Models and frameworks for total quality management

Early TQM frameworks

In the West the famous American ‘gurus’ of quality management, such as W. Edwards Deming, Joseph M. Juran and Philip B. Crosby, started to try to make sense of the labyrinth of issues involved, including the tremendous competitive performance of Japan’s manufacturing industry. Deming and Juran had contributed to building Japan’s success in the 1950s and 1960s and it was appropriate that they should set down their ideas for how organizations could achieve success.

Deming had 14 points to help management as follows:

1. Create constancy of purpose towards improvement of product and service.
2. Adopt the new philosophy. We can no longer live with commonly accepted levels of delays, mistakes, defective workmanship.
3. Cease dependence on mass inspection. Require instead statistical evidence that quality is built in.
4. End the practice of awarding business on the basis of price tag.
5. Find problems. It is management’s job to work continually on the system.
6. Institute modern methods of training on the job.
7. Institute modern methods of supervision of production workers. The responsibility of foremen must be changed from numbers to quality.
8. Drive out fear, so that everyone may work effectively for the company.
10. Eliminate numerical goals, posters, and slogans for the workforce asking for new levels of productivity without providing methods.
11. Eliminate work standards that prescribe numerical quotas.
12. Remove barriers that stand between the hourly worker and his right to pride of workmanship.
Figure 2.2 shows how the framework’s system connects and integrates the categories. This has three basic elements: organizational profile, system, and information and analysis. The main driver is the senior executive leadership which creates the values, goals and systems, and guides the sustained pursuit of quality and performance objectives. The system includes a set of well-defined and well-designed processes for meeting the organization’s direction and performance requirements. Measures of progress provide a results-oriented basis for channeling actions to deliver ever-improving customer values and organization performance. The overall goal is the delivery of customer satisfaction and market success leading, in
The EFQM publication for the new millennium of the so-called ‘Excellence Model’ captures much of this learning and provides a framework which organizations can use to follow ten new steps:

1. Set direction through leadership.
2. Establish the results they want to achieve.
3. Establish and drive policy and strategy.
4. Set up and manage appropriately their approach to processes, people, partnerships and resources.
5. Deploy the approaches to ensure achievement of the policies, strategies and thereby the results.
6. Assess the ‘business’ performance, in terms of customers, their own people and society results.
7. Assess the achievements of key performance results.
8. Review performance for strengths and areas for improvement.
9. Innovate to deliver performance improvements.
10. Learn more about the effects of the enablers on the results.

The four Ps and three Cs of TQM – a new model for TQM

We have seen in Chapter 1 how processes are the key to delivering quality of products and services to customers. It is clear from Figure 2.4 that processes are a key linkage between the enablers of planning (leadership driving policy and strategy, partnerships and resources), through people into the performance (measured by people, society, customers, and key outcomes).

These 'four Ps' form the basis of a simple model for TQM and provide the 'hard management necessities' to take organizations successfully into the twenty-first century. These form the structure of the remainder of this book.

From the early TQM frameworks, however, we must not underestimate the importance of the three Cs – Culture, Communication and Commitment. The new TQM model is complete
when these ‘soft outcomes’ are integrated into the four P’s framework to move organizations successfully forward (Figure 2.5).

This new TQM model, based on all the excellent work done during the last century, provides a simple framework for excellent performance, covering all angles and aspects of an organization and its operation.

Performance is achieved, using a business excellence approach, and by planning the involvement of people in the improvement of processes. This has to include:

- **Planning** – the development and deployment of policies and strategies; setting up appropriate partnerships and resources; and designing in quality.
- **Performance** – establishing a performance measure framework – a ‘balanced scorecard’ for the organization; carrying out self-assessment, audits, reviews and benchmarking.
- **Processes** – understanding, management, design and redesign; quality management systems; continuous improvement.
- **People** – managing the human resources; culture change; teamwork; communications; innovation and learning.

Wrapping around all this to ensure successful implementation is, of course, effective leadership and commitment, the subject of the next chapter.
Case Application and Practice (2)

Motorola is known as a company that saved itself. They are one of the companies mentioned in the 1980 television documentary on productivity, *If Japan Can, Why Can’t We*? This program illustrated the quality and productivity problems of numerous companies.

In the 1970s, Motorola produced television sets with a defect rate of 150 defects per 100 sets. In 1974, Motorola sold their television plant to Mitsushita. Using the same American labor force and Japanese quality management techniques, television sets were produced with an average of only 4 defects per 100 sets.

Motorola continued to produce two-way radios, pagers, cellular radiotelephones, and other electronic communication systems. In the 1980s, customers complained that Motorola’s paging systems were not meeting quality standards; Japanese-made pagers were. Top Motorola executives could either continue losing customers and market share to Japan, as they did in consumer electronics during the 1970s, or they could develop a new company culture and insist on TQM.

Motorola restated company goals for quality improvement of processes, global market share, and employee involvement. They invested heavily in training, with each employee (top-down) required to take a minimum of forty hours of training each year. They promoted a quality culture by providing workers with a greater degree of job security. Employees are no longer fearful of making suggestions or even suggesting ways to eliminate their own jobs.

1. Giving people authority to make decisions and take actions does not mean they will make good decisions. How or what can be done to help? Why is removing fear helpful?
2. Managers basically want their company to do well. Why do many managers drift away from TQM or fail to implement basic elements of TQM?
3. What motivated Motorola to change? Why could they do it when other companies have failed?