Introducing QC Activities
According to JUSE (1970) and Ishikawa (1972), if QCs are properly introduced in an organisation, these will develop rapidly. Often the first step is to expose workers and managers to group improvement activities at Quality Control Circle (QCC) conferences and QCC exchange meetings. However, where any organisation tries to introduce QCs in every work area due to top management’s order, those fail to last long. The best approach is to begin by making the workplace autonomous.

Institutionalisation of QCs
According to Ganapathy, et al. (2002), if an organisation, whether manufacturing or service, is interested in institutionalising this concept, it should be clear about the following:

a. does the organisation need to introduce QCs?

b. is the organisation having the required condition for starting QCs?

c. how should the organisation go about in introducing QCs?

- Is there any need for introducing QCs in the organisation?

For this not only the need but also how far this is relevant and useful in this ever-changing world scenario is to be looked into. These are important aspects as the concept is more than forty years old and everyone should make sure whether it is applicable and useful in this changed environment.

Technological developments have shrunk the world and made it a borderless society. Developments have also made countries interdependent. No country can say that they are self-sufficient. Before the World War II, industrialisation was carried out only in a few nations. Now almost all countries are in the market place with one product or the other. Service industries have also become important in this modernised world. These developments are intensifying competition everyday, sometimes leading to even hyper competition.
With the fast developments, expectations of the people have also gone up and what was considered luxury yesterday has become a necessity today. Developed nations are putting pressure on the developing countries to open up the gates for free trade and banish protectionism. There is no point in debating on this whether it is right or wrong. One has no control over these changes and change, by itself, is the only constant thing in this dynamic world.

This calls for new ways of functioning. Traditional methods will not work any more. There are a number of quality concepts catering to the needs of these ever-changing situations.

Juran et al. (1988) has already given an excellent method of Quality Control long back, whereby he states that it is the responsibility of the top managements to be vigilant and follow the changes that are taking place and will have impact on their organisations and they should take decisions based on such changes. They should decide the future course of action. Thereafter, it will be the responsibility of the middle management to transform those ideas into working plans and evolve systems. Afterwards, it will be the responsibility of the junior management and the workforce to carry out the required changes, adapt to the new systems, maintain standards and continuously improve in their own areas of operations. This is for all, including a new way of working, introducing a new product and adopting a new concept to develop working system.

This gives clarity about functional responsibility at various levels. But this needs a relook now. In this high-tech world, there is an imminent need for quick attention and action. So organisations will have to re-engineer their ways of functioning. Such changes will call for decision-making responsibility at various levels. This will be a continuous process and no one can afford to ignore the importance of that. That means organisations should create an environment and adopt methods to ensure that whatever changes needed for functioning efficiently and effectively to produce results need to be generated immediately.

Anyway, it is clear that there is a need for close-knit organisations. Particularly junior management and workforce, supposed to play a crucial role in the transformation of the organisation, have to be brought close to the senior management. The best and easiest way to do this is by implementing QC concepts in an organisation as an
integral part of Quality Management system, thus, paving the way for an integrated working to make the organisation as best as it could become.

In countries like India, QCs serve dual purpose. One is organisational improvement and the other is improvement in the personal life and living conditions of the workforce. Two important problems confronting India are illiteracy and poverty. In most of the organisations, grass-root level employees are not educated and the places where they dwell are not having congenial atmosphere for their children to get educated properly. QCs can definitely be used to make them think about their personal lives and that of their families and what they have to do for their personal upliftment.

To sum up, it can be said that QCs can be effectively used for improvement not only in the industrial and service sectors but also in homes, educational institutions, both in urban and rural areas. Thus, organisations in India need to institutionalise this concept as this is relevant even now. (Ganapathy, et al., 2002)

- Is the organisation having the required condition for QCs?

Many organisations ignore this important point before taking a major decision in their ways of functioning. Invariably, it results in failure. Whatever may be the intention of the top management, such changes or interventions will not work unless and until persons at all levels accept it. So finding out the condition prevalent is an important step. Taking this for granted has resulted in ultimate failure of such an effort. But without realising, these failures are normally attributed to lack of cooperation from, and understanding of, junior management and workforce. Many go to the extent of attributing to the culture and ethos.

So if the Chief Executive Officer (CEO) himself/herself thought of such an introduction then he/she should first make sure that he/she has adequate knowledge about it. Best way to do this is reading the books on the subject, visiting organisations, which are practising it and also attending programmes organised for this. In case of India, Quality Circle Forum of India (QCFI) is organising conventions every year at the national level and also organises tour for attending international conventions. The regional chapters of the QCFI are also found to be very active in terms of organising varied types of programmes.
The idea may come from some other person in the organisation. In such case, he/she too needs to make himself/herself fully familiar with the concept and it should also be ensured that the CEO gets a similar exposure. Ideas and interest with limited knowledge do not succeed in the long run.

Once this aspect is taken care of, next step is to make sure whether the organisation is having the required atmosphere for successful implementation of this concept. For this, a survey in the organisation by an outside agency, preferably by the QCFI, is advisable. Such step is needed even if the organisation is already practising some other quality concept. It is an assessment of the position, which has to be done periodically for correcting the course of action and effective functioning. An outside competent agency can help to get a realistic picture.

The QCFI in such a survey covers all the departmental heads and a certain percentage of other executives and grass-root level employees. Sampling percentage varies from level to level. The survey tries to find out the personal information about the individuals covered such as age, qualification(s), area(s) of function, how long they are working in the organisation in the particular service or manufacturing unit in the particular department or section. Besides that, their knowledge about the various quality concepts with particular reference to QCs, their interest and willingness to accept such an introduction, their career goals, achievements and convictions, etc., are also required to be considered.

Such a survey will help reveal the condition prevalent and also identify the kind of approach needed for effective implementation. If it is observed that the condition is conducive to implement QCs, then comes the need to address (Ganapathy, et al., 2002)

**How the organisation should they go about in introducing QCs?**

As pointed out earlier, QC is not a stand alone concept and is very much a part of the Quality Management system of an organisation. Thus, it is necessary that the organisation should have a broader quality programme covering everyone in the organisation including the CEO.

Earlier QCs were used apart from TQM. But TQM is not a particular way of functioning. TQM suggests basic conviction an organisation should have for effective
functioning. It is like having customer-driven quality leadership and continuous improvement with actions based on facts, data and analyse, also ensuring participation of all employees with improved two-way communication system (top-to-bottom and bottom-to-top). These all talk about attitudinal change, which need to be brought in every organisation. It does not talk about any particular methodology. Though Deming, Juran, Ishikawa and other leading quality masters have developed different approaches, all of them have insisted upon this fundamental change.

Unfortunately, TQM was adopted as a way of functioning by many organisations without understanding the underlying principles and obviously it did not succeed. Many attribute reasons for failure to the TQM concept. However, the main objective being institutionalisation of QCs, it is better to focus on that.

Prevalent concepts can be divided into two groups.

Quality concepts like 5 S, Kaizen, SMED, JIT/Kanban, etc., talk about improvement of particular aspects. Concepts like Business Process Reengineering, Six Sigma, etc., talk about overall improvement of the organisation. TPM, which was originally meant for defect-free functioning of machines, now talk about Zero Breakdown, Zero Defect, Zero Accident and Zero Pollution. Thus, an organisation may adopt any or all these concepts in their organisation. But introduction of TQM concepts is needed at all levels before trying to implement the QC concept. Quality concepts like QC, 5 S and Kaizen are the basic needs for success of any organisation. Without active involvement of workers, nothing can be achieved. Workplace management and continuous improvement are also essential requirements. (Ganapathy, et al., 2002)

**Steps to introduce QCs**

Introduction of QCs in any organisation involves the steps discussed hereunder.

- **Exposure Programme for senior executives, discussion and decision**

The first step is conducting an awareness programme for all senior executives. Though this may appear to be a very simple step, it is the most difficult step in most of the organisations. For whatever may be the reason, many of the executives do not attend the programme, which affects the progress subsequently. Even if they are aware of this concept, as an organisational activity, they should attend the programme.
A proper survey will enable one to understand the topics to be covered in such a programme and the duration necessary. The executives can be relieved from their work in groups to attend this type of programme. It is advisable to conduct this programme away from the workplace. But organisation should ensure that all executives attend this programme. None can be exempted from this, if the organisation is interested in success. Even if it is held outside, some of the executives either come late or attend only part of the programme. Organisations should ensure that such things do not happen.

In this programme, findings of the survey need to be discussed. What and how much to be revealed can be decided by the CEO. Since the findings relate to the departments headed by these executives, a discussion is needed.

After the programme, the CEO should discuss with his people for a final decision and decide about the action plan. (Ganapathy, et al., 2002)

- **Attend a QC conference/seminar/workshop to hear QC case presentations from other organisations**

In Japan, foremen, workers, and management representatives, promoting QCC activities, attend a conference sponsored by the national QCC headquarters or by any of its branch office to hear the experience of other organisations. QC conferences, etc., may include presentations by various QCCs, as well as talks by professors, consultants, and other promoters of QCCs, discussion groups, and factory tours. Today, seminars on QCs are offered at many places. There are three main types of seminars that are offered to the public. The major contents of such seminars are mentioned below.

- **One-day Introductory Seminar**
  *Introducing the QC concepts *Behavioural aspects of QC *Implementation of a QC program *Functions of the QC groups *QC Techniques *Maintaining QC operations

- **Two/Three-day Leaders’ Seminars**
  *Introducing the QC concepts *Objectives and goals of QC *History of QC *Functions of QC *Conceptual understanding of Motivation, Leadership and
Communication, Participative management and Group Dynamics * QC techniques
* Management presentation * Open Discussion

> Four/Five-day Facilitators’ Seminar
* History of QCs * QC operation * QC Implementation plan * Functions of QC * QC techniques * Training techniques for QC * Conceptual understanding of Motivation, Leadership and Communication, Participative management and Group Dynamics * Coordinator’s role and functions * Maintenance of QC operations * Follow up of QC activities * Promotional activities

Organisations, which intend to use the QC approach, should first send one or two people to an introductory seminar and later, preferably one person, to a facilitators’ seminar. The wealth of knowledge that can be gathered in these seminars helps give QCs a little faster and better start in new organisations. According to Ingle (1985), some organisations in the USA adopted this method in 1979 and 1980 and achieved remarkable progress within a short period of time.

- Design your Own Program

According to Ingle (1985), many organisations in the USA have had informal QCs in operation. Even today, these informal QCs exist in small organisations. When Japanese firms acquire organisation in the USA, they take the help of informal circles. Generally at the end of the shift, the foremen hold daily meetings with the employees. These last about 15 minutes. Problems and suggestions are discussed and analysed. The top management also follows the same system by holding weekly meetings and tries to implement the resulting suggestions as soon as possible. One of the organisations reported that the reject rates were reduced from 140 defects per 100 units to less than 4 to 5 defects per 100 units. One can achieve this type of success only with enthusiastic participation by the entire workforce.

The experts observed that there is noting wrong in the formation of informal circles. Improved efficiency and effectiveness can be achieved by imparting training programmes in statistical techniques so that many problems can be solved systematically and do not reappear. Small organisations, which would not like to form large elaborate formal QC programmes can follow an informal system and still achieve cohesiveness and unity in the organisation.
• **Visit a plant that runs QC activities and learn how QCs were introduced**
According to **Ozeki and Asaka (1996)**, it is important to listen to the stories about the
methods for introducing QCCs and the examples of its implementation, difficulties
and failures. This will help understand what QCCs are and what are the proper
methods for introducing and promoting QCCs.

• **Read books and magazines about QC programme management**
It is necessary to learn about managing QC programmes and activities through books
and articles written by people with experience. Many books are available about QCs
some simple books can be selected to start with. (**Ingle, 1985**)

• **Forming Quality Council/Steering Committee and selection of a Coordinator**
If the final decision is to go ahead with the implementation, then a Quality Council is
to be established. Quality Council and Steering Committee are one and the same. In
case of a QC, it is called Steering Committee, and in case of Five S and Kaizen, it is
called Quality Council.
At this stage or earlier, a Coordinator needs to be identified. He/she will be totally
responsible for the effective implementation of all the quality concepts. He/she should
be a senior executive. (**Ganapathy, et al., 2002**)

• **Working out an action plan**
The Steering Committee should also work out an action plan, i.e., the time frame
within which the concept is to be institutionalised. There are two ways of doing it.
The first way is by starting one or two QCs in each department and gradually
increasing them to cover all employees. The second way is by starting in a particular
area which is very conducive as well as an important one.
Each method has its advantages as well as disadvantages. If it is in all areas, it
becomes straight away an organisation-wide movement. But it is often difficult to
ensure everyone’s participation in the movement. Thus, it is better to be selective.
However, being selective also has its drawbacks as it may make people left out and
feel neglected and later on they may not show enough interest. So this problem needs
to be discussed and taken care of by the executives. The best way to overcome such problem is only by open communication. (Ganapathy, et al., 2002)

- **Trainers and Facilitators**

  Next step is selecting persons in the middle-level from all departments for training. The number of persons depends upon the size of the organisation. It is better to have trainer-cum-facilitator in the initial stage. (Ganapathy, et al., 2002)

- **Exposure programme for workers and staff members**

  Next step is an exposure programme for all grass-root level employees, i.e., staff as well as workers. It is better to cover everyone in the organisation leaving those who have already attended the programme. It needs to be emphasised here that QC is fundamentally an educational process for self-and mutual-development of the grass-root level employees. The very fact that they are grass-root level employees makes it abundantly clear the need for such an educational programme. Obviously, the benefit of such training will go to the organisation. The development aimed at, through QCs, will make them thoughtful and disciplined persons. In the process, that they will have better control over their job execution, which will help not only prevent problems but also continuous improvement.

  This programme needs to be carefully designed. It should explain to them the very fact they are workman due to lesser education, which, in turn, is invariably due to their economic condition. If they and their family want to progress, efforts need to be given only by them and none other can do it. Once the workers are convinced about the need and importance of these aspects in a convincing manner, they should be told how QCs movement can help them in these. They also need to be told that how such an improvement will not only benefit them but also the organisation where they work as it will make them capable persons. The aim of QCs is not just problem solving but problem prevention, leading to better control and improvement of the work carried out.

  Once the programme is over, it should be followed by a question-and-answer session to clarify the doubts. Then the persons who attended should be given a form, which, if
they are interested in QCs, can fill in and give indications of their willingness to become a part of the QCs movement.

The department looking after coordination should collect such forms and maintain a register department-wise and shift-wise. Once sufficient number of persons in an area agrees to such an idea, then QC is to be formed and entrusted to a Facilitator. In the initial stage, the need of a Facilitator is limited. (Ganapathy, et al., 2002)

- **Hold a workplace meeting and discuss starting QCs with employees**

  Discussion is necessary with the people who will be in the first QC. It is important to rely on the advice of the superiors and necessary interactions should be done with the department entrusted with the task of promoting QCs for their support to work out the managerial methods to be followed.

- **Hold a start up meeting to establish a QC in the workplace and discuss how to select a theme**

  First, the leader creates a group of between 6 to 8 people. The group will discuss important workplace matters such as equipment arrangement, safety, compliance with operation standards, and so on. The group draws up a plan consisting of how to survey the measures to resolve the problem, how to ensure effectiveness of the solution, and how to ensure that the problem does not occur.

- **The QC begins work on the selected theme**

  A QC should be started with the theme that has been selected. It should gain experience in terms of the methods for solving problems, applying QC methods, conducting a QC meeting, and delegating responsibility for action steps. (Sharma, 1998)

- **Discuss experience gained from QC activities and how to proceed in the future**

  The people involved reflect on theme selection, problem-solving procedures, effectiveness of meetings, and relations with managers based on their experience in the QC. They also discuss how the QC should conduct itself the future activities. (Udpa, 1992; Sharma, 1998)
- **Seek outside help**

This helps to implement the QC programme effectively and smoothly. Many mistakes that might occur can be avoided with the help of experienced ones. However, since sometimes this type of outside help is unwelcome, great care must be exercised in involving people from outside the organisation. Financial constraints also become critical actors in getting outside help. However, organisations should evaluate the need, objectives, and benefits, and then arrive at a final decision as to whether to rely on internal sources in implementing this programme or such external assistance. In some cases, an organisation might drop this possibility completely because of its traditions and certain influences. *(Udpa, 1992)*

- **Formation of QCs**

Once there is sufficient number of persons for forming a QC, then it can be formed. An ideal condition will be forming a QC with persons within a shift. If the number is less, it is to be found out whether a cohesive group can be formed involving even another area. This is to be done carefully. The other department should be connected functionally and the workers should know the function of their area as well as that of the other area, at least, in general. The idea behind this is that the members should find an identity and should not feel strange in that group and understand what is being discussed and should be able to contribute.

If this arrangement is not possible then a group with persons from different shifts from the same area can form a QC. *(Ganapathy, et al., 2002; Agrawal, 2001; Ingle, 1985)*

In order to ensure that a technique continues to exist, it becomes imperative to have it institutionalised. Many techniques, that were once a rage, did not last long because they were not institutionalised, i.e., they did not get integrated into the organisation's operations. Those who were the motivating force behind the techniques went away from the scene. The newly introduced practices are also losing ground. Thus, after implementing QCs, it is a must to ensure that the concept gets woven unto the fabric of the organisation and becomes self-sustaining or self-generating.
The following are some of the steps, which, if taken, would obviate the chances of the QC movement from facing the same consequence that some of its predecessors had faced.

a. It is necessary that even before QCs are formally initiated by the management, the department that will coordinate the QC activities, has to be identified. Since the departments in any organisation are permanent, within the concerned department, an individual’s name must be decided as the Coordinator for QCs. As the number of QCs increases, a full-time Coordinator may be required. As the task of coordination increases with the growth of QCs, the full-time services of more Coordinators may be called for.

b. In the initial stage of the operation of QCs, assistance for keeping records, using SQC techniques, and preparing case studies for presentation or interacting with other agencies, may be required by the QC members. The Facilitator and the Coordinator have to ensure that timely guidance and help are available to the QC whenever required. According to Udpa (1992), the issue of providing guidance to the QCs becomes very important in India where the level of education is unfortunately low compared to the other industrialised countries.

c. Two registers need to be maintained - one for recording notes of the meetings and the other for recording the progress relating to resolution of individual problems. This ensures the continuity of the QC activities, contributes towards the members’ development, and facilitates ready reference to the activities of the QCs.

d. The Coordinator must ensure timely supply of necessary stationery and arrange for a convenient place for the QCs to meet and take necessary steps to organise Brainstorming sessions and provide other support facilities.

e. A display board at the location where QCs are operating, which gives the names of QC members and leaders, project on hand, date of the next meeting and other details of the QCs, would be useful in many ways. Apart from keeping the employees of the concerned work area informed about the
existence and the activities of the QCs, it acts as a motivation in as much as it draws the attention of visitors from other areas to the QCs.

f. Training programmes with the help of competent faculty members must be organised systematically.

g. News and literature about the working of the QCs in other working areas in the organisation need to be disseminated either verbally or in writing from time to time to motivate employees towards greater achievement.

h. A special newsletter, giving the factual and objective publicity to the activities of the QCs, and/or including those in the organisation’s existing publications are useful. It is noteworthy that the Quarterly Newsletter on QCs being published by BHEL in English is also translated into Hindi, Telegu, Tamil and Kannada for the benefit of the QC members in different regions of the country. Shri Ram Fibres, Telco, L&T, and Escorts are some of the many organisations which bring out special publications on QCs periodically.

i. Meetings of the Steering Committee must be held regularly once in two or three months. This on one hand reflects the top management’s commitment to the concept and, on the other hand, enables prompt remedial action to be taken when any problem coming in the way of active functioning of QCs is perceived.

j. In case of large organisations, ‘Mid-term Presentation’ should be conducted at the departmental level in the presence of the Head of the Department, middle level executives as well as non-members. Different QCs present their case studies. In case of small organisations, separate departmental-level presentations may not be necessary.

k. Presentation of case studies by the QCs before the top management must be organised, at least, once in two or three months. When the number of QCs is large, it may not be feasible for all the case studies of every QC to be presented before the top management in which case the best of the case studies, as finalised by the QC members themselves from each department, could be selected for such a presentation. Regularity of this activity is not only important for recognition but gives opportunities to different
management levels to see for themselves the capability of the workers, thus, strengthening their conviction and faith in the concept.

l. An informal meeting of the coordinators and the QC leaders and deputy leaders for about an hour every month enables timely feedback with regard to any problems and constraints in operation. However, care should be taken so that this does not become a fault-finding exercise but is directed towards identifying weaknesses for corrective action.

m. QCs should organise annual social get-togethers in which senior executives and QC members participate and mingle together in a happy and informal environment. This goes a long way in breaking down the traditional barrier between the management and the workers. This enhances the development, involvement, personal satisfaction and creativity of the QC members.

n. After QCs have been in operation for a year, healthy competition between QCs should be encouraged within the organisation and, in the case of a multi-unit company, between QCs in different divisions. However, care is to be taken that the criteria for assessing the performance of the QCs should be accepted by all the concerned so that no conflicts arise on that account subsequently.

o. Sincerity of purpose on the part of the management in accepting workers as partners to contribute towards improving the total performance of the organisation has to be demonstrated in every possible way.

Udpa (1992), mentions that where QCs are properly institutionalised, as stated above, the QC movement has seen a healthy growth. Where any of these steps is neglected, QCs do not take off the ground at all or they gradually become dormant or inactive until the enthusiasm totally dies out.

QC Development

According to Hutchins (1992), once a QC has been formed, all being well, it will pass through three distinct phases of development to the fourth ultimate stage. Whether or not it ever reaches this final stage is entirely dependent upon the objectives and support of top management and whether the philosophical ideas behind QC have been internalised or not.
Phase 1 - problem solving
During this phase, the QC members will have been trained in simple techniques which will enable them to identify, analyse and solve some of the more pressing problems in their own work area. These problems may in general relate to:
- wastage of materials
- housekeeping problems
- delays, hold-ups, etc.
- inadequate job instructions
- quality
- productivity
- energy consumption
- environmental problems
- handling
- safety
- the quality of work life (QWL)
These are usually the problems that are uppermost in the minds of most employees. At this stage of development, it is not essential for team members to be made aware of policy deployment.

Phase 2 - monitoring and problem solving
After a short span of time, when several of the simpler problems have been resolved and many others have just ‘disappeared’ as a result of other improvements in the work environment, the QC will begin to develop a ‘monitoring’ mentality. By this time, the members must be trained in simple control techniques and must be encouraged to use these techniques to maintain the improvements already made.

Phase 3 - self-improvement and problem solving
There is almost a natural progression to the self-improvement phase from Phase - 2. As the QC begins to mature and most of the techniques taught have been well practised and understood, the confidence of the group will grow considerably. The QC members will also earn wider acceptance from their colleagues in their own and other departments. They will be treated with greater respect and it is the responsibility of management to encourage them and to formulate and deploy appropriate policy. It is about this time that the QC will progress from ‘just solving problems’ to the ‘mentality of seeking ways’ of making improvements. Obviously, this will take longer in some case than others.

Phase 4 - self control
There is a considerable amount of doubt relating to this stage of development of QCs in Western Europe. Whether this stage can be reached at all is much dependent on
both managers and others outside the QCs and the members of the QCs. Until most Western managers make visits to Japan to see for themselves what can be achieved, it is unlikely that they will ever reach this phase. The managers have to get there first and there is still little evidence of any such thing happening.

If the QCs pass through the Phases -1, 2 and 3, they develop maturity and should be seen to be trusted by the management. The organisation should have begun to realise much of the potential of this style of management and must seek ways of both furthering the continuous development of the existing QCs and encouraging new ones. The latter is only a question of continuing that same form of development in case of new groups. But the continuous development of the existing, mature QCs will be breaking fresh ground in most societies and is relatively recent among even those organisations with 20 years of development.

The development of the existing QCs depends upon two factors - internal and external. Initially, it is necessary for the organisation to ensure that such QCs have access to all the information, training aids, and techniques necessary for them to progress when encouraged to do so. They may indulge in self-study. It will be necessary for management consciously to give them help and information, such as quality control data, and access to technical journals relating to their work, and encouragement to attend in-house seminars in order to be kept abreast of the latest developments in their fields. In Japan, there is a direct link between self-education and promotion opportunities.

Externally, QCs should be given the opportunity of communicating with the professional, educational and specialist institutions, and also of making either direct or indirect contact with suppliers when necessary to their activities. They should be permitted to attend conventions such as organised by the National Society of QCs or other national bodies, where they can meet the QC members from other organisations and can trade experiences to help themselves progress in their work.

Opportunities should be created to encourage QC members to participate in self-development activities outside of work as was done in Japan the 1950s. In Japan, there is a direct link between promotion and voluntary engagement with this type of activity. Hopefully, the technical and management institutions will not only respond
to the demand but will also actively engage in encouraging people to return to or undertake the vocational part-time studies.

All this may be seen as little advances at the early stages of development but the best programmes are all planned well in advance. It will be appreciated that if this stage is ever reached. It is then an industrial society fundamentally different from that with which one is so familiar today will be created.

According to Hutchins (1992), many people believe that culture is cast in tables of stones and use this belief as an excuse to avoid attempting change. ‘It will never work here’, and ‘It does not suit our culture’ are frequently heard when TQM or QC's are mentioned. In terms of national culture, there is a vast difference between Japan and the rest of the world. The Japanese were isolated from the civilised world for over 200 years prior to the Meiji restoration in 1868. They are one of the few pure mono-culture races left and their religion, which is a mixture of Buddhism, Confucianism, and Shintoism, also makes them unique. This uniqueness, together with the traditional Japanese culture, is a constant source of fascination to the rest of the world and stories about the strange customs of the Japanese are constantly distorted to make good entertainment in magazines and on television. All this unfortunately clouds the extremely important question, i.e., whether the management concepts, which evolved in such a unique culture, could possibly have any relevance in another culture. Unfortunately, it was the belief that this could not be possible elsewhere even though such concepts were well known to some people.

The reason why QC's work in non-Japanese companies is not because the concept is cross-cultural. There are many company cultures in which Total Quality and its derivates, QC's, most certainly would not work, but these are not national cultures. Those are company-created and those can, and must, be changed. It will not always be easy but it can be done if the will is there. Survival is a strong motivator but only if the threat has been properly identified. QC's do require certain cultural attitudes to exist in an organisation prior to implementation after which those will themselves help create the basic cultural values as those become established and people can see the benefits for themselves.