same time, more than 15 members in a QC could result in deprivation of opportunity for active participation by everyone in the QC and discussions also may not be very meaningful.

**Restriction**

The members of a QC need not always be the blue-collar or whit-collar workers. It is desirable that the membership of QC should include workers working in the same area or engaged in a similar type of work.

**In the Same Work-Area/Doing Similar Type of Work**

A QC is a homogeneous group and not an inter-departmental or inter-disciplinary one. Members participating in QC activities must be on the same wave length. It is possible to have intelligible discussions in the meetings if the QC includes employees working in the same work area or engaged in a similar type of work. Designations of members need not necessarily be equal but the work in which they are all engaged should be common.
Voluntarily

It is essential that the members join QCs voluntarily. It is the voluntary nature of QCs that makes the concept totally different from all other adopted and practised so far. Employees decide on their own to join or not to join QCs and no amount of pressure on them is necessary. Moreover, no one can be barred from joining these QCs by virtue of his/her being a union leader or if he/she is lacking in terms of qualifications.

QC Meetings

According to Udpa (1992), normally QCs should meet for about an hour every week. There are some instances of meetings of QCs being held only once in a fortnight. The danger of having QC meetings at longer intervals is that the intervals may tend to lengthen till eventually meetings are stopped altogether. Whatever may be the frequency decided upon by the QCs themselves, the regularity of such meetings is of great importance and must be adhered to.

Problem-Solving Method

According to Sharma (1998), the employees who work in any work area day after day know best what problems are hindering achievement of good quality, productivity and optimum performance and also how these problems can be removed. Members of QCs themselves identify, analyse and resolve work-related problems. According to Udpa (1992), it is important to understand that workers voluntarily enrol themselves as QC members to solve work-related problems and not other extraneous issues such as grievances or demands. The latter are better tackled by trade unions, grievance committees and other similar bodies.

In Paid Time

According to Hutchins (1992), it is important to mention that QC meetings may be held in ‘paid time’ rather than ‘normal working hours’. In some cases, it becomes difficult or impossible to hold the meeting during scheduled work periods. This may be particularly relevant in shift-work operations, when QCs may sometimes span
shifts. If the QC comprises members from each of three or more shifts, it may be possible to hold the meeting during an overlap between two shifts, but the members from other shifts will either miss the meeting or have to attend the meeting outside shift time. The pay arrangements for this will have to be worked out between all concerned, not, of course overlooking the views of the of non-circle members. Contrary to popular belief, QC members in Japan are also paid for their time when these situations arise.

_Autonomy_

An important ingredient of a QC is the sense of autonomy experienced by its members. The members of a QC may, for the first time in their work life, have such an experience. Their tryst with autonomy starts when they are told that the participation is absolutely voluntary. Moreover, the members experience autonomy in the process of choosing their leaders and selection of work-related problems.

_Enrichment of Members' Work Life_

According to Sharma (1998), the spin-off benefits of QCs to the organisation include enrichment of the working life of their employees, apart from resultant attitudinal changes, cohesive team culture, etc. This is the result of avoidance of drudgery due to stereotyped work, an improved working environment, happier relations with co-employees and greater job satisfaction, etc.

Udpa (1992) mentions that the Quality of Work Life (QWL) of an individual is said to be good only if he/she is enjoying the work that he/she is engaged in, happy in the environment and finds his/her workplace meaningful. To achieve this purpose, some organisations tend to reduce status differentials by having the same uniforms for everyone in the hierarchy or by having a common canteen. Some organisations conduct extensive training programmes and HRD activities. Involvement of workers in decision-making, providing for their growth and security and improving the general work relations in the organisation are the means of improving the QWL.
Poor QWL is a disease, the symptoms of which are:

- High absenteeism and turnover
- Poor quality products
- Low productivity
- Inter-personal/intra-group/inter-group conflicts
- Non-involvement and apathy

It is a common phenomenon that the management is trying too hard to tackle the symptoms without earnestly trying to eradicate the disease altogether.

*Leading to improvement in their total performance*

QCs resolve work-related problems such as quality, productivity, cost reduction, safety, etc., which, in turn, leads to improvement in the total performance of the work area, resulting in both quantifiable and intangible gains to the whole organisation.

**Unique Feature of QCs**

QCs, which has evolved in Japan in the 1960s and has since then been not only alive but steadily increasing unlike some other techniques such as Management by Objectives or Zero-Defect programmes (which were once popular but are unheard of now, have the following features that makes it unique:

- QC is a philosophy - not a technique
- QC has a bottom-up approach - not a top-down approach
- QC is voluntary - not coerced or compulsory
- QC is management-supported - not directed by the management
- QC is truly participative
- QC is a group activity
- QC involves task performers or grassroots employees
QCs and its Synonyms

In various issues of a Journal on QCs, published in USA, the following names were discovered

► Human Resources Circle
► Action Circles (Active commitment to improving norms)
► Magic Circles (Making analytically-grounded interventions through Circles)
► The Quality Seekers
► The Power-minded Circles
► Mac Circles
► Employees’ Circles

In India too, an interesting collection of names have been noticed. Some continue to call the groups as Quality Control Circles (QCCs) and a few call them as Productivity Circles (PCs). QCs are also called as Employees Participation Circles (EPCs) in Shri Ram Fibres Ltd., Chennai, and Small Group Activities (SGA) at Telco, Pune. QCs are called Thinking at Work Circles (TAWC). However a good number of those who have interacted with the QCFI prefer to call it QC.

Udpa (1992) mentions that one has to be careful while using names of the QCs. The term PCs was turned down in BHEL because it was felt that such a name would give an erroneous impression that the management was only out to extract more output from each individual. Similar argument holds good for Shop Improvement Teams.

QCCs is what the Japanese prefer calling to mention QCs because the need to start such a movement was directed to improve product quality and change their past image as producers of shoddy and cheap goods. Although, with the passage of time, the Japanese have realised that such group activities not only improve quality of goods and services but also achieve better productivity, cost reduction, improved safety, etc. apart from humanising activities and bringing about attitudinal changes, greater cohesion, etc., they, perhaps, do not want to change the name at this stage because, by this time, the name QCC has become popular and widely known in Japan.
Another interesting development is that each QC gives an individual name to itself. Apart from an identity to each group, this trend also gives an individual the fulfilment of the need for individuality and creativity, e.g., QCs in Air India have names like Jet QC, 7 Aces, Safe Air QC, Quality Boosters, Hydro QCs.

However, one should understand that the concept of QCs cuts across all barriers of language. It has been widely accepted in many countries and the concept has been assimilated in different languages all over the world. Nothing is mandatory in the concept of QC. Each organisation is free to make its own decisions, taking into account all its pros and cons. It is the voluntary participation which needs to be preserved irrespective of the name by which one wishes to call it. Though for the successful and long-term growth, the name given to a QC does have a bearing.

Objectives of QCs

It is always said that a well-defined objective is the stepping stone to the success of any programme. The following objectives can be accomplished in a QC programme:

**Self Development**

Training is considered to be one of the main elements of a QC programme. In order to enhance knowledge, every member of a QC gets 8 to 10 hours of training. Training fulfils the two-fold needs: first it helps a member to understand the organisation's needs and, on the other hand, the knowledge acquired through the training helps to promote success in other areas of life. The problem-solving techniques used by QCs, including Pareto Analysis, Cause and Effect Analysis, Check Sheets, etc., are so easy to understand that they can be used anywhere to analyse and solve problems. In a broader sense, QCs help the members improve their abilities and develop themselves to the fullest extent.

**Mutual Development**

It inculcates group or team work. Organisations with selfish interest and vertical ambitions cannot benefit from QCs. In QCs, people get to know each other and there
is a feeling of 'togetherness' to combat the growing competition and other problems of the organisation.

*Improvement in Quality*

Improving quality is a never-ending process. In today's highly competitive environment, if an organisation has to survive, then it must try to satisfy the demands of the consumers who constantly demand better quality products and services. A QC is one of the best ways for solving problems and improving the quality image.

*Improvement in Communication and Attitude*

The importance of good communication cannot be understated. QCs help to improve communication since the group activities help to increase the frequency of communication among the members. People become open minded and they feel free to discuss the problems of the organisation. This, in turn, helps to change the work atmosphere and the development of a more positive attitude.

*Waste Reduction*

One way of looking at quality improvement is reduction of waste in material, re-work and time. Often it has been seen that organisations treat the symptoms of waste by adding some temporary operations without trying to eradicate the disease. According to Ingle (1985), many QCs have helped reduce the waste by deciding to work together and help each other.

*Job Satisfaction*

It is very important that people feel enthusiastic at work and take pride in it. One way of achieving it depends on the opportunities given to the workers to use their ideas and brainpower. QCs provide an ideal structure whereby it satisfies the 'achievement' need of an individual since he/she becomes aware that his/her ideas will be considered.
Cost Reduction

With inflationary trends, it becomes absolutely important for organisations to take measures to reduce cost. Today, most of the organisations in Japan concentrate on cost reduction. One way of reducing cost is to request QCs to examine the costly items with a view to reducing the cost without compromising on quality.

Improvement in Productivity

Reducing cost and eliminating waste helps improve productivity. Ingle (1985) mentions that Genesco Company, a garment manufacturing company, reported a 5% improvement in productivity by reducing rejects. Similarly, Nashuo Company improved productivity in its paper products. Lal (1994) mentions that QCs have improved productivity in Bokaro Steel Plant located in Bihar.

Improvement in Safety

Although every organisation intends to improve the safety of its employees, it is becoming increasingly difficult to appreciate all the hazards and problems that should be watched and steps should be taken to eliminate/reduce accidents. The QCs can play an important role in identifying and presenting the major safety changes that are required as recommended by the members at work place.

Problem Solving Opportunities

Brainstorming is one of the techniques used by QCs to solve problems. This gives the members adequate opportunity to solve the problems and take pride in developing solutions. At the same time, they feel themselves as a part of the organisation. Brainpower is unmatched as a mean of solving problems.

Projects are QC's Efforts

The QC, as a whole team, receives recognition for any achievement it has accomplished. No individual, whether the management or the shop-floor worker, can individually claim any success of a project.
Projects are Work-related

Individual or departmental problems are not dealt with. Problems have to be related to the member’s own department or work area, though advice may be sought from other QCs. It is based on the assumption that the members are the experts in their own field at what they do but not at what other people do.

Mental Awareness Regarding ‘we’ and ‘they’

QC encourages leadership quality and personal development in terms of group behaviour. It facilitates effective use of channels of communication, thereby, assuring improved interpersonal relations and bonds of brotherhood. It urges people to receive ideas with an open mind and to participate positively.

Absenteeism and Grievances are Reduced

Members in QCs have realised that QC programmes have helped them enjoy work, develop a feeling of belongingness which has made them come to work places more enthusiastically rather than abstaining for minor reasons. Grievances too automatically get reduced since most of the work-related problems are solved by the member themselves.

Work-Ethic, Discipline and Trust

These are considered to be the pillars of success for any QC. Trust is the corner stone of organisations in Japan where it is considered fundamental to success. Self-discipline, ethics and intangible, unquantifiable trust among all result in incalculable benefits for the organisation.

Misconceptions relating to QCs

Udpa (1992) mentions that there are a lot of erroneous impressions held regarding the philosophy of QCs. The successful implementation of QCs precludes that such erroneous impressions are removed. Dearth of operation and experience in India has been the major cause of lack of clarity regarding the role of QCs. QCs are not short-
lived temporary programmes. Once formed, those continue to exist forever. It becomes absolutely imperative to dispel misconceptions and doubts about QCs.

*QC do not tackle just quality problems*

The themes taken by QCs are diverse and varied. Although they are called QCs, they do not tackle problems of quality alone but any issues affecting productivity, cost reduction, safety, housekeeping, etc. Udpa (1992) mentions that a typical break up of problems tackled by QCs shows that 26% relate to Quality; 30% to Productivity, 13% to Technology, 11% to Housekeeping, 8% each to Engineering and Materials Management and 2% to Cost Reduction and Safety.

*Source: Udpa (1992)*

In simple terms, it can be said that QCs aim at continuous improvement in every aspect of the activities in the respective work areas.
QCs are not a substitute or replacement for

☐ Task Forces

QCs are homogeneous groups which are performance-oriented and aim at improving the work area in totality, unlike task forces which are problem-focused and cease to exist once the problem is resolved. As such, one is not a replacement for the other.

☐ Product Committees

These committees primarily aim at improving the quality of products. Since the objective of QCs is to make improvement in a holistic manner, it can be said that QCs are not Product Committees.

☐ Joint Plant Councils/Works Committees

These councils do not include representatives of the management and the trade unions for resolving organisational problems. But their members are sponsored by the management and trade unions respectively, and therefore, are not voluntary. Because of the very nature of their composition, spontaneity of response for improving the performance of the organisation is not there and an element of hostility in their discussion is inevitable. Joint Plant Councils or Works Committees can co-exist with QCs in any organisation.

☐ Quality Assurance or Quality Control Departments

These departments are very essential and have functions which are entirely different from QCs. All the above-mentioned groups are constituted by the management and they perform management-directed activities and, hence, these follow a ‘top-down’ approach. On the other hand, QCs are voluntary groups formed by the employees at the grass root, which have their autonomy in their functioning and their recommendations flow in a ‘bottom-up’ manner.
Suggestion Schemes

In many organisations such schemes exist with a view to soliciting suggestions from the workers. Under such ‘Suggestion Scheme’, only one individual gets rewarded monetarily and the responsibility for implementing the recommendation does not rest on the individual who has given the suggestion. On the other hand, recommendations in QCs emerge from the group activities and, thus, develops a sense of team spirit. Moreover, the QCs do not only analyse problems and recommend solutions to the problems but are also responsible for implementing the recommendations. Udpa (1992) mentions that the ratio of the number of suggestions emanating from QCs activities to others that result from ‘Suggestion Schemes’ (when both are coexisting in an organisation), has been roughly found to be at least 20:1.

The following diagram gives the real position of QCs in an organisation:

![Diagram showing the real position of QCs in an organisation](image)

Source: Udpa (1992)

QCs do not change the existing organisational structure or the chain of command

The formation of QCs in no way affects the hierarchical set up in any organisation or delegation of authority to different levels. On the other hand, it has been seen that QCs catalyse a better and more willing response from different levels of executives,
leading, in turn, to quicker decision making and less delays in implementation, resulting in higher productivity and morale.

**QCs are not a forum for grievances or a spring board for demands**

Lal (1994) mentions that trade unions apprehend QCs as an encroachment to their union activities and regard it as unfair labour practice by the management. Worker-members who are found too active with QC activities are critically viewed upon by the union leaders and all efforts are geared to make QC programmes a failure. Most of the time, intra-union rivalries foil all attempts to start QCs. Often QCs members, hailing from different unions, tend to voice their union views rather than their own views. This often results into QCs becoming more fissiparous fora rather than team-building bodies.

Even when union leaders themselves are leading QC groups, they inwardly nourish ideas of seeking promotions on the basis of the successful implementation of the QC projects. Where such promotions are not forthcoming, frustration sets in, leading to severe jolts and set back to QC programmes.

QCs are essentially formed voluntarily by the workers which help fulfil the higher order needs such as ego, self-esteem and self-actualisation. Such needs, unlike lower order needs (such as psychological, financial and security needs) cannot be attained fruitfully through collective bargaining. Moreover, QCs help increase the human relations in any organisation and do not cause any harm to workers unity.

**QCs are not a means for the management to unload all their problems**

There is a general misconception that once QCs are formed in any area, the management executives can take things easy, expecting that any problem arising in the future will be tackled by the QCs themselves. But it is far from true, since QCs are not panacea of all ills. However, it can be said that as more and more problems are tackled by the QC members, it would give more time to the executives regarding their managerial responsibilities.
**QCs are not just another technique**

It is wrong to confuse QCs with Value Engineering or ABC Analysis, etc. practised by many organisations as management tools. QCs may use any of the said techniques for identifying, analysing and solving problems but is not a technique itself.

It needs to be mentioned that a QC programme is not something that management needs to fear about and it is not a management programme. It is one effective method for involving an organisation's employees in assuming responsibility for quality, i.e., quality of their work, work environment, professional growth, and personal development. The secrets of a successful QC programme lies in keeping participation purely voluntary, obtaining commitment from top management, developing a suitable atmosphere, formulating objectives, exposing the members to the programme, communicating and informing the members, providing training to the members, selecting the right member for the right job, becoming open and positive, and monitoring progress and changes.

Although most commonly found in the manufacturing environments, QCs are relevant for a wide variety of organisational situations and problems. QCs are based on two ideas, viz., (i) employees can often make suggestions for improving work processes better than management, and (ii) employees are motivated by their participation in making such improvements. Thus, implemented correctly, QCs can help an organisation reduce costs, increase productivity, and improve employee morale. Other potential benefits that may be realised by an organisation include greater operational efficiency, reduced absenteeism, improved employee health and safety, and an overall better working climate.

**Objections to QCs**

According to Ingle (1985), there are a number of old customs and traditions that have to be overcome. Many people have to be convinced to try managing business the new way. Some of the frequently heard objections are briefly discussed here.
i. **Resistance**

Many companies feel that QCs will change the existing organisational practices and will result in more financial burden on the organisation. Some people in the organisation also resist change fearing that they may have to treat other people differently or listen to them more carefully and that they cannot neglect or cover up mistakes anymore. In reality, there is very little change in the organisation. Once people understand the basic principles and learn the techniques, most of the operations become smoother.

ii. **No time for QCs**

Many people feel that they do not have the time for QCs work. They are already busy during the working hours and they do not have time to work for the organisation. They are not ‘workaholics’ like the Japanese. QC related-activities may appear to generate extra work at the beginning but, in the long run, those help save money, avoid waste, and improve quality.

iii. **Loss of Management Authority**

This is another baseless objection. Participation of workers does not mean the loss of management authority. Management still has the final say in the solution of a problem. The only change that happens is that people at all levels get involved in the problem-solving process. Some of the problems solved could be ones that were never tackled before. With more inputs, better decisions are made.

iv. **Members Feel ‘Used’**

Some QC members get the feeling of being ‘used’. However, one has to keep in mind that the organisation is not made up of the management only. Members make the organisation and there is nothing wrong in helping the organisation build better quality and reduce waste.
v.  Why Should I Help My Company

This is an objection that needs the special attention of the facilitator. Many people feel that the organisation is something apart. In reality, workers make the organisation. It is they who are responsible to the development of the organisation. In reality, the members are helping themselves by building better quality in an expensive manner. A facilitator and other managers have to convince people and lead them to appreciate these concepts.

vi.  It Is a Quality Control Work

Many members feel that because the organisation maintains a quality control department the people in that department should take care of all the quality problems. However, it is practically impossible to employ one inspector per operator. People have to realise the need for building better quality all the time. Detection of defective goods comes late and does not make money for the organisation. At the same time, quality control is always busy on major problems. A QC can also extend help to other QCs and, thus, help solve minor problems that annoy the workers daily.

vii.  N.I.H. (Not Invented Here)

Many organisations and people feel that this technique was developed in Japan and so it works in Japan well because custom and culture there are different from others. It is true that the culture is different but the philosophy behind the programme is universal and it can work anywhere at any time.

viii.  It Won't Work Here

This is another frequently heard objection. Many people have the feeling that these kind of venture will not work here as the operator is different. People do not like change and hesitate to try something new. This is common. One has to convince top key people first and then just keep trying until one can gain the confidence of all the people. Later on, things become much smoother.
The QC philosophy

The coming together of people from the same work place to participate in some activity with a common goal is called Small Group Activity (SGA). SGAs are valuable because:

✧ People have different ways of thinking and different approaches. A small group can foster a creative atmosphere and can benefit from such differences.
✧ New concepts can be created during intense discussions of how to identify and solve problems.
✧ The cooperation of group members makes it possible to use the collective competence of the group, leading to a synergical effect.

According to Hutchins (1992), SGAs can be organised in several different ways. Small Groups and should also include task forces, value analysis teams, value engineering teams, project groups, action-centred groups, etc. Each plays a different but important part in participative activities but true 'self-control' at the work place can only be achieved through the introduction and development of QC-type activities.

The QCC also known as QC is one type of group activity seen frequently. Self managing teams and zero-defect circles are other examples.

In his book ‘Principles & Practices of Quality Circles’, Agarwal (2001) mentions that the philosophy behind QC movement may be visualised as under:

'The man on the job knows more about its problems than anybody else.’

'Every person is inherently talented and a conducive environment will bring the best out of him/her.'

'People building is more important than people using.'

If all work is deemed as service and if all work is performed; keeping the receiver of the product/service in mind and his/her satisfaction, there will certainly be an elevation in the personality of every individual. It is this which one should aim first through education and training on QCs. The three dimensions of QCs can be epitomised as Humanistic, Scientific and Spiritual.

The main principles of QC activity have been stated as under:
i. respect for humanity (human individual)
ii. to develop people and not to exploit people
iii. make people happy at work place
iv. raise their ‘material and spiritual level’

Lal (1994) mentions that philosophy and *modus operandi* of QCs are based on finer values of team spirit among employees, trade unions, healthy management and, above all, an organisational commitment of all those who are directly or indirectly having a stake in the organisation. It teaches to respect humanity, to bring cohesiveness among isolated individuals and to give due recognition to the human factor for better achievements. It is very important that management plays an important role in winning employees confidence by showing genuine concerns for their welfare. Cooperation is essential for the survival of QCs. Thus, concerted efforts on the part of all those concerned along with a radical re-orientation of attitudes are the key issues underlying the philosophy and success of QCs anywhere. It basically rests on the participative culture and a sound quality system towards excellence in performance, quality and productivity, leading to enhanced quality of worklife.

It is important to mention at this point that it becomes imperative to distinguish between the philosophy of QC and that of QWL. A general misconception is that QCs should be equated at par with QWL. Such a belief has emerged from the assumption that both QC and QWL have a common basic objective, i.e., optimum utilisation of human potential for organisational purposes as well as providing meaningful work to employees which will lead to their psychological satisfaction and development. However, it is unfair to equate QC with QWL. The scope of QC is much wider compared to QWL. QC is a much better instrument in securing total involvement of workers in productive activities. It is more ideal, concrete and easy to implement. QWL, on the other hand, does not encompass total work involvement of the workers in directly dealing and solving their day-to-day work problems as QCs are empowered to do so. QWL operates only within the ambit of fair wages, health and safety, social relevance, personal advancement and total life space, which really refers to a requirement of balancing an individual’s health, happiness and organisational work.
According to Udpa (1992), it is essential that anybody contemplating the implementation of the concept of QC in any organisation, understands clearly the major ingredients of the philosophy of QC before initiating any step for launching QCs. This is particularly true in a country where there is no experience for sustained operation of QCs, which is necessary for guidance. In organisations, lacking the culture of participative management, it would be difficult for employees to understand the role of QCs, and necessitates a change in the very style of management.

At the time when QCs were first organised in Japan, there were three basic aims discussed below which determined their activities.

To contribute to the improvement and development of the enterprise
The modern concept of quality control came to Japan after 1945 from the USA. However the systematic management of company wide quality control (CWQC) which evolved in Japan after 1955 envisaged that people at the bottom of the organisation could also participate in the quality control functions at the workshop level. The QCs provided the employees at the grass-root level with the opportunity to perform effectively, meshing well with the activities of the other levels and functions of the organisation. As a result of such participation in the functions by the employees at the lower levels, the performance in the respective work areas naturally improved and, consequently, development of the enterprise as a whole was facilitated. Corporate quality also improved and, with such development and improved working of the organisation, the future growth and prosperity of the employees were also assured.

To respect humanity and build happy workshop
One important aspect that is generally neglected is that people working anywhere should be treated as human beings. As more and more mechanisation takes place in factories, consideration for human beings gets reduced in varying degrees. Through voluntary activities at the lowest levels, QCs pay respect to humanity and make people feel that their workplace has real meaning. As much of one’s life time is spent at the working place, it is desirable to make it pleasant and meaningful. In the QC
philosophy, workers are not treated as a part of the machinery or equipment but are afforded opportunities to express their potential and display their true capability.

Taylor felt that it is the management alone which has the capability and authority to take decisions and issue directives which to be carried out by other employees without any questioning. He believed that management should accept the responsibility for planning and organising work and that the task of planning should be separated from the tasks of execution. His main objective was to work and manage in a 'scientific' manner and to replace the rather predominant in exact and subjective procedures.

In his approach therefore, tasks are deskillied by breaking down into their smallest elements and problem-solving is carried out by specialists at managerial level, who are often referred to as troubleshooters or problem-solvers.

This approach also requires jobs to be defined in such a way that each task becomes fairly clearly stated sequence of operations or work elements to be performed by an individual. The sequence may be longer in some jobs than others but the elements are still a sequence.

The approach developed and permeated the entire society throughout the world and has become the accepted form of management in both industry and commerce. Once the people have learnt the job routines, they simply repeat their tasks in a continuous manner. No one asks them anything or involves them in anything provided they perform their operations according to the prescribed schedule. If they experience problems, they usually require to turn to the manager, supervisor or, in some cases, employee representatives.

Unfortunately, problems which are high on his list of priorities are frequently low in their manager's or supervisor's list. The consequence is that rarely any action is taken. This leads the individual to believe that management is not interested in his/her ideas. In other words, this approach encourages the individual to switch off mentally and to perform the task mechanically.

Taylorism, combined with the work of Frank and Lillian Gilbert and others such as Charles Bedeaux, served a purpose, which revolutionised the concept of work in the USA. It can be seen that this development did not have a cultural origin but was a pragmatic solution to the problems confronting that country at that time. Eventually, through Taylorism, the USA became the most economically powerful nation in the
world. Later on, mainly after the Second World War, Taylorism swept the world, sweeping aside the craft-based systems which had dominated in Western Europe for a long time.

'Scientific Management' is merely the ultimate development of the Taylorism in which the specialists, together with functional line management, totally control the work process. Once developed, the 'Scientific Management' process becomes self-perpetuating. Management becomes dependent on specialists, and the specialist use this dependence to increase their influence. There is no pressure within the model which will enable the mould to be broken.

This concept of management made its biggest impact on the world at large during the Second World War when the Americans used this concept to build their massive armament machinery. It then became the principal means by which they were able to flood world markets with cheap, mass-produced products when they reverted to the manufacture of domestic products in the 1940s and 1950s.

This impressed Britain and other European countries and very soon other countries were copying this approach to management. American management consultants earned large fees in any country in the world. It was generally assumed that this process represented the possible thing nearest to an ideal model of management and this assumption has never, until now, been challenged in the West.

The pioneers of Taylorism, viz., the specialists and, in particular, the work-study specialists, then began to introduce the concept elsewhere, not only in office operations in manufacturing organisations but in every form of work activity irrespective of the type of industry.

This is not to say that that people have not identified the problems which this approach brings. All the problems associated with Taylorism, regarding treatment of individuals as mere extensions of their machines or desks, have been identified, however, the solutions offered by the specialists have usually been cosmetic. No Western organisation has till, recently, questioned effectively the basic tenets of the systems of organisation itself. Even those, which have now identified this need and are making progress have a long way to go before they can claim to have reached the Japanese level. Until such changes came at the societal level, it may not even be possible to reach such level.
A good example of this is there in the works of behavioural scientists like Herzberg, Maslow, and McGregor. Each of these famous management scientists made a substantial contribution to an understanding of the problems relating to personnel needs at work but they were singularly unable to suggest a vehicle for the satisfaction of such needs because they did not realise that the causes of such problems have their roots in the principles of the organisational structures themselves.

**QC and McGregor's Theory**

According to Dey (1988), even when the top management is keen to launch QCs and takes several steps to introduce motivators in the workplace, there is no guarantee that these will succeed in the organisation. The success of QCs depends, to a great extent, on the kinds of beliefs held by the managers and supervisors about their workers. The beliefs, according to McGregor (1960), may be classified into two categories: Theory X and Theory Y. Theory X managers and supervisors believe that a worker has no interest in work is lazy and uncooperative, and is interested only in money, and there is a need to offer monetary incentives for meeting standards and impose penalties for failure. Theory Y managers and supervisors believe that a worker has internal drive for accomplishment and pride in workmanship but industry makes his/her job meaningless and monotonous and it stifles his/her natural drive and creativity, and only the creation of new job conditions is likely to remove a worker's frustrations in his/her workplace.

QCs seek to create new job conditions by offering opportunities to the workers to identify, analyse and solve their work-related problems. They experience a sense of pride and satisfaction when some of those solutions are implemented and publicised. QCs' efforts in the departments having Y-type managers and supervisors are likely to succeed because they have trust in the intrinsic worth of their workers and they believe that, given proper opportunities, the workers are capable of making creative and innovative suggestions concerning their jobs and work environment.

According to Agarwal (2001), it may be difficult to classify every manager and supervisor into one of these two distinct categories. A manager or a supervisor may, for example, be a believer in Theory X with respect to some of his/her workers while he/she may apply Theory Y in case of others. It is, perhaps more realistic to identify...
him/her with one of these two categories depending on his/her inclination to either of these. In other words, the belief held by him/her with to most of his/her workers will decide the category to which he/she belongs. According to Dey (1988), one way to assess managerial belief is to develop and administer a questionnaire consisting of statements concerning the attitudes of managers and supervisors towards their workers. Depending on the type of response, the respondents may be categorised as having either X-orientation or Y-orientation.

**QC and Herzberg's Motivation-Hygiene Theory**

It is interesting to examine the philosophy of QCs in the context of theories propounded by the behavioural scientists. According to Herzberg (1959), the stimuli to which an employee responds in his/her workplace may be classified into two categories - hygiene or maintenance factors and motivators. Hygiene or maintenance factors include working conditions, job security, economic factors, social factors, etc. The absence of one or more of these usually makes an employee dissatisfied but the presence does not necessarily ensure job satisfaction. If an employee, for example, is required to work in unhygienic conditions or if the arbitrary decisions of the management make him/her feel insecure in his job, if his/her wages are not adequate of if he/she experiences social isolation in his/her work place, he/she is likely to be dissatisfied with his/her job. Even when the management takes care of all the hygiene factors, there is no guarantee that an employee will have job satisfaction.

The motivators, on the other hand, offer job satisfaction. An employee is motivated to give out his best in his/her workplace when he/she finds his/her job challenging, when the job offers scope for innovation, autonomy, participation and growth, and when his/her efforts and achievement are recognised by the management. It is not necessary that the recognition should always be in the form of monetary rewards.

Early managerial approaches to job design focused primarily on attempts to simplify an employee's required tasks so far as possible in order to increase production efficiency. Such a technique, efficient as it may be, is not without its problems. Steers and Porter (1979) mention that, as workers become better educated and more organised, they start demanding more from their jobs. According to Dey (1988), the top management, desirous of introducing QCs in the organisation, must think beyond
hygiene factors and take positive steps to introduce motivators in the workplace. If the management is not prepared to do so, it should abstain from introducing QCs. The top management in many organisations tends to believe that the only way to meet the aspirations of the workers is to look primarily after the hygiene factors. It should be remembered that the effectiveness of these factors as stimuli in the workplace is substantially reduced beyond a certain point. When the normal wages of workers are quite high, as is the case in most of the organised sectors, they may not be interested in working overtime even though money is involved in it.

According to Mohr (1983), QCs provide a climate where job satisfaction can grow and alienation is reduced. The philosophy of QC is based on the presence of motivators. If the top management of an organisation associates workers' aspirations primarily with the presence of hygiene factors and makes little effort to introduce motivators in the workplace, its viewpoints are in direct conflict with the philosophy of QC. In such a situation, QCs are not likely to succeed.

**QC and Maslow's Hierarchy of Needs Theory**

The reason for a worker to join QCs and the benefits derive from it can be understood in terms of the hierarchy of human needs developed by Maslow (1970). According to him, human needs can be arranged in a hierarchy starting from the physiological needs and ending in the fulfilment of self actualisation needs. He listed the hierarchical needs as given below.

Physiological Needs like food, clothing, shelter and physical comforts at work constitute this. These really do not motivate but the absence of these cause loss of motivation.

Safety Needs relate to security (not the job security alone but good supervision and good working conditions also), peace of mind, good human relations, stability, dependency, freedom from fear and anxiety, need for structure, order and law, etc.

Social Needs relate to need for affectionate relationship with people; need for a place in work group and community; need for developing team spirit and team activity, knowledge of group goals, and social interaction, etc.
Esteem Needs comprise need for self image or self respect in terms of strength, status, publicity, attention, appreciation, achievement, challenging work, responsibility, free communication, etc.

Self-actualisation Needs are at the highest level in the hierarchy of needs. A self-actualised person wants to realise his/her individual potential, wants to release his/her creativity, use his/her aptitude and abilities to the widest possible, wants to take up new and intensely challenging jobs, needs personal fulfilment and to stand at the highest level of self-confidence.

According to Maslow, after an individual’s physiological, safety and social needs are satisfied, he/she would like to satisfy his/her esteem needs which may be in the form of self-respect or self-esteem or a desire for appreciation for good work, recognition and publicity. The manifestation of the fulfilment of esteem needs is different for different persons. In the final stage of the hierarchy, an individual looks for the fulfilment of his/her self-actualisation needs.

Physiological and safety Needs are called the lower-order needs while the other three, namely, social, esteem, and self-actualisation needs are known as the higher-order needs.

According to Dey (1988), a QC is a forum for the fulfilment of an employee’s higher-order needs. Monetary benefits are usually enough to satisfy the lower-order needs. If the management believes that all workers’ needs can always be satisfied by offering more and more monetary incentives, then its attitude is not conducive to the formation of QCs. The main thrust of a QC is to fulfil the employees’ higher-order needs.

A QC satisfies the special needs of a worker because he/she is identified as the member of a team. His/her QC offers him/her the opportunity to interact with the Circle members and develop team spirit through team work. If the management takes the initiative to recognise good performance of the QC members, not necessarily in terms of monetary incentives, it provides for the fulfilment of members’ esteem needs.

The lower-order needs of most of the workers in the organised sector are fairly well satisfied. In the coming years, they are likely to look more and more for the fulfilment of their higher-order needs. If the management is convinced about such a shift in the aspiration of workers, it is advisable to form QCs in the organisation.
**QC and the Works of Argyris**

Argyris states how the characteristics of organisations inhibit a personality from reaching maturity. The said characteristics are mentioned below,

- **Task Specialisation** - each person does only a limited, short and completely manageable task
- **Chain of Command** - pattern of task is held together under the direction of a few people
- **Unity of Direction** - which means that each specialisation is in a separate unit (for greater efficiency) and
- **Span of Control** - which means that the size of the work-group is determined by the number of persons one can control.

Against these characteristics of so called effective organisations, Argyris lists the changes in personality as it develops to maturity. These are stated below.

Immaturity (CHILD) → ........... grows → ........... Maturity (ADULT) continuum

<table>
<thead>
<tr>
<th>Passive</th>
<th>→</th>
<th>Increased activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td>→</td>
<td>Independence</td>
</tr>
<tr>
<td>Behaving in a few ways</td>
<td>→</td>
<td>Increasing number of behavioural patterns</td>
</tr>
<tr>
<td>Erratic shallow interest</td>
<td>→</td>
<td>Deeper and Stronger interests</td>
</tr>
<tr>
<td>Short-time perspective</td>
<td>→</td>
<td>Longer-time perspective</td>
</tr>
<tr>
<td>Lack of awareness of self</td>
<td>→</td>
<td>Increased self-awareness and control over self</td>
</tr>
<tr>
<td>Subordinate position</td>
<td>→</td>
<td>Equal or super-ordinate position</td>
</tr>
</tbody>
</table>

Argyris puts forth that the organisations tend to retard or hinder the development of personality from reaching maturity. Workers may behave in an immature manner because management and organisation encourage them to be passive, dependent and subordinate. Management and organisations tend to create childlike roles for workers which frustrate their natural development. Tasks are often intensely specialised and hence offer little interests to the workers. Jobs become trivial. Patterns of behaviour are limited to a few activities. Most workers are not encouraged to look ahead as there is little scope for challenge in repetitive cycles of work in most modern factories. Hence, the time horizon is exceptionally short. Because of the control and constraints
imposed by organisational rules and procedure, there is little autonomy in doing the work and workers are always subjected to control by positions upper in the hierarchy. Due to the non-congruence between the nature of organisation and human growth, the results are frustration, failure, short-term perspective and conflict.

According to Agarwal (2001), QCs can be said to improve opportunities with a longer-time horizon (through planning for work) and they provide scope for building up interests, increased activity and more autonomy. The frustration of remaining in the 'sub-ordinate' position is alleviated to a certain extent as shop floor workers gradually feel themselves as masters of their own work. The uneducated shop floor technician is respected as much as directors as far his/her own area of work is concerned. The people-building philosophy of management offers scope for advancement and further development. QCs can, therefore, be said to be able to reconcile the incongruence between the nature of organisations and the dimensions of natural growth to a certain extent.

**QC and Skinner's Behaviour Modification Theory**

According to Susan and Luke (1985), Skinner's theory is relatively significant as a background concept for QC. The work of the Harvard psychologist, B.F. Skinner, tells much about the shaping of behaviour through operant conditioning. Presently organisations are learning how behavioural modifications can be used in their to improve performance. Skinner’s theory holds that behaviour is caused primarily by externally-induced stimuli and maintained by its consequences. A person does something because of the reinforcement he/she received from similar behaviour in the past. If the outcome of his actions pleases him, the chance of his repeating the same action is high. Reinforcements are things that increase the probability of a behaviour occurring again.

Whyte (1955) observes that there cannot be change in attitudes unless the conditions are changed to which people are responding. If the conditions are changed, people will behave differently and they will adjust themselves to the new situation. In QCs reinforcements can come in the form of tangible things like cash awards, study trips, sponsored holidays, attending conventions and so on. This normally happens when some organisations share part of their productivity gains with the QCs.
Reinforcements can also come in a more tangible form like praise, approval during their presentations before the management, etc. In fact, QC's programmes provide positive reinforcements for good work attitudes which, in turn, help shape the worker's behaviour. Plaques, mementos, letters of commendation, certificates, medals, souvenirs, etc., are all forms of positive reinforcements used in QC's. However, it must be noted that Skinner's theory has explained part of QC concept. Skinner's theory has often been criticised because it has not taken into consideration the existence of free will and the autonomous, inner-motivated person.

During the critical stages of Japanese reconstruction after the Second World War, labour alienation was the last luxury the Japanese could afford, and the rapid deterioration in labour relations that they experienced in the late 1940s and early 1950s came as a shock. This lead to considerable analysis of the root causes and they concluded that the most important factor was the impact of Taylorism in the workplace.

They were the first nation to become aware of the need to break the mould and avoid the problems becoming deeply entrenched. This was because they had experienced its benefits. For example, if Japan in the early 1950s is compared with Western Europe and the USA at that time, a vivid contrast can be observed.

The West was going through an unprecedented boom, where most enterprises could sell everything they could make. Economies were booming and most people were relatively well off, in fact, than at any time in history. It was at that time, Harold Macmillan, the British Prime Minister, coined the slogan, 'You never had it so good'.

In Japan, on the other hand, things were different. The economy was weak, the export performance of the Japanese was poor, and their GNP was about a third of that of the UK, although, admittedly, it had recovered to its pre-War levels. They were known as junk merchants to the world and were noted as cheap imitators of Western products.

Whereas the West believed its success was due to Taylorism, the Japanese identified Taylorism with their failures and associated it notably with low motivation, low job interest, absenteeism, and so forth. Of course, the West was also confronted with these problems but, at that time, with the economy in top gear, the disadvantages were easily outweighed by the benefits. Low job satisfaction seemed to be unimportant, if
the dehumanising aspects of the work methods and the related social problems were
more than offset by high wages and by the workers' access to consumer durables
which would otherwise had been out of their reach.
Even the quality problems seemed not to matter. There was even a perverse argument,
widely publicised during management training courses, that suggested that there
commercial advantage could be gained by deliberately producing poor quality or
short-life products. It was argued that this would cause the customer to make frequent
replacements, thus, increasing the level of demand and the volume of production,
while decreasing costs. This gave rise to the notion of a 'throw-away society'.
Unfortunately, this approach only works if all competitors do the same. As soon as the
market begins to shrink or a major competitor deliberately changes the rules of game,
the process collapses, possibly, with disastrous results for those who fail to respond.
This is probably one of the most important reasons for Japan's recent success in
hitherto safe markets. Not only are the Japanese able to change the rules of game, they
actually have challenged the fundamental basis upon which industrial society is based.
They could effectively challenge Taylorism and introduce aggressive, market-led,
customer-first policies. This is something the rest of the world has not yet done in a
big way, but must do, and quickly, if it is serious about survival and growth.
For many years it appeared that the Craftsmanship approach was the only alternative
to Taylorism. The Craftsmanship approach is almost the opposite of Taylorism since
by definition a craftsman is responsible for his own quality. The most fundamental
difference between the Craftsmanship approach and Taylorism lies in the question of
who has the control over the process. All work processes have the same basic
ingredients of PLAN-DO-CHECK-ACT (PDCA), but, with Craftsmanship, these
phases are controlled either directly by the worker or by the supervisor and the
craftsman together.
In the simplest form of the Craftsmanship system, management only provides the
means and facilities using which craftsmen perform the entire operation. Again, the
PDCA cycle can be used to describe this system as, with Taylorism Plan-Do-Control
(PDC) are in the hands of management, whereas, with Craftsmanship, the entire
PDCA cycle is in the hands of the worker or craftsman.
This system does produce high-quality products but it has the disadvantage of high cost, low wages, low output, and inadequate forecasting or scheduling possibilities. Inevitably, both this and the Taylorism-based system have their advantages and disadvantages. However, it appears for many years that, though Taylorism has its problems, those are greatly outweighed by its obvious advantage over the pure form Craftsmanship system.

Ishikawa deserves to be remembered in the history of management for developing a new system of management that combines all the beneficial ingredients of both systems but avoids all their disadvantages. In effect he created a method of management that is not in conflict with many of the benefits of Taylorism but includes all the elements which give it strength, and, at the same time includes the most desirable aspects of the Craftsmanship approach. There is nothing cultural in such a concept because everything contained in his approach already existed, at least, in part and has worked for centuries in virtually every developed country in the world. Taylorism has never been challenged in the Western world because it has been assumed that Taylorism and Craftsmanship are mutually exclusive and, therefore, incompatible. Ishikawa's recommendations essentially achieve a revolution in management by bringing the 'craftsmanship' element back to groups of people rather than individuals. This is the essence of the Total Quality system.

For historical reasons, most of the organisations in India have, for a long time, been imbibing Western management practices. One of these is Taylor's system of Scientific Management based on which most of the Workshop and Engineering techniques in India have evolved. As a result of blindly following Taylor's teachings, which advocate such a clear distinction between the management and the employees, a barrier based on mistrust and non-involvement, has been erected between these two equally important sections of the organisation. Moreover, as a result, the immense hidden potential of work force, for innovation, creativity and positive contribution to the improvement of performance in different work-areas, has remained neglected and unharnessed. The philosophy of QC respects human dignity and, by humanising activities, motivates employees at the grass-root level to use their brain power instead of only their hands and feet as they have been hitherto using. Through QCs, concern for people is established.
The QC concept enables workers to utilise their intrinsic wisdom and creativity for the work that they are engaged in. QCs help to create a climate in work areas wherein employees voluntarily work together and happily contribute to improving the standard of performance of their activities for their own individual development as well as the organisation's betterment.

People, by being given the opportunity to use their brains, develop their personal capabilities. Employees in the same work area act as a group which creates harmonious human relations and helps develop bonds of brotherhood among them. Common sharing of experiences, knowledge and ideas enables workers to mutually educate themselves. It is a people-building philosophy and not just a people-using one. The operation of QCs provides an opportunity for employees to be recognised by their superiors, other departments and by outsiders.

To satisfy the higher human needs of recognition and self-development

Many of the natural aspirations of every human being, such as the desire for his/her achievements to be recognised, the longing for social recognition and personal development and the need for the opportunity to display one's abilities, etc., tend to be satisfied where well-designed and efficiently-run QCs operate.

According to Hutchins (1992), a successful QC program is part, and only part, of the new philosophy of management called Total Quality and represents an essential ingredient if the full potential of the concept is to be realised. This philosophy, regretfully even today, is, still outside the experience of the vast majority of people in industry and commerce anywhere in the world except Japan. It is the 'people aspect of quality' which provides the sparkle to those organisations who know how people should be treated and it is through people that the breakthroughs and advances can be made. However mechanised we become, people will still be a dominant factor. Even in the highly-automated factories of Japan they are under no illusions as to the importance of this fact. Hutchins emphasises that systems and processes do not motivate people and it is the management style which has created many of the problems of the Western organisations. If people do not really care and if they just do their jobs according to instructions, then no amount of system is going to make any difference.
Unfortunately, it is this side of quality, i.e., the motivational and involvement side, which has proved to be the most difficult aspects to be comprehended by most of the managerial people. One of the key reasons for this failure is that very few of them have ever questioned the fundamentals of the system of management they operate. Most Western developments in job design have only involved cosmetic changes which, because those lack human substance have been difficult to sustain. This includes considerable manifestations of even job enlargement and job enrichment.