

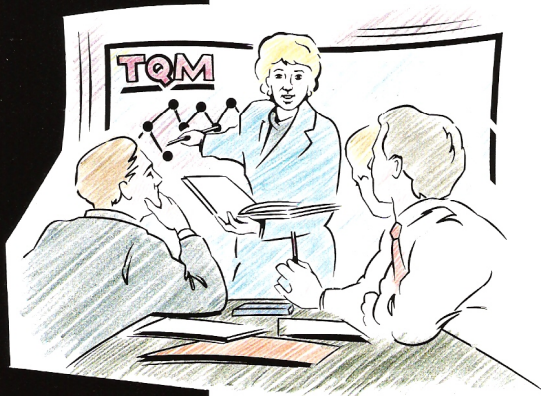
OPEN LEARNING

Improved Performance and satisfaction with Total Quality Management

DOWTY SEALS' CUSTOMER PROGRAMME

The Background

Dowty Seals is the UK's leading manufacturer of fluid seals and sealing systems, sold world-wide to a variety of industries, from aerospace to pharmaceuticals. The company has a reputation for high quality, but in the current climate, where customers tend to identify and remain with a single supplier, a 'preferred partner', Dowty Seals recognised the need to stay ahead by offering consistently high standards at the lowest possible cost.



The directors recognised that quality would be the major competitive factor in the 1990s and that by adopting the principles of Total Quality Management (TQM) it would help the company maintain its lead. The demand for continually improving quality standards is created by the consumer, and by greater competition in the market place. And the

increasing complexity of products, such as cars, requires an exceptionally low failure rate of components if the final assembled product is to perform as designed.

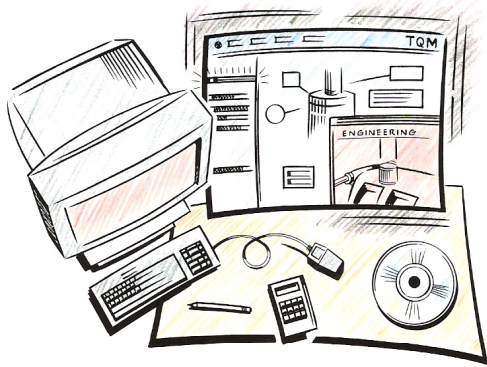
To satisfy these market needs, Dowty Seals' directors decided to build quality into the production process - a much more cost effective and reliable solution than seeking good quality through inspection and rejection.



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Inspection-based quality is expensive in human resources and in the generation of scrap, especially as the process advances. Quality failures cost the company not only in terms of inspection, but also in scrap and rework, rejects from customers, loss of customer confidence and, ultimately, loss of business.

The ethos underlying the introduction of TQM is to work to satisfy customers' requirements. If each member in the production process, from director to, eventually, the sales person, is seen as a supplier and the next person in the line as the customer, then a continual quality objective becomes apparent. It was quickly realised that *all* employees needed training in the TQM approach, starting with the directors and cascading down through the company. Dowty Seals' approach to meeting their business needs attracted the attention and enthusiastic support of the Employment Department, which subsequently provided part funding.

The Training Solution

TQM at Dowty Seals has been a company-led project, assisted by an external consultant to advise on programme design and to produce some specific learning materials. The early steps in the design of the programme involved a small team of directors and senior managers working with the consultant. The training method chosen as being most appropriate to

the needs of the business was open and flexible learning, supported by direct training. Open learning offered a unique opportunity to have training materials specially written for the company so that the staff would be able to see a direct relevance to their specific job. A major part of the programme was to redefine the role of everyone in the company and subsequently produce standards of performance for all employees.

The Format

To begin the process every employee received a short brochure and audio tape outlining the approach the company was adopting. Two specific open learning manuals were devised, one for all managers and supervisors and a second version with less complex information for all remaining workers. Also produced were a techniques manual and a trainers' guide to help facilitate the introduction of the programme and the application of specific techniques such as brainstorming and the use of simple statistics. Computer based and interactive video were used to encourage users to learn and develop skills in statistical process control, thereby creating a safe environment in which to practise what is traditionally a difficult subject to learn. The computer uses a laser disc which stores a wide range of exercises and visual displays, giving a high degree of reality. Other advantages are that, as with other open learning materials, the student controls the pace of learning and so in this case can be exposed to many more statistical examples than would be possible in a similar time at the workplace.

It was decided to conduct all training in small groups to encourage the feeling of involvement and reinforce the importance of individual responsibility for work. Initially,

trainers were trained themselves, in a series of extremely popular workshops. The improvement in communication was noticed almost immediately. Detailed aspects of training in the Customer Programme were then introduced throughout the company, using open learning materials in small work groups. Each member was given a personal copy of the learning materials and after discussion agreed progress targets were set. Users could either work by themselves or with one or two others, the learning reinforced by frequent meetings to discuss any difficulties. Fresh targets were continually set. The supervisor or manager acted as tutor, creating an intimate and safe learning environment for all participants. Specialist help could be sought from the company's newly appointed Total Quality Manager.

The Benefits

Improved quality

After the initial training, work groups could move on to identify and tackle particular quality problems in their own work area. By repeating this process across the company, quality levels improved and productivity increased.

Improved performance

Each work group, including all areas from administration to manufacturing, chose its own quality indicators-such as monitoring the number of quotations for customers outstanding for more than one day, or measuring a department's reject rate. There was a steady improvement in performance throughout the company.

Cost saving

The financial saving is cumulative, since the introduction of TQM throughout a company takes time and the emphasis on training is high. The overall cost saving for Dowty Seals was £200,000 in the first year, expected to rise to more than £900,000 in the second year.

Improved customer relations

The real saving for the company is with the customers. The response from customers has been very positive and customer complaints and returns decreased at a very early stage of the programme. Dowty Seals has already received several commendations for its programme and the resulting improvement in service.

The Future

Now that the TQM programme is well under way, the company recognises that it can no longer risk jeopardising its own quality because of supplier inconsistency. Consequently, Dowty Seals has now embarked on a supplier involvement programme, inviting suppliers to attend one-day presentations designed to help them meet Dowty Seals' required standards.

