CHAPTER 6

CONTEMPORARY - CLASSICAL TQM MODEL
- A PROPOSED CONCEPTUAL INTEGRATED TQM MODEL

To Understand Anything is to Find in it Something Which is Our Own – Chinmayananda.
6.1 INTRODUCTION

The ingress of democracy in business enterprise is so deep and severe that the corporate managements started to re-look into the governance of their organizations. The business houses are subject to constant and intense scrutiny and surveillance by the state and society in which they function. The society is becoming growingly unorthodox and non-conformist, and increasingly dynamic and flexible. Even though the business is private it is no longer a private affair, since it is concerned not only with the stockholders, but also is concerned with all the stakeholders including the society as whole. Their freedom to operate is not a licence to abuse. Business is construed and constructed as a community asset and public-in-conduct having its impact on the society, such as human values and national purpose. The corporate responsibility is a vital issue in contemporary business climate and much of its currency comes from the scale and influence of the present day corporate.

Of course, profit is primary concern of any business. Without profit there is no progress, prosperity or not even sustainability. However, there are two over-riding criteria, which assume significance in such a context - the first being the methods employed to achieve profit, which have to be above board, and based on ethical and moral codes. Secondly, having achieved profit, the company must look around for ways and means to return to the society some endowments for the welfare of everyone of the society in which it subsists. The core theme of sound business is its responsibility to society. Matsushita (1984) had adopted that “the mission of a manufacturer is to overcome poverty, to relieve society as a whole from the misery of poverty, and to bring wealth to the society” as an important principle in his enterprise. At the same time, the society needs the dynamism and vitality of business and industry to generate wealth through profit earning, for mutual benefits.
and advantages. Total Quality Management (TQM) plays an important role in earning sustained profit. The success depends on the adoption of an appropriate TQM model in managing quality of business. An honest attempt was made in the present study to provide a comprehensive integrated conceptual TQM model, which would meet the needs of the hour.

6.2 ANALYSIS OF EXISTING TQM MODELS

The existing TQM models – both in Manufacturing and in Service sectors, were numerable in quantity, vast in variety, greatly diversified in concepts, and varied in approaches. The models were either:

- practitioner oriented (Saraph et al. 1989), (Evans et al. 1993), (Black et al. 1995), (Powel 1995), (Ahire 1996 b), (Silvestro 1998), (Joseph et al. 1999 a, b), (Zhang 2000), (Parasuraman et al. 1994), (Sureshchander et al. 2001 b), etc. or,
- quality guru’s perceptions oriented (Crosby 1979), (Ishikawa 1985), (Juran 1986), (Taguchi 1986), (Deming 1992), (Feigenbaum 1983), etc. or,
- the award oriented (NIST 2000), (EFQM 1995), etc. or,
- the individual organization’s policy oriented (Swift et al. 1998), or,
- the standard oriented (BIS 2000), (Dissanayaka et al. 2001).

The extensive and near exhaustive TQM models reviewed in the previous chapters 4 and 5 could be grouped in another way, based on:

- Relationship between Performance and TQM implementation (Shepetuk 1991), (Evans et al. 1993), (Rama 1994), (Madu et al. 1996), (Samson et al. 1999), (Zhang 2000), (Westlund et al. 2001), etc.
- People oriented soft issues of TQM (Hansen 1989), (Rama 1994), (Powell 1995), (Victor 2000), (Ross 1999), etc.
Contextual factors influence on TQM (Benson et al. 1991), (Joseph et al. 1996 b), etc.


Concept of control in the TQM context (Thomas 1965), (Sullivan 1986 a, b), (Whitten et al. 1990), etc.

Difference between being a TQM and a Non-TQM organization (Ahire et al. 1996 b).

Longevity (age) of TQM implementation on Quality (Ahire 1996 a).

Service Culture (Sureshchander 2000 a, b).

Customer perceptions and Service Quality (Parasuraman et al. 1988, 1991, 1994), (Cronin et al. 1992), (Lin et al. 2001), etc.


Service elements like encounters, recovery, incidents, etc (Schonberger et al. 1997).

The TQM models and frameworks had brought-out plenty of quality parameters called factors, critical dimensions, constructs, and elements and so on. All such items could be categorised under three generalized areas such as: Human Resource Development, Manufacturing Systems, and Products / Service Performance. The quality parameters mentioned in the vast quantity of literature, are as listed below.

1. Human Resource Development:
   - Organizational and Corporate Culture, Policy, Philosophy, and Ethical Work Culture.
   - Visionary and Committed Leadership.
   - Customer Focus, Satisfaction / Delight, and Perception.
   - Unionisation of Quality Culture.
   - Society Focus, Social Responsibility, and Impact on Society.
• Supplier Quality Management, and Partnership.
• Education and Training.
• Speaking with Facts, Open and Transparent Communication.
• Focus on Future.

2. Manufacturing Systems:

• Continuous Improvement, and Innovation.
• Zero-Defect Approach.
• Elimination of Waste.
• Process Planning, and Management.
• Role of Quality Department.
• Quality Measurement Systems (SPC, SQC, etc).
• Technology Utilization.
• Customer Need Assessment and Deployment.
• Cycle Time Reduction.
• Benchmarking.
• Quality Data and Reporting / Communication.

3. Products / Service Performance:

• Product and Service Quality Parameters such as:
  o Reliability.
  o Flexibility.
  o Maintainability.
  o Functionability.
  o Efficiency.
  o Profitability.
  o Usability/ Re-usability.
  o Saleability.
  o Integration.
  o Empathy.
  o Tangibles.
Consistency,
Responsiveness,
Assurance.

- Design Quality Management, and Product / Service Design
- Cost of Quality, and Loss to the Society.
- External Interface Measurement.
- Employee Service Quality.
- Operational Performance Measurement.
- Service Culture, and Service-scopes.
- Customer Satisfaction / Delight Measurement.
- Impact on Society.
- Business Results / Performance.
- Product Leadership.
- Creating Value.

The systems, process and techniques would not exist by themselves without the backup of appropriate tools to support them. The analysis of the encyclopedia of contemporary literature on quality management had revealed that quite a few tools were used to enhance, enrich and ensure the quality in every aspect—from design to service. A list of such tools is as follows:

- Quality Function Deployment (QFD).
- Value Engineering (VE).
- Business Process Re-engineering (BPR).
- Concurrent Engineering (CE).
- Flexible Manufacturing System (FMS).
- Single Minute Die Change (SMDC).
- Quality Circle (QC), and Quality Control Circle (QCC).
- Suggestion Scheme (SS).
- Employee Involvement (EI).
Various combinations of assorted tools were advocated by different TQM models in their frameworks.

Though the well elucidated TQM models and frameworks were pragmatic and quite liberal in guiding (the organisations) for the selection and usage of the tools and approaches for TQM implementation, yet, there was certain amount of incompleteness leading to scepticism. There were certain unknown, but definitely not un-knowable missing links / elements, because of which the existing models were
not universally accepted. Such parameters which were hidden in the contemporary literatures, needed to be explored, unearthed and unravelled. The existing TQM models were far from holistic and also had not mapped the entire topography of TQM and hence, were not comprehensive.

6.3 THE NEED FOR A NEW TQM MODEL

The intricate question is 'whether the management should be concerned with what is socially desirable? or, with what is socially desired?'. The contemporary management opted for the latter, resulting in the emergence of a result-oriented and experience-based business institution. Accordingly most of the existing quality management theories / approaches were concerned with quantitative techniques, which did not answer to the first question and hence lacked comprehensiveness. Further, the multiplicity and duplicity of TQM models based on such result-oriented approaches, had added to the confusion and complexity with conflicting views. It made the organization's task of selecting and adopting a model / framework difficult and unsatisfactory. As Woodruff (1994) had put it, 'the challenge is to define, implement, and sustain a simple TQM model'. It required a new thinking style, the thinking for quality (Yusof 2000). Why was a new TQM model required?

Firstly the present TQM models were tools and techniques oriented. Accordingly the concept, approaches and philosophy were technology biased, overlooking the human values. The theme of business enterprise as expected by the society (in which the enterprise existed) had to be 'social well-being, concerned with the 'socially desirable' values rather than the 'socially desired' values. Therefore, it was imperative to have a new TQM model having human values as its core philosophy.
Secondly, the existing TQM models – both in manufacturing and in service – were based on the materialistic-objective-results. These models did not cater to the subjective aspect of the path or the ways and means to achieve the objective and secular motive of earning profit. As Vivekananda (1989) had postulated “that the man should not be judged by the nature of his duties, but by the manner in which he does them”. Therefore, there was a need for a new TQM model, which would incorporate the road map to achieve the primary concern of the business – namely earning profit, but with ethics.

Thirdly, since the TQM models contemplated by the various exponents of quality were anchored on the technology and the objective-results, they suffered an infirmity of not being universal and comprehensive. Lack of values, understanding, and above all lack of vision, was the reason for it. Therefore, there was a compelling need to infuse comprehensive concepts and philosophical approaches into a TQM model, so that it could be adopted universally.

And finally, the existing TQM models were the result of the intellectual judgement coloured by the past experience, which controlled, directed, regulated and disciplined the reaction to the business world. The battery of the factors proposed by such models might not withstand the onslaught of time. The reason being that, the technological advancement and the obsolescence of tools and techniques had been taking place at much faster pace than that was imagined. Therefore, it was necessary to identify and associate the parameters in a new TQM model, which would withstand the passage of time.

Frontiers are no longer frontiers; oceans are no longer safe boundaries. Business is getting globalised and internationalised. Customers are becoming more and more
sophisticated, demanding higher quality. Society is exerting increased pressure for regulatory compliance. Technology is fast advancing and is creating new horizons continuously. Such continuously changing business scenario had been insistently over burdening the enterprises with the intricacies of competitive strategies, core competences, corporate culture, technology integration, etc. The organization had been facing a constantly nagging problem of selecting a suitable TQM model. The materialistic philosophy of life had set such low goals of organization namely money and position in the market. The existing TQM models temporarily suited these concepts, and hence, lacked currency of application, since those models were devoid of inspiration, sense of purpose, and selfless involvement. So, the changed situation demanded a new model, which would incorporate those missing aspects.

The afore-stated compelling demands and requirements for a new TQM model (bridging the gap in the existing TQM models) had provided an immense encouragement for the present research and unqualified impetus for the study to investigate and formulate a comprehensive and universally adoptable TQM model. The present attempt was an ardent and perhaps the first venture in integrating the (human) values of business with the techniques of business. So, developing a macro-vision for creating such a TQM model had become a practical need of the day.

6.4 WISDOM OF INDIAN CLASSICAL SCRIPTURES

There was no need to look to the West or to the East, in getting assistance for creating the much-needed ethical and moral value-based TQM model. One could find abundant idealistic approaches and philosophies in Indian culture. The management systems and philosophies imbibed in Indian Classical Scriptures such
as Sastras, Upanishads, Ramayana, Mahabharata, Bhagavat Gita in Sanskrit and Thirukkural, Aathichudi and Kondraivendran in Tamil were lucid discernment. The classical treatises had enshrined unparalleled management concepts, in a poetic language devoid of modern-day jargons.

Many civilizations and cultures – had risen, blazed and emblazed for some time and slowly died out of existence. On the contrary, Indian Culture, with all its diversity and multiplicity, has not only survived, but also is current because of its strong foundations of moral values. The Indian classical literatures were the icons of strength and stability. However, out of many ancient Indian scriptures, the present study was confined to Thirukkural, Aathichudi and Kondraivendhan, the classical Tamil treatises.

6.5 CLASSICAL VALUES AND CONTEMPORARY METHODS

Management science, even after centuries of development, continues to search for the integrative principles. An integrative principle is a macro-vision that combines all the different aspects of business into a single common social and economical goal. Contemporary (especially Western) management, which was based on experience, research, and experimentation, had perceived management in the objective terms. The secular objectives originally comprised of profit making, had been progressively expanded to include customer service, employee welfare, good neighbourhood, and good citizen polices. However, the expansions had come more as a response for survival (Thandaveswara 1989).

But the world looked at the enterprise as a 'society's instrument for creating wealth for the well-being of the society'. The society also expected the organization to make profit through ethically worthy means. Such expectations of the society had brought
about a change in the thinking of management to incorporate the social responsibility and ethical values into their business. As the ancient tomes, such as Thirukkural, Aathichudi, Kondraivendhan, etc in Tamil, had addressed these concepts and ideologies. A link between ancient culture and modern management had to be perceived and developed which would integrate the classical value systems and contemporary management techniques. A sincere attempt was made in the present study to achieve an integration of classical quality concepts as enshrined in Thirukkural, Aathichudi, and Kondrivendhan and Contemporary TQM techniques, in creating a new model of TQM. It would be an integration of ancient culture and modern management, which would have the benefit of both the past and the present, for the benefit of the future.

6.6 PROPOSED INTEGRATED CONCEPTUAL TQM MODEL

Price (1992 b) had brought out a comparison between a three-legged stool with a pot of profit on it and the management philosophy. The three legs were Technology, Management, and Leadership resting on three foundations namely – People, Systems, and Things. Price also highlighted that if any one of the legs got shortened or the foundation failed the pot would spill out profit, which was a loss for both the society and the organization.

Figs. 6.1 and 6.2 depict the Price's concept of stable and unstable structures of business management respectively.
Another similar and concurrent view came from Imai, (1991) who had divided the business elements into three 'wares' namely – Humanware, Software, and Hardware and called them as three 'building' blocks of business.

The proposed integrated conceptual TQM model was structured in line with the thinking and philosophy of Imai (1991) and Price (1992 b). The proposed model encircles three Domains of Quality, enthroned and crowned with TQM philosophy of Continuous Improvement. The domains constituting the total quality management of business are:

- Quality Of People.
- Quality of Process.
- Quality of Product.
The domains themselves are made up of the following thirteen *Constituents*:

- **Quality Of People Domain:**
  1. Customer.
  2. Shareholder.
  3. Management.
  4. Employee.
  5. Supplier.

- **Quality Of Process Domain:**
  7. Equipment.
  8. Method.

- **Quality of Product Domain:**
  11. Value.
  12. Purpose.
  13. Friendly.

The domains were interconnected with themselves with the links such as:

- **Perception** — between Quality of Product and Quality of People.
- **Planning** — between Quality of People and Quality of Process.
- **Performance** — between Quality of Process and Quality of Product.

All the three domains in turn were integrated with the crown i.e. TQM. The integrating links with TQM are:

- **Integrity** — with Quality of People.
- **Clarity** — with Quality of Process.
- **Credibility** — with Quality of Product.
One could see that the interlinking elements were open-ended creating an endless loop for the continuous improvement.

The thirteen Constituents of the quality domains had contained within themselves the following twenty-seven Elements of Quality:

- **Customer** - 1. Value.
- **Shareholder** - 2. Profit.
- **Management** - 3. Leadership.
- **Supplier** - 5. Assurance.
- **Society** - 6. Friendly.
  - 8. Tooling.
  - 12. Control.
  - 15. Information.
  - 17. Safety.
  - 20. Creation.
- **Purpose** - 22. Function.
  - 23. Fit.
The three domains of Quality, thirteen constituents of domains and the twenty-seven elements of the constituents along with the inter-links and the integrating-links, mapped the entire topography of TQM concepts, philosophies, and approaches. The present attempt was not to create a totally unknown new model but to integrate the classical concepts into the contemporary models. As clarified earlier in chapter 1, the present research was not to re-invent the wheel but to reinforce the wheel to take-on the great expectations of the present and the future business meeting the objectives of the present research. In short, the objective of the present research, in just simple term, was to confirm that the Contemporary TQM is indeed Classical.

The domains are analysed individually along with the inter-links and the integrated model is analysed in detail and it is given in the following paragraphs.

6.6.1 QUALITY OF PEOPLE

The 'Total Quality' could be contained in three domains namely the Quality of People, Process, and Product. The Quality of people (out of the three) is the most important aspect, since, the people alone could control the other domains of quality of process or product. People perceive, plan, and perform the activities of quality management in particular and business in general. People design, select, and operate machineries. People design, manufacture, and service products. Every activity is directly or indirectly connected with the concerned people. There are six stakeholders in business who are covertly or overtly concerned with the
management of the business. The six stakeholders were the six constituents of the
domain of quality of people. As already mentioned, they are:

- Customer.
- Shareholder.
- Management.
- Employee.
- Supplier.
- Society.

An analysis would reveal that the quality of people had been dealt with in the
contemporary literature under the headings Human Resource Development,
Organizational Development, Cultural Change, and so on. It is also true, as Caulcutt
(1993) had asserted that the dis-illusion of TQM was the result of ‘neglect of human
resource’. So, the proponents of quality had advocated one or more of the following
tools to enhance the quality of people:

- Education and Training.
- Employee Empowerment.
- Participative Management.
- Unionisation of Quality Culture.
- Quality Circle.
- Suggestion Scheme.
- Open and Transparent Communication.
- Business Process Re-Engineering.
- Enterprise Resource Planning.
- Supply Chain Management.
The constituents of quality of people (stakeholders) has been analysed and detailed below.

6.6.1.1 CUSTOMER

The most important stakeholder of the business is the Customer, without whom the organization would not survive (Pimblott 1995). The customer’s stake in the business is the value for money that has been paid for the product or service. Almost every modern quality preacher had touched upon the subject of customer under the topics such as: customer focus, customer satisfaction / delight, customer requirements / needs / wants and so on. Sullivan (1986 b) had entertained the voice of customer. Customer perception of quality, customer satisfaction / dissatisfaction, customer satisfaction index, etc. were adequately addressed by the authors like Parasuraman et al. (1985, 1988, 1993, 1994), Deffenbaugh (1993), and Sureshchander et al. (2001 a, b).

Tamil Classical treatises did not lag behind the contemporary literature in addressing the customer’s stake in business – namely the value for money. Kural 754 ‘அம்மவனும் குமாரும் ராமூர்ச்சி வேண்டாம் உள்ள பொருள்’ (Aran eenum inbamum eenum thiranarinthu theethindri vanda porul) had not only addressed the value (Porul) but also insisted that such value should be free from evil or taint, which was not dealt with in the contemporary literature – at least explicitly. Thiruvalluvar had highlighted the adverse effect of ‘negative value’, in Kural 208, by comparing the evil deeds to that of a shadow which would follow relentlessly. The customers would destroy the business if they get ‘negative values’ (Kural 555). Thiruvalluvar also, suggested in Kural 512 that doing business with ‘creative value’ addition would strengthen the business for achieving sustained growth. The couplet of Vettriverkhai
(another book on dharma / social justice) 'வாசியர்க்கு அழ்த்து வாரழயாக இந்தம்' (Vasiyarkku azhlahu valar porul eettal) (Arasu 2000) insisted that the business enterprise should provide 'value' for ensuring continuous and prosperous business. Thus the classical literature qualified the value that the customer should get. "To error is human" might have value in literature, but today's customers would not appreciate and approve. They are not willing to give a second chance, because they have a second choice for them from the competitors. Hence, the only way to retain the valued customers and to create the new ones is by attending to their needs, and also by attending to their complaints effectively (Kural 433). 'தினைதுணியான் குற்றம் வரினும் பாணைதுணியாகக் கொல்லும் பாழியும் நனுவார்' (Thinaithunaiyan kurtram varinum panaithunaiyaak kolver pazhii naanuvaar) which means that even a small / minute complaint has to be treated as a great one and attended to immediately. Such prompt action would enhance the value to, and the confidence of the customer.

Avvaiyar had contributed her part in dealing with the value based on virtue. AC 35 and 38 had advised to desist from doing that of inferior and destructive, (negative values). Aathichudi also insisted to honour the rules of the land and the society (AC 10, 36, 43, 66), by doing virtuous deeds, which would heighten the value to the customer.

Both classical and contemporary literatures had got concurrent views on providing the value for the money that the customer had spent on the product/service. Yet, only the classical treatises advocated the ethical means to add value to the customer, while the modern literature was silent about it (the ways).
The second stakeholder who has invested their money in business - called Shareholder or Owner in some cases, expects high return on investment (ROI) in the form of profit. Every contemporary business management exponent had unanimously agreed that the very purpose and motive of business was to make profit. The classical literature did not dispute the fact that the prime objective of business was to earn profit. In addition to the concurrence of the modern day management experts, the ancient literature had shown the righteous path that had to be followed in making profit. Profit without tears is the motive behind the business.

Kural 31, ‘அய்வு ருத்து வைக்கவும் ருத்து ஆக்கினார் துணிய துணிய சிவோர்ச்சு’ (Chirappueenum selvamum eenum arathinoonngu aakkam yevano uyikkku) means that the wealth earned by means of virtue and with moral values would bring prosperity and fame.

The approach of Thirukkural was based on the ‘end and means’ concept, which was in contrast with the contemporary approach of “end justified the means’. The contemporary management philosophies were result oriented and based on materialistic end-goal. Whereas, the classical school of thinking had given importance to both, the ways / means and the results in their approaches. The element ‘means’ was the core issue differentiating the proposed TQM model from the existing ones.

Thiruvalluvar dealt with the subject of making profit in a ‘righteous’ way in many Kurals. It was reported in Kural 32 that “A man’s adherence to virtue (in earning profit) raises him to great heights and his failure (to do so) brings him down”. Kural 39 brought out the fact that virtuous deeds alone would give true happiness (of
profit), and all else were inglorious bringing unhappiness. It was advised in Kural 463 not to venture into a short-term profit oriented dubious deeds, which in the long run would destroy the business itself. Thiruvalluvar had warned that the wealth (profit) earned in an unfair means and by hurting the society would be destroyed (Kural 283). Kural 555 ‘அலை பட்டு ஆற்றாது அலை அனிய அளிய உருவாக்குத் தோற்று பட்டு’ (Allal pattu aartraathu azhulutha kannere anntre selvathai theikkum padai) has also cautioned that the ‘tears of the troubled people would destroy the wealth earned by unethical means’. Crosby (1984) had described it as ‘Profit without Tears and Quality without Tears’. In fact, Thiruvalluvar contributed quite a few chapters (Athikarams) such as 4, 29, 32, etc. on the subject of righteous ways of creating wealth (profit). Avvaiyar through her Aathichudi verse AC 72 had insisted to be straightforward in doing good (quality) deeds (AC 36).

It is not enough if one does a thing right, but he must do a right thing as well. Here again (in profit making), there were agreements between the classical preachers and the contemporary practitioners of quality. But the later one had not insisted on the righteous means of making profit, which was insistently recommended by the classical scriptures.

6.6.1.3 MANAGEMENT

The next stakeholder in the business is the management, which provides leadership. The leadership of the management is the one who visualizes and determines the business horizons and leads the organization towards the destination. The contemporary literature covered enough of leadership (and management) under the topics like visionary leadership, culture-change of organization, leadership's
commitment to quality, focus on customer, employee, environment and society, etc.

Some of the management's tools adopted for effectiveness were:

- Strategic Planning.
- Business Process Re-engineering.
- Enterprise Resource Planning.
- Lean and Mean (Flat) Management.
- Education and Training.

Avvaiyar compared the leadership, to that of a captainship of a ship without which the ship could not be sailed properly (KV 73). Aathichudi verse AC10 advised the leaders to follow that would be beneficial to the society. AC 87 'இல்லம் துவாய் விளையாட' (Manam thadumaarel), which means that the leaders should not be confused and wavery. The leader should have unfailing energy (KV 86) and purity of mind without cunning thoughts (KV 87).

Thiruvalluvar had stated that the leaders of great stature would think high (Kural 596) and excel by doing rare and excellent deeds (Kural 26), which would bring fame (or disgrace) (Kural 114, 505). Thirukkural had also brought out that the leadership / management should have the following qualities (Kural 382, 383):

- Education (கல்வி kalvi).
- Knowledge (ஏற்று arivu).
- Determination (யுக்கம் yukkam).
- Courage (தொண்டு thunivu).
- Alertness (துண்டமை thungamai).
- Generosity (சேகா eega).
- Fearlessness (நீந்தமை angjamaai).
Thiruvalluvar had emphasized that the resoluteness only would determine the effectiveness of action (Kural 611, 661). Kurals 140, 426, and 637 had advised the leaders that the business should be harmonious with the society and not to be isolated. Disciplined way of working was the key element of success for the leaders and the organizational culture (Kural 131, 137, 138, 202, 208, 664). Thiruvalluvar had advocated that the management should carefully and thoroughly consider the following aspects while planning the business strategy (Kural 631, 675):

- Resources (குற்று porul).
- Equipments (கருவிழ karuvì).
- Technology (ருவினை aruvinai).
- Product (வினை vinaì).
- Appropriate Time (காலம் kaalam).
- Proper Place (இய்வாட iydam).
- Process (சையை chaihai).

The classical theories thus, have not only advocated the organizational leadership/management ethical culture, but also concentrated the moral values of the individual, since the organization (the management) is just a composite of individuals. Whereas, the contemporary theories relied more on the collective organizational culture, and the materialistic leadership qualities.

6.6.1.4 EMPLOYEE

Yet another important stakeholder of business, who transforms the vision and mission into action, is the employee. Employees convert the philosophy and concepts into reality. Some HRD experts place the ‘employees’ above the ‘customers’ in priority, since the employees fulfill the needs of the customers. Nevertheless, it has only highlighted the important role played by the employee in
business. They are the ones, who add value to the input resources and create value added marketable output i.e. the product. The employees expect not just a job and salary but a career, which will give them a place in society with respect and pride. Contemporary literature advocated many tools, methods, approaches and techniques to enhance the employee quality, perceptions, and concepts, some of which are:

- Empowerment.
- Involvement / Participation / Teamwork.
- Quality Circle.
- Satisfaction / Delight.
- Evaluation / Recognition / Rewards.
- Unionization of Quality Culture.
- Suggestion Scheme.
- Education / Training.

While the contemporary literatures propagated the tools, the classical school of thought had advocated the moral, ethical, and disciplined means to perform. The chapters (Athikarams) on virtue, rectitude, conduct, zeal, efficiency, greatness, etc. had extensively dealt with every aspect of the employee qualities and requirements. The Kurals 131, 137, 138, and 202 are also equally applicable for the employees as well, (in addition to the management).

While the supervisory cadre has got many avenues, like QFD, Design of Experiments, Task Force, etc. to show their talents, the employees have got only a few fora like Quality Circle, Suggestion Scheme, and Team Work. Their participation in the management and decision making empowerment are derived from the above activities. Kural 462 குரல் 462 குரல் 462 குரல் 462 குரல் 462 குரல் 462
which means that if a group of people having similar knowledge and skill comes together and works together then there is nothing like impossible’, which is the underlying principle in Quality Circle and Team Work. As for as the selection, entrustment, and empowerment are concerned, many Kurals in Athikarams 51 and 52 overtly dealt with the subject. Kurals 501, 513 recommend the following characteristics for the selection of an employee:

- Virtue (நீர் aram).
- Economic status (முனை porul).
- Hobbies (உடும inbam).
- Safety habits (உரசம yuracham).
- Kind and compassionate (அம்ப anbu).
- Discriminating mind (நீண்ட arivu).
- Greedless (நீள்வ anavaavinmai).
- Decisiveness (தெர்தம thertram).

One should examine the merits and demerits and select the employee based on the relative (advantageous) merits during recruitment (Kural 504, 511). After such selection, one should assign him / her total responsibility and the ownership of the job (Kural 517, 518) with full trust (Kural 508, 519, 510). Such total empowerment, trust, and confidence would provide the employees the much sought after ‘career’ with pride. Such delighted and committed employees would excel in doing their job (Kural 26). Thiruvalluvar had advised the employees to learn thoroughly during education and training, and then implement them (whatever was learned) properly (Kural 391) which is also applicable to every one in the organization.
Avvaiyar had contributed her part in advising the employees not to perform unnatural deeds against rules and regulations (AC 24, 28, 36, 43, 46, 59, etc.) and insisted on not to do harmful evil deeds (AC 35, 38). She had also insisted that the employees should be enthusiastic and without laziness (AC 6, 53, KV 86) and they should learn continuously (AC 70). She had in fact, summed up to do right first time (AC 49 "துவம் சிற்றிக் கையு chaivane thiruntha chai").

The unbridled empowerment by ownership and total freedom of operation would elate the employees in satisfying their ego, which could transcend them to a higher stratum of the Masловian Ladder of Human Need (Price 1992 b). An analysis would reveal that the contemporary TQM practitioners had restricted their studies to the tools of improving the employee participation. The quality requirements of the employees had been treated under organizational and human resource development. But, Thiruvalluvar and Avvaiyar had covered both the tools and the aspects of human values together.

6.6.1.5 SUPPLIER

The next stakeholder in the business is the supplier who is an extension of the organization in the upstream and he expects an assured and sustained business. Whatever applicable to the main business is applicable to the supplier as well, since the supplier also is an organization carrying out business on its own identity. The existing literature addressed the supplier aspect under Supplier Chain Management, Supplier Quality Programme, Partnership approach, and so on.

The classical approaches reviewed so far are as such applicable to the supplier management as well, since both are involved with the same or similar type of activities. The only difference might be in size and the product. Nevertheless, Kural
311 had advised the supplier not to harm the business even for getting profit and fame (short sighted approach); otherwise similar harm would befall on him immediately (Kural 319). The supplier should also treat the troubles of the organization as that of his own (Kural 315). On her part, Avvaiyar advised the supplier to be honest and forthright (AC102 and KV 87) and to be harmonious with the society/world (AC 61, 103). Such a committed and involved partnership in the business would ensure consistent, continuous, and assured business.

The Kurals, Aathichudi, and Kondraivendhan verses had included the nature of business partnership (based on mutual trust and co-operation) for the sustained growth of both the organizations. The modern theories cover the tools to achieve the same. Both classical and contemporary approaches complement each other.

6.6.1.6 SOCIETY

The last constituent but a non-member stakeholder is the society as a whole who demands friendliness from the business. Society acts covertly but powerfully. It supports or threatens the business, depending on whether the business is friendly or otherwise. The friendliness to the society comes from the product, process and the people. The product should be simple and safe to use. Product and process should be eco-friendly. People should be courteous, responsive and responsible to, and concerned for the well being of the society. Many establishments had closed down their business because of the hostile society. Bhopal Chemical plant, South Indian Viscose Unit and opposition to the nuclear plants and waste handling were some of the examples to quote. Contemporary TQM models dealt with the society through the topics like, Environmental Friendliness, Loss to the Society, and so on. The contemporary Standard Management Systems like ISO 9000 and ISO 14000 insist
the organization to ensure the compliance of environment friendliness in managing business, through a set of regulations.

The classical management concepts were based on the 'profit sharing' with the society. The management based on Vedanta and Value systems is expected to find ways and means to return a part of the wealth earned, back to the society as endowment. The noble and lofty objectives of the enterprise should be to serve the society in which the enterprise subsists (Chakraborty 2001). Kural 231 had brought out the concept of sharing wealth with the society. Kurals 1001 to 1010 had highlighted uselessness of the miser's wealth, which was considered as a waste. Kurals 140, 425, 637, and 850 had heightened the importance of being friendly with the society. So, the business would not adopt what the society considered as harmful and evil (Kural 656), otherwise such harm would bounce back on the perpetrator (Kural 204). Kurals 207, 208, and 319 also had advocated similar philosophy. Thiruvalluvar contemplated through Kural 742 that mote of water, an esplanade of land, hills and forests were the fortresses (and of course, the wealth of the nation), which would protect the society and the nation. Hence, they are to be preserved and protected from deterioration and damage. Destroying them would result in destruction of the natural protection, which would expose the society to the design of attack by nature and enemy. Thiruvalluvar had summed up that the enterprise, which promoted social welfare of the society, would be encouraged and patronized for sustained growth (Kural 1025).

Avvaiyar advised the management to do dharma (AC 1) by way of sharing profit with the society (AC 4). Many of her verses were already reviewed regarding the care for the society (AC 44, 65, 66, and KV 48).
Thus, the classical and contemporary approaches for the management of quality and business compliment and support each other in many areas. In the areas of virtue, ethics and moral value-based concepts, the classical approaches supplement the contemporary techniques, which are based on end-result orientation. Quite a few of the approaches are identical, proving that the contemporary concepts are indeed classical. Yet, the contemporary approach followed the 'end justified the means' philosophy, while the classical approach dealt with the 'end and means' concepts (Diaz 2000). But not a single concept of contemporary management is contradictory to any of the classical approaches.

The tools covered by the contemporary quality management models, were deliberately not addressed in the present study. In that way, the user of the proposed TQM model would have a free hand in adopting his own appropriate tools, which in turn would enlarge the applicability of the proposed model (enhancing the comprehensiveness). The domain of Quality of People with its constituents and elements is shown pictorially in Fig. 6.3.

![Quality of People Diagram](image-url)
6.6.2 QUALITY OF PROCESS

The next important domain of TQM is the quality of process. Process is a value adding function, which converts an input into an output with enhanced value. The effectiveness of value addition depends on the effectiveness of the process quality. The process quality is a highly technology and tools oriented, and hence, most of the views expressed by the contemporary theories are congruent with the concepts of classical scriptures. Both ancient and modern approaches are concurrent. Tamil literature, additionally envisaged the ethical routes to achieve the end result, which was invisible in modern quality management theories, but had suggested the following tools to improve the quality of process:

- Strategic Process Planning.
- Enterprise Resource Planning.
- Quality Function Deployment.
- Just In Time.
- Flexible Manufacturing System.
- Computer Integrated Manufacturing.
- Concurrent Engineering.
- Bench Marking.
- Total Productive Maintenance.
- Waste Management.
- Single Minute Die Change.
- Statistical Process Control / Statistical Quality Control.
- Problem Solving Tools (Seven QC tools).
- Kanban.
- Poke-Yoke.
- Five S.
- Six-Sigma Programmes.
ISO 9000 / ISO 14000 certification.

The list of tools gets extended day by day as the technology gets developed.

The Quality of Process domain consists of four constituents and twelve elements within them, and are listed below:

- **Equipment**
  - Machinery
  - Tools
  - Maintenance
- **Method**
  - Procedure
  - Monitoring
  - Control
- **System**
  - Finance
  - Material
  - Information
- **Environment**
  - Conducive
  - Safety
  - Healthy.

The Contemporary literature had dealt with the Quality of Process mostly as a single entity and the constituents were addressed as resources. However, for convenience and better understanding, the Quality of Process had been segmented as mentioned above, in the present study.

### 6.6.2.1 EQUIPMENT

Equipments and machineries are important tools of manufacturing, which many industries relay on as a competitive advantage. The term equipment includes the machinery required for the manufacturing; instruments needed for measurement,
monitoring, and control, of the process/products; and the tooling required for production and maintenance. Maintenance of the machineries, instruments, equipments, and tooling of the plant for optimum utilization and yield was separately identified as an element because of its impacts on quality.

Thiruvalluvar had clubbed together the management of the business resources, equipments, time, place, and the process to manufacture the products (Kural 675). In Kural 631 he had used the terms 'சையாயும், சையும் அறியும்' (chaihaiyum, chaiyyum aruvinaiyum) to distinguish the process from the product and technology as explained earlier. 'சையென்' (vinai) was interpreted as product/act; 'அறியும்' (aruvai) as technology; and 'சையும் அறியும்' (chaiyum aruvinai) as manufacturing methods. 'சையாயும்' (Chaihai) was interpreted as process. Kural 496 had highlighted the importance of selecting and using proper equipment for proper job, by quoting an example – that, the ship could not sail on road, and the chariot would not run on sea (water).

Thiruvalluvar had categorised maintenance into two types i.e. preventive and breakdown maintenance. Kural 788 advised that the breakdown maintenance should be carried out instantly, like the hands reaching out to holdback the clothes when the clothes were about to slip off the body. The timely help in attending to the breakdown would highly be appreciated (Kural 102). Thirukkural also postulated that those wise people, with foresight to adopt preventive maintenance, would not face any shocks of failures (Kural 429). Kural 435 illustrated that it would be like a haystack in front of fire if one did not take preventive measures by anticipation. Thiruvalluvar (Kural 442) insisted on proper solution to the present problem, and prevention of the recurrence of the same problem.
Avvaiyar had, also advised that the maintenance had to be in time (AC 22) and routine, vide special poem 8 ‘நிற்பூ நடையின் நடைப்பக்கங்கள்’ (Nitham nadiyum nadaippazhlaikkam), (Chinnasamy 1999). Thus, the classical treatise addressed the equipments and their maintenance (both breakdown and preventive ones) aspects extensively but covertly through examples. They had emphasized the adoption of the right means in selection / use / maintenance of equipments / instruments for the efficient execution of the job.

6.6.2.2 METHOD

The next constituent of quality of process in manufacturing is the 'Method', comprising three functions namely, Procedure, Monitoring, and Control. The standards such as ISO 9000, ISO 14000, and BS 5750 had devised elaborate systems and methods for compliance. They would demand well-documented procedures with monitoring and control systems for ensuring consistent quality. SPC/SQC, in process inspection, computer integrated quality control, and so on were some of the tools suggested by the contemporary literature for the control of the process / product quality.

Thirukkural suggested to take into account the experience of the learned and skilled while determining the method of manufacturing (Kural 441, 677). Also, the procedure and the process should take care of the obstacles, benefits and reactions before finalizing the method (Kural 676). Since the good performance would lead to all round success as contemplated in Kural 651 ‘செய்துறவு செய்தவ் காண்பவது தொழி’ (Vinai nalam venndia yellaam tharum), the procedure must suggest the best process. Kural 392 and Kondraivendhan verse KV 7 highlighted the importance of
statistical control and the documentation (of process / procedure) by comparing them to the human eyes. So, Aathichudi (AC 7) insisted not to neglect statistical controls.

Thiruvalluvar had strongly recommended the use of quality department which could exercise critical control on the process / product, without which the business might get affected, even without the onslaught of the competitors (Kural 447, 448). Since quality could not be ensured at the end of the process, Kural 111 advocated the continuous control at every stage. The checking and control had to be fair and just, like the balance (Kural 118). Thiruvalluvar had been insistent upon checking and verification (Kural 355, 423), which would avoid uncalled for and unpleasant explanations and experiences (Kural 280). In short Thiruvalluvar had highlighted that it would be harmful if one did what was not to be done or did not do what was to be done in Kural 466 ‘’(Chaiyaththakka alle chaiyakkedum chaithakka chaiyamiyanum kedum). It simply insisted to do what is right and avoid what is wrong.

6.6.2.3 SYSTEM

The third constituent of the quality of process domain is the system. It consists of three systems i.e. financial system, material system, and information system. The financial system in TQM deals with the investment (as a capital resource), generation (profit - ROI), and distribution (endowment) of wealth. The contemporary management theories adopted various strategies like profit sharing and capital resource utilization for the optimal use of wealth. The endowment part of profit sharing with the society was addressed in the classical management.

The material system deals with the management of material resources. The contemporary systems are ERP, JIT, Supply Chain Management, Waste
Management, etc. Thiruvalluvar had used the word 'Porul' to represent both the capital and material resource. Accordingly, the Kurals 631 and 675 had brought out the following critical factors, which should be taken care of by the system.

- **Porul** - Material and Capital.
- **Karuvi** - Equipments / Machineries.
- **Kaalam** - Appropriate Time.
- **Iydam** - Appropriate Place.
- **Vinaï** - Product / Service.
- **Aruvinaiyum** - Technology.
- **Chaihai** - Process / Method.

In addition, Kural 449 declares that, there is no business without capital.

The information management had been well structured to have an open and transparent system in modern quality literature. Thiruvalluvar insisted on flawless and purposeful communication vide Kurals 644 and 645. Avvaiyar had advised not to speak misleading words (AC 78) and not to provide incorrect and non-factual information (AC 14) and sugar coated lies (AC 45).

### 6.6.2.4 ENVIRONMENT

The fourth constituent of the domain of quality of process is the working environment, which should be conducive to perform efficiently, safe and healthy for the comfortable living. The conduciveness includes the workplace conditions, committed management, dedicated employees, participative work culture, and the atmosphere of collective ethical wisdom. The safety and healthy atmosphere comes from clean, hygienic and organized work environment. Such a highly spirited work
place atmosphere would bring out the maximum from the organization, and optimize the resource utilization. The modern tools such as 5-S programmes, Quality Circle, etc. could be utilized to improve the work place. Empowerment, education / training and appropriate appraisal / rewards systems could be used to improve the morale and motivation of the employees.

The leader and the management should be simple, approachable and compassionate for the conducive working atmosphere (Kural 386), which would drive out fear from the employee. According to Kural 501, virtue, wealth, happiness, safety and security for life should be taken care of, for enhancing the conduciveness. Kural 388 entrusted the protection of the employees upon the leadership. The empowerment and other motivating factors had already been addressed earlier in section 6.6.1.4.

To sum up, the contemporary quality models prescribed one or more tools and techniques as implementation frameworks for the process quality. The prescriptions were based on the experience of the practitioners. They were materialistic result oriented. They had skipped the human philosophy and concepts. The ethical means and moral ways to achieve the goals (of process quality improvement) were overlooked in those models. Hence, the contemporary models though modern were not comprehensive. In a highly people oriented society, the modern quality management techniques lacked currency in totality.

On the contrary, the Tamil classical management approaches were based on the human values and philosophy. They suggested the ethical and moral ways to reach the destination. Yet, they have not abandoned any of the techniques and methods.

All the elements of process quality had been adequately dealt with by the classical
advocacies. Hence, the classical quality management concepts are universal and comprehensive. The ancient management approaches might be orthodox, but not outdated. Thus, both the classical and the contemporary models are complimentary and supplementary to each other. The Domain of Quality of Process with all the elements is shown in Fig.6.4.

![Quality of Process Diagram](image)

FIG. 6.4 QUALITY OF PROCESS

6.6.3 QUALITY OF PRODUCT

The third domain of TQM is the Quality of Product consisting of three Constituents namely, Value, Purpose and Friendliness along with nine elements. Quality of Product is a frontline characteristic directly concerned with the customer / society. It
is the first and primary link between the customer and the organization. The vast contemporary literature had brought out the following tools and techniques to enhance the quality of product.

- Quality Function Deployment.
- Design of Experiments.
- Value Engineering.
- Activity Based Costing.
- Loss Function Analysis.
- Failure Mode and Effect Analysis.
- Fault Tree Analysis.
- Old 7 QC Tools.
- Poke-Yoke Approach
- New 7 QC Tools.
- Vendor Development.
- Bench Marking.

Most of the quality management approaches had divided the quality of product under different headings, such as:

- Quality.
- Cost.
- Delivery.
- Safety.
- Service
- Perceived Quality.

The present study had divided the quality of product into three constituents and nine elements. The division was based on the value addition to the product, the intended purpose of the product, and the impact of the product on the customer society. The three constituents with their elements are given below:
Both Contemporary and classical literatures more or less had similar or same approach towards quality of product. They were relying heavily on tools, techniques and systems, some of which were already listed.

Thiruvalluvar’s insistence to produce a product with quality par-excellence (Kural 236) which would be envied by the competitor (Kural 759) highlights the importance of quality of product. In the same tone, he advised not to produce otherwise (bad ones).

6.6.3.1 VALUE

Value addition to the product should start from design and run through production and service. Contemporary literature mainly relied on quality function deployment, design of experiment, customer survey, etc. as modern day tools of designing quality products. Whereas, Avvaiyar and Thiruvalluvar had used poetic language to bring home the same message.

Avvaiyar had advised the designer to learn from many sources like books, literature, etc. (AC 70), and adopt the best (KV 53) while designing. She had cautioned the
designer not to incorporate what was not good (AC 35), and which was against nature (AC 24). She also advised to include aesthetic value in the design (AC 28), and to avoid what was not desirable to the society (AC 66). Kondraivendhan (KV 52) insisted that the designer should give proper weightage even for a minute point. Then, the design should be documented without any error (AC 78).

Thiruvalluvar had commanded that the designers should think great and high (Kural 596) and should not start to indulge in design if the subject and the requirements of the customer were not clear (Kural 491, 494). Kural 475 had pre-supposed the importance of safety by narrating that ‘even the feathers of peacock would break the axle of the cart if over loaded’, providing a caution note to the designers. It would be wise to benchmark the best ones in the field (Kural 443) Thiruvalluvar had categorically advised the designers to translate the requirements of the society and customer, into a product (Kural 140).

The present study adapted the terminology 'create' instead of 'manufacture' or 'produce' since creation is a combination of 'artistic skill' and 'manufacturing technology'. The artisan (as seen in the evolution) takes personal pride in his own creation and follows the dictum 'தன் கையே தந்தைகொண்டு வருக' (Than kaiye thankkudavi) which means that one should rely on his own strength (to assure the quality during production). The contemporary philosophers called such approaches as self-certification or self-inspection. Kural 611 encouraged the employees to produce quality products even if they were difficult to manufacture. Thiruvalluvar also stated that, even if the design was excellent, the quality of the final product depended on the good performance of the employees in producing it (Kural 640).
The entire chapter on Hospitality (Athikaram 81) dealt with the service quality. Kural 35 proposed that the service personnel should treat the troubles / problems of the customer as if they were their own, and attend to them immediately (Kural 788), like a reflex action. The service and the solution to the service problem should be according to the extent of the trouble and the urgency (Kural 948, 949). Kural 86 wanted the service provider to cater not only to the present complaint but also to welcome the new ones as an opportunity to improve (quality). Thiruvalluvar had described the service quality concepts in a poetic language covertly under hospitality, a service oriented activity. Avvaiyar had cautioned the sales / service personnel not to exaggerate the facts (lies) regarding the (quality of) products, and also advised them to speak kindly, courteously, and without hurting (AC 45, 47, 74, 78, 89, 96).

6.6.3.2 PURPOSE

The very purpose of a product is to serve the people in meeting their demands and requirements. Some of the product quality parameters identified (by the quality exponents) to serve the intended purpose are:

- Performance.
- Conformance.
- Features.
- Reliability.
- Durability.
- Serviceability.
- Flexibility.
- Maintainability.
- Portability.
The above-mentioned elements were part of function, fit, and finish, the terms used in the present model. Safety, and other aspects were addressed under the heading ‘friendly’ in the next section 6.6.3.3.

The quality of product is the main feature that the customers and the society are concerned about. The customers see quality in the product as a result of the organizational effort (KV 59). So, as Thiruvalluvar contemplated, the world-class organizations would create products with world-class quality (Kural 26). Kural 975 adduced the same view ‘அழகமப்பெற்று உண்மையான உண்மை அதிகம்படும் உண்மை’ (Perumaiyudayavar aartruvaar aartrim arumaiyudaiya chaiyal), which means that the great people would perform great tasks of excellence.

It was all the more important to produce quality products since; the customer would compare the good and bad qualities of the products and select the product based on the strength of good qualities (Kural 504).

6.6.3.3 FRIENDLY

The third constituent of the domain of quality of product is ‘Friendly’. The product has to be friendly to the customer, user, and the society as a whole. The friendliness comes from simplicity, safety, security, and social / environment protection. So, the product has to be simple to operate, safe to use, and non-pollutant eco-friendly. The society would weigh the pros and cons, merits and demerits of the product before embarking upon as per Kural 511 ‘நெண்றுவதுநெண்றுவது என்று என்று பற்றின் தன்னையா்யதின் வளடு’, (Nanmaiyum theemiyum naadi nalempurintha thanmiyan aalappadum) which means that the society (and the customer / user) would be governed by the beneficial values of the product (including the friendliness) in choosing the product.
The product quality itself might not be sufficient and the service also has to be taken care of. Many business had lost their identities, because of poor service, even though the product quality was good. Hence, even a minor problem has to be attended to immediately, to satisfy the customer (Kural 433). The customer and society-friendly organizations would shun arrogance, anger, and meanness in dealing with the society and the customer (Kural 431) ‘Cherrukkum sinamum chirumaiyum iyellar perukkum perumidham neerthu’. If the product quality is of world-class one, and catering to every needs of the customer / society, then the extreme steps of discarding or down grading the product in the form of ‘seconds sales’ or ‘discount sales’, etc. are redundant and could be avoided (Kural 280). Thiruvalluvar had described the same in a poetic language, instead of jargons.

Analysis of the literature review had revealed that, both the classical and contemporary quality management approaches had consistent and insistent on demand for product quality. The terminologies might have been varying, but the essence was retained in both the philosophies. The core issue of the product quality was the acceptance of the customer, the tolerance of the society, and the approval of the regulatory bodies. The contemporary and classical quality models were synonymous, having unified and concurring views and concepts on product quality.

The Quality of Product domain is depicted in Fig. 6.5
Continuous improvement is the essence of the sustenance of business, which should be taken care of in all TQM models. The three domains of quality, representing the three contributing and controlling factors of business, had to be integrated to complete the model, for providing scope for continuous improvement. Accordingly, the domains of quality were interlinked by three processes, which would
enhance quality continuously. The spiral of improvement of quality could be continuous because of the interlinking factors. The unending and non-stop quality improvement would carry forward the business to a new horizon. The interlinking elements are:

- Perception - between Quality of Product and Quality of People.
- Planning - between Quality of People and Quality of Process.
- Performance - between Quality of Process and Quality of Product.

6.6.4.1 PERCEPTION

The people are linked to the product by 'intellectual perception'. The perception at the conceptual stage fuses the ideas, thoughts, wishes and requirements of the customer, into a vision of business. Hence, perception obviously is the result of the following activities:

- Comprehending the aspirations and needs of the customer, society, and the regulatory compliance requirements, which provide the basic inputs required for conceptualizing the product.
- Anticipating the enhancement of quality requirement by the concerned. It is required, to meet the future requirements of the customer as well.
- Knowing the availability of the resources, which will ensure that the product (quality) is attainable and producible.
- Understanding the culture of the organization and that of the society, which will help in deciding the requirements to meet the cultural needs (both materialistic and ethical) of the business.
- Ensuring long and trouble-free life during entire life-cycle of the product, by predicting, planning, pre-empting, and preventing the possible failures and non-performances.
- Acquiring abundant / adequate knowledge from books and past experiences which will help to visualize the product from conception to competition and beyond.
Documenting flawlessly the design and other aspects, which act as a communication to the other organs of the business. Total clarity is an essential requirement of documentation of what is perceived.

Communicating effectively, whatever perceived and documented, for others to convert the vision into a mission and then into an action to complete the cycle.

Quite a few tools/techniques such as Quality Function Deployment, Design of Experiment, Concurrent Engineering, were recommended by the modern day quality practitioners, to the designers and architects. Matsushita (1984) had postulated, “while scientific methods could be applied in most cases, in the end we have to rely on our intuition. Intuition and science are by no means incompatible. They are like the two wheels of a bicycle; when either is missing, the bicycle could not move”. Matsushita’s (1984) statement had not only highlighted the importance of the art of intuition in shaping the vision of a product, but also had brought out the fact, that the tools alone would not be sufficient for decision making. The perception should be based on the collective wisdom of the people with knowledge, experience, and expertise along with the intuition of the perceiver. Most of the contemporary literature on quality (especially of the West) had not addressed the intuition’ part, but advocated the techniques/tools-oriented and logical/reasoning approaches.

The classical literature did address the ‘intuition’ part as well. Avvaiyar and Thiruvalluvar had covered the subject of the elements of perception in various verses of Aathichudi, Kondraivendhan and Kurals respectively. Avvaiyar’s advise for proper perception was continuous learning (AC 11, 70), fulfilling the needs of society (AC 66) by following good (AC 65) and by avoiding evil (AC 57). The perception should take care of the futuristic requirements also by anticipation (Vetriverkhai Verse 8 – Arasu 2000). Avvaiyar had insisted on the architects of the products to follow the traditional and cultural values (AC 63). The designers should analyze thoroughly (AC
59) and in fair manner (AC 72) without any hesitation (AC 87), prior to embarking upon the requirements of the products quality.

Thiruvalluvar had not lagged behind Avvaiyar, and had advocated to follow the intuition by understanding the various products thoroughly irrespective of its origin before embarking upon it either for adoption or for benchmarking (Kural 355, 423). Thiruvalluvar wanted the architects to be men of clear vision without delusions; vide, 'இருள் வெண்கி வெண்பி பாற்றும் தென்னச்சியிடி மரம் காம் பாலாம்' (Irul neengi inbam payakkum marul neenghi maasaru katchiyavarkku) (Kural 352). He had prompted the designers to take into considerations the knowledge and experience of wise people (Kural 455). The perception should aim high (Kural 596). In short, Thiruvalluvar had summed up in Kural 512 'அரைப்பொற்குக்கு வேலட்சுது யூத்த்வை அர்த்தவன சீந்தர் நீதியைக்' (Vaariperukki velampaduthu yurtravai aaraaivaan chaiha vinai) which advocated to do the acts that would yield continuous profit, and sustained progress with prosperity. Such acts of the visualizers would results in product-excellence, which would be envied even by the competitor (Kural 759). The visionaries were advised to take a decision at the end of consultations and discussions with the experienced and the knowledgeable experts 'சூல்சிமுதுவ் துணுவைத்துநீதிக்' (Soolchi mudivu thuniveythal) (Kural 671). A proverb 'Wisdom flows from the mouth of the righteous' as quoted by Diaz (2000) supported the theory of collective wisdom. At the end, as verse 2 of Vertriverkai — another Tamil book on moral values — (Arasu 2000) had suggested, that the men of such vision who perform the act of perception should communicate clearly for the benefit of all, who would transform their thoughts into action.
6.6.4.2 PLANNING

The link connecting the domains of quality of people and quality of process is 'planning', which converts the perceived vision into a mission for the accomplishment of quality. The planning is the most important activity that will determine the effectiveness of the manufacturing and controlling functions. The efficacy of fulfilling the mission goals of quality management depends on the efficiency of the planning. The planning should take care of the following sub-sects for producing the best results:

- Devising / adopting the best and suitable manufacturing processes which would give a competitive advantage in terms of Cost, Quality, and Productivity.
- Providing appropriate material and other management resources for optimum performance.
- Creating a conducive work place-environment that would motivate and induce the employees to perform at their maximum efficiency. Effectively it would be a factor for the best results.
- Assigning and empowering the employees with appropriate training and education, which would tune them to be creative and innovative.
- Incorporating appropriate and effective monitoring and controlling systems to check that the process is in control. It would provide an opportunity to correct the process and the product, in midstream if it goes off track.
- Providing efficient maintenance mechanisms so that the equipments and machineries perform the way they are intended for. It would ensure the best of sustained productivity and quality.
- Communicating clearly the planned activities to all the concerned in the organization, so that everyone talks the same language in achieving quality.

The planning might incorporate some of the tools/ techniques and methods like Total Productive Maintenance, 5-S Programmes, Poke-Yoke Adoption, Zero-Defect Concept, Cycle-Time Reduction, Quality Circle, Suggestion Scheme, etc. which were
recommended by the contemporary quality management models. The approaches suggested by the modern TQM practitioners were common for quality planning and manufacturing process. Thus, the planning had to be institutionalized.

Thiruvalluvar and Avvaiyar had spoken quite a lot about planning. Kural 467 ‘என்றுற்றுக்குருமும்’ (yennithunika karumum) means, that planning should be meticulous prior to action and performance. Thiruvalluvar had cautioned not to start the action without planning (Kural 464). The planners should also assess the strength of the employees, the requirements of the task to be performed, and then should match them for achieving the best output (Kural 517). The planning had to take into consideration the nature of job, suitable person to do it, and appropriate time to do it (Kural 516, 517). Already the resources planning had been reviewed earlier, in Kurals 631 and 675. The planners (along with the designers) had to evaluate the results (gains), the troubles, and impediments during planning (Kural 676). Avvaiyar had insisted that even a minute element of work had to be planned (KV 52).

6.6.4.3 PERFORMANCE

The 'performance' as the link between the quality of process and quality of product, is action oriented, converting the mission into a reality. The impact of performance would directly be on the customer and the society. In real sense, it is an important link between the organization and the customer. Performance is the frontline feature concerned with the outside world of business. Hence, the performance should be excellent, which could be achieved with some of the following methods as prescribed by both the ancient and modern quality management theories.

- Total commitment of the management for quality.
• Investment on the dedicated and skilled / knowledgeable employees.
• Involvement of the empowered employees.
• Unfailing supply-chain management.
• Effective monitoring and control of the process and product quality.

The customer’s insistence and consistent demand for good quality only would keep the organizational performance on top gear. As the customer is the king, the organization does not have a choice, but to cater to the customer’s needs. Without the customer there would not be any business and no one would be able to help the organization, if it incurs the wrath of the customer (KV 88). Many tools and techniques like in-process controls, statistical quality / process controls, flexible manufacturing systems, etc. could be used for obtaining the best performance during manufacturing.

Self-assessment and self control as contemplated by a Tamil proverb ‘தன் கையே தன்னக்குத்தவிய’ (Thann kaiye thannakkuthavi), which literally means, that ‘one should stand on his own strength’. Since team working would yield synergic-effort, Avvaiyar recommended teamwork in Kondraivendhan (KV 30). Avvaiyar and Thiruvalluvar both had insisted on unfailing and tireless effort in achieving the goal of quality performance (KV 86, AC 6, and Kural 861, 616, and 666). Thiruvalluvar and Avvaiyar had used the word ‘ஒக்கம்’ (ookkam) to represent / mean ‘sustained encouragement and effort’. Kural 640 further clarified that without the executing skill of the employees, quality could not be achieved even if the product was well conceived.

Thiruvalluvar had presupposed that the good quality and poor quality was the result of the good or bad performance (Kural 505). So, one should desist from performing deeds which would not be beneficial (Kural 652). He had summed up, that quality
would be affected by performing an act that should not be done, or by not performing an act that should be performed (Kural 466). So, Avvaiyar had exhorted to do any job perfectly (AC 49) – the Right First Time and Zero-Defect concepts indeed. Thus, the perception, planning, and performance provide an assured end-less and continuous improvement cycle. It is shown in Fig. 6.6. The cycle could be converted into a spiral of continuous quality improvement by elevating and enhancing the quality level after every cycle to next higher strata.

![Continuous Improvement Cycle Diagram](image)

**FIG. 6.6 CONTINUOUS IMPROVEMENT CYCLE**

### 6.6.5 INTEGRATING LINKS

The final set of links that integrates all domains of quality with TQM consists of the following:

- **Integrity** - linking Quality of People domain with TQM.
- **Clarity** - linking Quality of Process domain with TQM.
- **Credibility** - linking Quality of Product domain with TQM.
The integrity determines the ethical work culture and moral responsibility of the organization to the society. The clarity provides synergic and undivided concerted effort in quality management. Finally, the credibility ensures continued support of the customers and the society for progress and prosperity.

### 6.6.5.1 INTEGRITY

The integrity based on ethical culture would determine whether the house becomes a home – a place, where respect, co-operation, trust, care, justice and high performance standards would prevail with principled-standards. Without such moral value based principles and standards, the business would not survive for long in today's highly demanding world. Integrity is based on the culture and culture should be anchored on human values and moral code of conduct. Unfortunately, none of the contemporary TQM models had addressed the absolutely essential aspect of life. However, there was one exception to it – The House of Total Quality model. The original model of Voehl Frank (1992) modified by Lindsay et al. (1997) did include the 'ethical work culture' as a part of the structure of the TQM framework. According to Lindsay and Petrick (1997), 'while the House of Total Quality provides the height and breadth of total quality, the organizational ethical work culture provides the depth'. It indicates that even the modified Voehl's TQM model also does not overtly deal with the integrity, but considers it as an organizational development tool.

Without the ethical work culture the implementation part would be an impossible task. While the contemporary literature was almost silent about the integrity and ethics, the Tamil classical scriptures spoke volumes about those human values. Avvaiyar and Thiruvalluvar had preferred poetic language and used many expressions, some of which are listed below:
Excellence.
Honesty.
Beneficence.
Virtue.
Good manners.
Dharma, Lawliness.
Tradition.
Helpful, Useful Good, Merit.
Greatness.
Pride.
Honourable.
Discipline.
Pleasant.

Avvaiyar had summarized the entire aspect of integrity in 'Chakkra neri nil' (Chakkra neri nil) meaning that one should stand by virtuous laws of the land (AC 43), 'Peedu pera nil' (Peedu pera nil) which means that follow the great-deeds (AC 79). In short she had advised to be honest 'Yuthamanai iru' (AC 102) and insisted that one should be anxious to do virtuous acts (dharma) 'Aram chaiya chaiya virumbu', (AC1), and the act of beneficence (AC 10); by avoiding sinful act (AC 57). One should learn and follow moral and ethical ways in life (KV 53) with purity of thoughts (KV 87).

Kural 32 'Arathinunuku aakkamum iyellai athanai marathalin oonkillai kedu' (Arathinunuku aakkamum iyellai athanai marathalin oonkillai kedu) which means that the integrity would fetch greatness to a person and the absence of it would bring him downfall. Blemish-less mind was the basis of all virtues (Kural 34, 132). "Thoughts and deeds free of envy, greed, wrath and bitter words alone constituted virtue" (Kural
The subject of earning profit in just and fair means had been covered in Kurals 112, 113, 115, and 118.

Technology and the systems are available universally. Even skills and knowledge are not the monopoly of any one. The only distinguishing factor is the integrity of the people concerned based on ethics and morals. Hence, the proposed model had incorporated it overtly as contemplated in Tamil literature.

6.6.5.2 CLARITY

Quality of Process is integrated with TQM by the link 'Clarity', which comprises of:

- Clarity of Thought and Focused Mind.
- Clarity of Documentation.
- Clarity of Communications.
- Clarity of Process and Performance.

The classical and contemporary quality exponents are unanimous and clear in insisting that clarity is important for the effectiveness of any activity. Clarity unifies the divergent and digressing views and actions that would result in synergy and maximize the efficiency. For the clarity of documentation and communication, the Quality Policy Deployment and the Quality Function Deployment were the two of the tools advocated for usage by the contemporary literature.

One should state and mention every thing very clearly (AC 96), without which misinterpretation or in the worst case rumor would prevail upon the truth (KV 24), due to lack of clarity. Thiruvalluvar for his part had devoted at least two chapters entitled 'Avoiding Idle Talk' (Athikaram 20) and 'The Art of Persuasion' (Athikaram 65) on the subject of clarity, covering from focused mind to effective communication.
He also advised the use of appropriate text and vocabulary, which would not give rise to ambiguity (Kural 644, 645) for flawless communication (Kural 647). The clarity of process and performance had been covered in the usage of the terms ‘Vinai thitppam’ and ‘Vinai chaiyal vahai’ under various chapters such as Purity of Action (Athikaram 66), Efficiency of Action (Athikaram 67), Mode of Action (Athikaram 68), etc. He had summed up that ‘people would not start anything without clarity’ (Kural 464). The extensive coverage of the subject – communication - by Thiruvalluvar and Avvaiyar, indicate the importance of ‘clarity’ in establishing effective communication.

6.6.5.3 CRIDIBILITY

The Quality of Product and TQM is integrated with a link called ‘credibility’. The credibility (of the business) with the customer and the society would determine the survival of the organization. Such, everlasting credibility would be built on the following parameters:

- Excellence of the Product Quality.
- Effectiveness of the Service Quality.
- Efficiency of Communication.
- Integrity of the Organization in Expressing the Truth.
- Mutual Trust between the Organization and the Society / Customer.

The excellence of product quality is the result of combined efforts of (quality of) design, process and performance all of which had been elaborately dealt with in previous sections. The strength of credibility is a function of happiness of the customer and the society derived out of harmless and noble deed (Kural 754). Thiruvalluvar had covered extensively the qualities of the service rendered under the
chapters Hospitality (Athikaram 11), and Friendship (Athikaram 79).

Quite a few Kurals had already been reviewed in the preceding paragraphs. The truthfulness and trust had been dealt with in Kural 294 which was translated as "If he lives true to his mind, he lives in the hearts of all mankind". Kural 296 stated that "All the world esteems a truthful man for whom other virtues come without any effort". Kural 299 asserted that "the truthfulness is the best light to illuminate the path of life". Thiruvalluvar vide Kural 787 had brought out the mutual trustworthy friendship between customer and organization; by highlighting the duties of true friends (such as keeping the other friend away from the wrong path and also in helping him to follow the right path). Kural 788 ‘தேவார் மன்னருக்காலை அன்னை அண்மை ஆன்மார் கதாக்கத்து முழு’ (Yudukkai izhlanthavan kaipola aanghe iyudukkai kaivadham natphu), which means that true friendship would help each other like the reflex action of the hand beholding the cloth that was to fall off. Such mutual trust and confidence along with the demand (for quality) of the customer alone would sustain the business. Piecing together the various quality management parameters hitherto reviewed would result in a new TQM model.

6.7 CONTEMPORARY – CLASSICAL TQM MODEL

The three domains, thirteen constituents and twenty-seven elements of total quality management along with the six interconnecting and integrating links were rolled into a model framework. The new TQM model integrates the classical wisdom of Thiruvalluvar and Avvaiyar and the contemporary techniques and approaches of the modern day quality management proponents. The combined model has got the advantages of both the worlds of the past and the present, which would also benefit the future. The new TQM accordingly entitled as Contemporary – Classical TQM
Model, providing justification to both the concepts and philosophies of ancient and modern times. The Contemporary – Classical TQM Model is portrayed in Fig. 6.7.

![Contemporary - Classical TQM Model](image)

**FIG. 6.7 CONTEMPORARY – CLASSICAL TQM MODEL**

### 6.8 SUMMARY

The review and analysis of the enormous amount of contemporary literature on total quality management (TQM) would reveal the following characteristics of the existing TQM models.

The existing TQM models were:
• Prescriptive in nature.
• Practitioner oriented.
• Experience based.
• Techniques and tools biased.
• End result (goal) oriented.
• Materialistic goal based.

The present existing TQM models had extensively dealt with the Hardware and Software but neglected the Humanware. Those contemporary quality management models had either un-covered or under-covered the human value systems. Human value based philosophies and concepts were missing in those models. The modern quality management models had not addressed the following:

- The ethical and moral ways and means of achieving the end results.
- Integrity of the people who manage, perform, and service.
- Culture of individuals.
- Total philosophy of human values.

Because of the above-stated factors, one could conclude, that the existing TQM models were lacking the following aspects:

- Total Comprehensives.
- Universality in Application.
- Futuristic in Currency.

Hence, it is deemed necessary to have a new TQM model. The proposed TQM model aptly named as Contemporary – Classical TQM Model meets the expected requirements. It integrates both the classical philosophies and the contemporary techniques. The contemporary – classical TQM model incorporates the following:
o Hardware, Software, and Humanware, i.e. Quality of People, Quality of Process, and Quality of Product.
o Ethical and Moral ways of Achieving the Targets and Goals.
o Human Value based Philosophies and Concepts.
o Integrity of the People.
o Culture of Individuals.
o Classical Concept and Contemporary Tools.

Since, the proposed quality model is a conceptual model integrating the classical values and modern techniques it meets the requirement of the future as well. Hence, the new TQM model is:

- Comprehensive.
- Universal.
- Having Currency in Future.

The modified The House of Total Quality model (Lindsay et al. 1997) did touch upon the subject of integrity and ethical work culture. Lindsay and Petrick (1997) had, indeed, divided the work culture into six segments:

- Social Darwinism.
- Machiavellianism.
- Popular Conformity.
- Allegiance to the Authority.
- Democratic Participation.
- Principled Integrity.

They had incorporated the ethical work culture (as they had called it as a House of Integrity) in the Voehl TQM model as an organizational development programme, rather than a quality improvement one. It is an institutionalized work culture and not
that of an individual. In fact they had addressed the model as Total Quality Organization Development Model (TQOD) (Lindsay et al. 1997). So, even the modified 'The House of Total Quality' model was not a fully integrated TQM model, but a derivative of the past experience. On the contrary, the proposed contemporary – classical TQM model incorporates the culture of the individuals. Indeed, the organizational values are derived from individual's values. The organizational culture is the derivative of individual culture, in fact a sum total of individual cultures. The nomadic values of individuals were enshrined in Tamil Classical Scriptures – an orthodox system of ethics-in-practice.

To sum up, the new TQM model integrates the classical and the contemporary theories of quality management, ensuring continuous improvement. It combines the past and the present for the use of future. Yet, neither the past and the present are not sacrificed for the sake of future, nor the future is sacrificed for the sake of the past and the present. The new model is a conceptual integrated model and hence is universal and comprehensive. It is, in fact, timeless with futuristic currency. The contemporary models might be modern, but were not current. The classical models might be orthodox, but were not out-dated.

Nevertheless, it is not a re-invention of the wheel, but a reinforcement of the wheel to strengthen it for meeting the challenge of the day. The new TQM model is complementary and supplementary and not contradictory to the existing TQM models. As Chakraborty (2001) had expressed that "Modernity is not its own testimony, nor tradition its own indictment". Both the ancient and the modern approaches on quality could go in harmony and in unison. In short, Contemporary TQM indeed is Classical.
Various Kurals and verses from Aathichudi and Kondraivendhan could be interpreted in many ways at different places to suit the context and the situation, because of their versatility in language having multiple meanings in it. They are quite adaptive and adoptable. That is the richness of knowledge and wisdom they behold. Such a hidden wealth of knowledge embedded deep inside these Tamil treatises were brought to the surface, for the benefit of all those, who care for. The present study was not intended to expose the potentials of the Tamil classicals, but a sincere attempt to explore and experience the Total Quality Management values enshrined and epitomized in Thirukkural, Aathichudi, and Kondrivendhan. As Avvaiyar had asserted, "what has been revealed is only like a handful of earth, and what they conceal and yet to be revealed is like the whole world". However, whatever had been exposed were good enough help for the creation of the new Contemporary - Classical TQM Model.

There was a unanimous agreement amongst all the quality philosophers that TQM is a must for the success of business. Yet, a nagging question is 'Is it sufficient enough or anything else is also required? The answer to the question has been provided in the next chapter.

*Faith is, 'To Believe what you do not see', the Reward of which is, 'you see what you Believed' - Chinmayanandha.*