In a product, quality ensures that the present expectations of the customer are met and the future needs are also incorporated (or shown concern). This futuristic and multi-functional thinking added in developing the product accumulates and results in customer satisfaction and value for money.

In the contemporary market, it is now more important for a company's future to make the customer's experience with the product as easy, enjoyable and enthusiastic as possible. For instance, Swiss knives have multi-functionality and are made in accordance with customer's needs. They have a lifelong warranty on their sharpness and the customer can get it reworked at any of company's outlets worldwide.

Therefore, from the Swiss knife example, we can deduce that quality is freedom for customers to experiment with the product with reinforcement from the producers against any problem/defect that the customer may experience with the product under normal circumstances. But applying quality in a company or an organization is not the work of a single authority; rather, every department has to contribute in equal measures.

Growing numbers of organizations use quality management as a strategic foundation for generating a competitive advantage and improving firm performance. Firms that have won quality awards generally outperform other firms with respect to both income measures and stock market value. One of the main conditions for successful quality practices is to engage everyone in the improvement process.

**Total quality management**

What is total quality management (TQM)? It is a strategy (towards continuous change), it is a philosophy, it is an operationalized process and it is a fad. It becomes a fad if we expect quick results and become disenchanted because we are not "like the Japanese" in the first two months. TQM is a process if we just look at the steps for implementation, but do not look at the major strategic effects. TQM is a philosophy if we do not look at the specific, concrete way it can be used to implement improvements. But TQM is really all of these. It is a strategy toward becoming leading edge and world class. And this type of strategy requires both the philosophical, and the operational aspects. TQM offers all of it, if we can only see beyond the fad. Global companies like Motorola, AT&T and Soleclectron have achieved enormous success with TQM because of their consistent and applied focus with it.

TQM is a philosophy, it is not a setup of some commands that will make machines work; rather, it is a way of doing things altogether different from the simple ways of doing things. TQM requires thinking on the next level, the level of "efficient utilization of all the resources". The philosophy of TQM is filled with ideas and attitudes. Basic to this philosophy is the idea that the only thing certain in life is change. And, we can either wait for the change to happen to us, or we can become an instrumental leader in the changes that will occur anyway. Competitive edge is rampant with changes. The philosophy behind change is one that suggests that we become excited about changes. We look for opportunity to change, especially because change should mean that we are becoming
better. To be a TQM organization is to become an organization that wants to be the best, and realizes that there is always room for improvement.

Need for quality

The major environmental challenges which face the planet require consideration of an uncertain future with a long-term perspective and an acceptance of major changes which will affect our way of life. Seeing the future in terms of a sustainable society with humane behaviour rather than islands of personal wealth insulated from harsh reality is an integral part of that perspective. Other factors that make quality a serious movement are for instance market competition, importance to customer's needs and fulfilling them too, high quality – low-cost battle.

The advance in the area of quality management and development of numerous "statistical" as well as "strategical" tools divert our attention towards the increasing fluid behaviour of market, neck-to-neck competition, consumer behaviour, and other vital standpoints which indicate the success/failure level of a business. A starting effort in line with implementation of quality is the acceptance of 3M (Muda, Muri, and Mura). Out of all these Japanese words, Muda and Mura are for the "waste" and "unevenness". Thus, they represent the waste, which was considered an essential by product of processes half-a-century ago.

The quality philosophy and principles have become central to international business reform efforts in nations such as Canada, Australia, Japan, the USA, and the UK as they seek quality products and services through renewal and restructuring. Quality as a standard is necessarily required in any business endeavour irrespective of the target consumer segment. Thus, it becomes all the more important for the standardization of some important codes (or yardsticks) to help companies find the right path to achieve their own goals in accordance with the best possible satisfaction of customer's requirements. Hence, the International Organization of Standardization (ISO) 9000 standards were introduced in 1987 by the IOS, based in Geneva, Switzerland. The ISO 9000 standards are based on the concept that certain minimum characteristics of a quality management system could be usefully standardized, giving mutual benefit to suppliers and customers, and they focus on process rather than product quality. ISO 9000 is a management control procedure which involves a business documenting the process of design, production and distribution to ensure that the quality of products and services meets the needs of customers.

Quality and productivity

It may seem at first thought that why we should invest in quality when we can in same time focus on producing more to cater to the ever increasing competition which is now omnipresent. A simple explanation to the above fallacy will clear things out. When quality is improved by identifying and eliminating the causes of errors and rework, more usable output is available for the same amount of input labour (or for that matter any input resource), i.e. for the same input resource used for production, the number of saleable units increases.

There is no doubt in stating that there is a divided opinion of the "nature of connection" between productivity and quality among managers. Many managers seem to believe that the effect of quality improvement is decreased productivity. This is because of two reasons: first, an improved product or service may incur a greater use of resources. Second, most of them believe that taking their eye off the productivity in present market conditions can be suicidal.

The main aim of implementing quality in a manufacturing company is cost reduction, and this is realized through fewer rejects and delays, with better use of resources, and hence higher productivity. Thus, in order to become a world class organization, a company will have to take productivity and quality hand-in-hand so as to realize both customer commitments and company goals. Take for instance the internet shopping websites that are prevalent in developed (and even in some developing) countries, these companies
daily witness huge competition in their market segment. Therefore, customer loyalty in this market segment is a crucial survival factor for companies; hence, the customer support and helpline system is quite active. For the slightest mistake, full compensation can be claimed. And companies are happily willing to do whatever they can do to make customers come back in the near future. The overall important aspect is to "make customers feel good and happy about the whole process".

Cost of quality

The cost of quality (COQ) is generally classified into four categories:

1. prevention;
2. appraisal;
3. internal failure; and
4. external failure.

Prevention cost is all of the costs expended to prevent errors from occurring in all functions within a company. They include quality planning cost, new product review cost, process control cost, quality audit cost, supplier quality evaluation cost and training cost. Appraisal cost is the cost incurred to identify poor quality products before shipment to customers. Appraisal costs normally include incoming inspection and testing cost, in-process inspection and testing cost, final inspection and testing cost, accuracy of test equipment cost, inspection and testing of materials and services cost and evaluation of stock cost.

Internal failure cost is the cost associated with defects when found before shipment of the product to the customers. Internal failure costs include scrap cost, loss cost, rework cost, failure analysis cost, 100 per cent sorting inspection cost, reinspection and retesting cost and downgrading cost.

External failure cost is the costs that are associated with defects that are found after shipment of the product to the customers. They may include warranty charges, complaint adjustment, returned material and allowances costs. The COQ is aimed at placing a measure upon current business processes and highlights waste. The COQ itself gets covered under the increase in production which results. Hence, it is a win-win situation for both producers and consumers along with earning the loyalty of customers.

The uses of quality costs can be grouped into four categories.

1. for promoting quality as a business parameter;
2. they give rise to performance measures and facilitating improvement activities;
3. they provide a means for planning and controlling future quality costs; and
4. they act as motivation.

And a quality product does not require any "grounds of Marketing strategies or advertisement to support itself". Calculation of the COQ acts as an indicator of current efficiency of an organization. Reducing the COQ enables the improvement process to unfold without the burden of excessive additional costs.

Securing the future

The principals of TQM are now a recognized characteristic of most of the successful businesses the world over. Customer's changing demands and the need for stringent cost management in fluctuating environments make TQM a practice of paramount importance for every enterprise, big or small. Gone are the days when customers considered price as the main reason for purchasing a product or service.

In the end, we cannot fail to appreciate the importance of TQM in that the company gets admitted into an elite league of companies that have a safe and secure place in the markets of the future world. In this present market situation with an exponentially
advancing technological field, quality is a yardstick that every product will have to
appreciate to go through the labyrinths of market place.

*February 2010.*

This is a shortened version of “Quality follows quality: add quality to the business
and quality will multiply the profits”, which originally appeared in *The TQM Journal*,
Volume 21 Number 5, 2009.

The author is Jaspreet Gill.