Quality streak
by Bob Scarlett

The principles of TQM have inspired devoted followers, but it is unwise to believe that the approach will work for all companies.

The total quality "movement" has captured the imagination of managers, writers, consultants and academics. Total Quality Management (TQM) – a brand name originally coined by PA Consultants – is now encountered in sectors ranging from manufacturing to healthcare and education, and the design and operation of total quality programmes has generated a minor business consulting industry in its own right.

Although TQM is thought to originate in the post-war reconstruction of Japanese industry, the concept came to the fore in the 1980s when Japanese companies came to the UK bringing TQM with them. At the Nissan plant in Sunderland, for example, staff at all levels wore the same company uniform and shared the same dining facilities. Almost all administrative and management staff shared an open-plan office. Many of the British workers, coming from traditional engineering companies, found the approachability of Japanese managers refreshing. This had a profound impact on local people and businesses at the time.

The idea that quality is a critical success factor in business is, of course, not new. The value that a customer derives from a product depends heavily on its quality as well as its technical specification.

If a customer is considering buying a product (whether this is a component, service or a finished good) then they will be influenced by how quickly it can be delivered, how far it can be customised to meet their precise requirements, how reliable it will be and how pleasing its appearance is.

All these issues are relevant to quality. The traditional cost accounting view of quality is that it has a cost composed of two main elements:

- compliance costs – the organisational costs of ensuring that quality is achieved. These include quality inspection, quality training and product sampling;
- conformance costs – the costs of failing to achieve perfect quality. These include the cost of re-working, replacement or rejection by the customer.

There is a trade-off between the two, illustrated by the graph (above) which shows the quality cost structure of a manufacturing operation. In order to achieve 0 per cent defects, compliance costs must be high (£10,000), but these can be reduced as higher levels of defects are accepted. At 0 per cent defects, conformance costs are nil, but these rise as higher levels of defects are accepted. In theory, there is an optimum level of acceptable defects – which in this case is 2 per cent. This occurs at the point where total quality costs (compliance and conformance) are minimised.

The main point of this approach is that quality costs are important and may be the subject of management decisions. They should be specifically identified and reported on by the management accounting system.

Quality costs are not always easy to identify and may be dispersed through the costing system of the whole operation. Furthermore, the long-term implications of poor quality in terms of customer response may not be immediately quantifiable.

One solution is the cost of quality report. This seeks to identify all the costs associated...
with maintaining quality and the costs of failing to do so. Both can be matched against targets and benchmarks to measure performance. Steps taken to maintain quality may include locating technical specialists at the factory site of suppliers.

TQM is not just a body of techniques; it is a philosophy and movement that attracts followers. There are many alternative definitions of TQM, but the central concept is that quality is the key strategic variable in business and it is a variable that is amenable to organisational culture. The idea is that quality should be rooted in the structure of the organisation. It should influence the way the organisation is run and the way that staff are recruited, assessed, promoted and rewarded. The view that quality is something imposed on staff by inspectors is anathema to the TQM movement.

At a recent management seminar by a firm of consultants promoting a TQM model called “Six Sigma”, the presenter, when asked how TQM related to the cost of quality graph, said that TQM does not recognise the idea of compliance costs. The activities that those costs relate to should be immersed in the normal functions of the organisation. Therefore, only conformance costs need be considered – resulting in 0 per cent defects being optimum.

The main principles of a TQM-oriented organisation are:

- Top priority is given to satisfying customers and the organisation is structured to ensure that owners, employees, suppliers and management are all working to achieve this. Managers should act as facilitators rather than controllers.
- People are considered the key internal guarantors of success. Decision-making processes are participative. Management is both visible and accessible.
- Constant change is considered a way of life and the organisation is structured in a way that readily embraces change. That structure is flat, requiring employees to use initiative and communicate directly with customers and suppliers.
- The organisation pursues continuous improvement, not static optimisation. The concept of “an optimum defects level” is entirely alien to TQM. Performance is measured against an external benchmark and not against an internal standard.
- The emphasis is on prevention of problems and faults rather than on detection. Employees have a wide span of activity, but a short span of control.

Achieving and improving quality is the central theme that runs through all of these features. This is particularly relevant in the era of flexible manufacturing when products are highly customised and product life cycles are short. Customer service and product innovation have become major elements in the quality of products.

There are two recurring themes that run through much of the TQM philosophy – “teams” and “empowerment”. Employee empowerment is considered to liberate talents and facilitate the deployment of skills. Teams are considered to improve the co-ordination of functions and skills within the organisation. The co-operative ethic lies at the heart of TQM.

However, 20 years’ experience of TQM has raised some awkward questions. Do employees and management really find “empowerment” liberating? Empirical studies suggest that, in reality, it often amounts to the delegation of additional duties to employees. Limits have to be placed on what employees can do, so empowerment is often associated with rules, bureaucracy and filling in forms. That aside, many employees find that they gain most satisfaction from activities outside their work and are quite happy to confine themselves to doing what they are told while at work.

Do teams contribute to organisational effectiveness? Just calling a group of people who work in the same office a “team” does not make it so. A team requires a high level of co-operation and consensus, something many competitive and motivated people find difficult. It means that every time you want to do anything, you have to communicate with, and seek approval from, fellow team members. In practice, this is likely to involve bureaucracy and form-filling.

Is quality really a function of system? TQM tends to begin with the assumption that variations in quality can be explained by features in the organisational system. The idea is that, by changing the system, you can improve quality. However, it can be argued that TQM merely moves empowerment from management to employees. The latter cannot always be expected to succeed where the former has failed.

Management literature offers many examples of the success of TQM and the benefits that some organisations have obtained from it. However, not all the experiences are good. Many organisations that have attempted TQM have found that it involves a great deal of extra bureaucracy.

Some have found themselves with parallel structures. This happens when a new TQM structure is set up complete with committees and teams, but the old, hierarchical structure – the “real” organisation – remains in place.

One UK study by A T Kearney found that only 20 per cent of organisations which had tried TQM actually reported positive results. A US study put the figure somewhat higher at 30 per cent.

There have been some celebrated failures. Florida Power and Light Company discontinued its TQM programme after employees complained about excessive paperwork. This decision was taken in spite of the com-

“TQM focuses on customer delight, error removal, training and involvement of all employees, visible leadership and the continuous improvement process.”

David Luther, V-P Corning Industries, 1992

Bob Scarlett is a former examiner and an author of CIMA Study Systems

Further reading
A Ghobadian and others, Total Quality Management, CIMA 1998
Bob Scarlett, Value Based Management, CIMA 2001

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