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Introduction



According to Phil Crosby the study of quality has a lot in common with sex! Everyone wants more of it (under certain conditions); everyone believes they understand it (even if they can't explain it); everyone thinks they're good at it (another case of delusions of adequacy?); and of course we all believe that any problems are caused by other people.

It is difficult to have a meaningful discussion on sex, quality or any other complex subject until some basic assumptions are clarified. That is what this chapter is about. Read it and you will not only have a much better understanding of what quality is all about but also some useful ideas that you can apply. Alas I can't claim that it will improve your sex life!

Ask a group of people to name a quality product and the likelihood is that they will mention Rolex, Rolls Royce or Prada. This is because there is a tendency to measure quality in terms of price and prestige. The implications of this are that most people, unable to afford such luxuries, are deprived of quality. Yet there are many mid-price quality products available such as Tissot watches and Skoda cars (once the byword for junk on wheels). What we have to do is measure quality not in terms of price or prestige but relative to fitness for purpose; does the product or service do what we want it to do and is it accessible in terms of price and availability?

I chose 1980 as the starting point for theories in this section because; despite earlier work by many writers, it was in an interview with William Edwards Deming on NBC TV in 1980 that sparked off the so-called quality revolution. In the interview Deming was asked why America couldn't catch up with Japan in terms of manufacturing quality products. He warned the American public that he wasn't aware that Japan was waiting to be caught.

Good luck

Theory Sixty Eight

Deming's Seven Deadly Diseases

Use this to diagnose the most likely disease that your organisation is suffering from.

The core of Deming's work is what he referred to as the Deadly Diseases that had infected western industry.

Deming's seven deadly diseases are:

- A lack of constancy of purpose, which creates organisations that have no long-range strategy for staying in business.
- An emphasis on short-term profits, which undermines quality and productivity.
- Evaluating performance by using merit rating or annual review systems, which nurture inter-organisation rivalry and destroys teamwork.
- Mobility of management, which leads to a lack of understanding about the organisation and a reluctance to follow through on long-term objectives.
- Running the organisation on visible figures alone, which fails to recognise the importance of unknown and unknowable figures such as the 'multiplier' effect of a happy customer.
- Excessive medical costs for employee health care, which leads to an increase in the final cost of goods or services (he was writing about the USA).
- Excessive warranty costs arising from customer dissatisfaction with goods or services.

Deming argued that the above could only be tackled by effective management that demonstrated a commitment to quality, communicated the quality message to staff and recognised the need to create a belief in total quality management throughout its workforce.

How to Use It

- To tackle the seven deadly diseases develop a plan for where you want to be in 3–5 years' time (see Section 7).
- Resist short-term thinking that might be advocated by others in the organisation. For example, reducing expenditure on training and development will boost profits in the short term. But where will that leave you three years down the line?
- Ask yourself, does our performance system reward outputs or outcomes? Outputs are what you produce, outcomes are how your customers feel about your product. There are many unknowable figures such as the 'multiplier' effect which occurs when a happy customer not only buys your product again but tells friends and family about it. Just because such figures are unknowable or can't be calculated doesn't mean you can ignore them.
- As for job-hopping managers, don't worry about them. Within every organisation there are a group of managers who are committed to the organisation. They are the middle managers who know that the grass isn't always greener elsewhere. They can deliver the organisation's long-term plans provided they are given the opportunity and not treated as dinosaurs by management.
- The final two diseases have been made worse by the litigious society which believes if there's blame there's a claim. Protect your staff, the organisation and yourself by eliminating the cause of legal claims and remove the causes of complaints by producing high-quality goods that are fit for purpose (see Theory 69).

Questions to Ask

- Is my organisation infected by one of the diseases?
- Do I see the cure as everyone's responsibility or restricted to the quality control team?

Theory Sixty nine

Juran's Quality Trilogy

Use to avoid losing customers because of poor quality.

Joe Juran is one of the founding fathers of Total Quality Management (TQM). He was an early proponent of benchmarking and quality costing and helped popularise the Pareto principle (see Theory 81).

He is best remembered for developing the quality trilogy which is composed of three managerial processes.



- Quality planning identifies who the organisation's customers are and determines their needs. This information is then used to create processes that can produce the product or service that fully satisfies the customer's needs.
- Quality improvement involves establishing the infrastructure needed for quality improvement. The first step is to identify the key 'production workers' and provide them with the resources, training and motivation required to be effective/successful.
- Quality control measures quality performance against expectations, identifying where the gaps are and acting to rectify any deficiencies.

Juran considered that management were the cause of most quality-related problems. He cited their failure to identify the needs of customers (see *Theories 8 and 71*) and not having the right people and processes in place to meet these needs even when they are identified as the source of most quality problems (see *Theory 63*).

How to Use It

- Collect data on which activities cause problems, then analyse the activity to identify the root cause of the problem. It's uncanny how often Pareto's 80–20 rule applies (see *Theory 81*). You will find that 80% of your quality-related problems can be attributed to around 20% of your organisation's activities.
- Pull together a quality team (sometimes referred to as Forums or Circles) (see Section 6) that will drive your quality improvement programme forward. Choose people who are enthusiastic about improving quality.
- Remember that although you may be the one who is the driving force behind the quality improvement project, quality is an organisation-wide issue and it's unlikely that you can tackle the problem without support from other managers. Build alliances (see *Theories 55 and 62*).
- Provide the team with the resources, training and skills they need to do the job (see Section 4). Resourcing quality improvement programmes can be expensive but the alternative is a reputation for poor quality, lost orders and complaints.
- Talk to your customers about what they expect from your products/services. Are you meeting or, as Peters suggests, exceeding their expectations (see *Theory 71*)? If not, find out why?
- Celebrate successes, no matter how small. The cumulative impact of many small improvements can be significant and will generate enthusiasm for further improvements (see *Theory 73*).

Questions to Ask

- Have I got any quality champions within my team?
- Have I built alliances with other managers across the organisation as a prelude to implementing a quality programme?

Theory Seventy

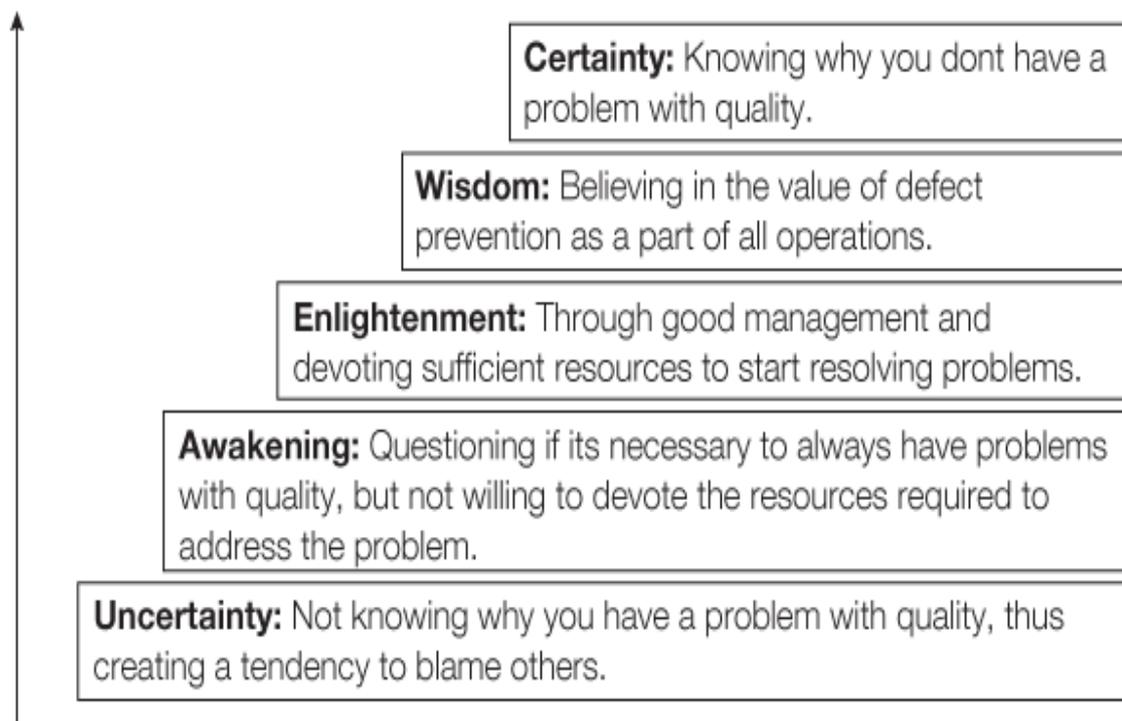
Crosby's Maturity Grid

Use this to understand the stages you and your team need to go through to establish a quality programme.

In Quality is Free Phil Crosby discussed the costs, in terms of warranty claims and poor public relations, to organisations of providing poor-quality goods. He argued that an organisation that established a quality programme would make savings that would more than cover the cost of any such programme.

Underpinning Crosby's belief was the principle of 'do it right the first time', which he felt was only achieved when an organisation reached a level of operational maturity. To achieve maturity organisations/individuals go through five stages.

Wisdom and certainty



Ignorance and uncertainty

How to Use It

- Build alliances with other managers who are interested in improving quality.
- Take stock of where you are and get as many people as possible in your team/organisation to complete the Maturity Grid in Quality is Free or online.
- Don't be surprised if the general view is that you are in the early stages of maturity. Moving from unconscious incompetence (doing things wrong and not knowing it) to conscious incompetence (still doing things wrong but knowing it) is the first step that you and your staff need to take. The second and third steps are to accept that most things don't work as they are supposed to and that problems breed problems. It is only when everyone accepts the reality of the situation that you can deal with the problem.
- Before you can eradicate any problem it's essential that you accurately identify the cause of the problem (see Theory 72). It only takes one bit of bad data to compromise the integrity of the whole procedure so check and verify all data as you receive it.
- Don't rely on just statistical data in your analysis. Find out how people feel about the problem.
- Only when you fully understand the problem, and have the resources to solve it, should you take action.
- Define your customer's requirements, agree performance standards in advance and then let nothing stand in your way as you deliver them.
- Once the new system is installed, monitor the level of complaints and adjust the system as required.

Questions to Ask

- Does my team see quality improvement as a significant issue?
- Does my team see quality improvement as a one-off task or a continuous process?

Theory Seventy One

Peters, Waterman and Austin's Excellence Model

Use this model to identify the features of an excellent organisation.

Tom Peters, Bob Waterman and Nancy Austin identified concern with the production of quality products as a fundamental feature of excellent companies.

The Eight Prerequisites That are Essential for Managing Quality Are:

- A bias for action: Encourage active decision making using cross-functional teams that include staff, customers and suppliers.
- Staying close to the customer: An ability to identify what your customers want.
- Autonomy and entrepreneurship: A willingness to foster innovation and nurture 'quality champions' throughout the organisation.
- Productivity through people: A willingness to treat all employees as a source of quality and to respect, involve and empower them.
- Hands-on, value-driven: Management should show its commitment to quality at all times and adopt a management philosophy that reflects this.
- Stick to the knitting: Stay close to the business that the organisation knows about and has expertise in.
- Simple form, lean staff: Develop simple organisational structures with a minimum of senior staff.

In 1985 Peters and Austin summarised their thinking on excellence as a concern for customers, a willingness to innovate, a well-motivated staff and a management and leadership consumed with a passion for excellence.

How to Use It

- Listen to your customers. Get to know them and what they want. Be sensitive to their changing needs and seek to deliver what they want before they even ask for it.
- Establish a cross-functional team with representatives from staff, customers and suppliers to examine how your service to customers can be improved.
- Remember your customers may be internal or external.
- Support innovation and enterprise in the organisation. Identify and nurture those people who have a passion for excellence and want to improve quality throughout the organisation.
- See all employees as a potential source of quality and unlike the typical hard-nosed task-centred manager (see Theories 12 and 13) treat them with respect. Involve them in decision making and empower them to do their job. Do this and productivity and quality will improve.
- Show your commitment to quality at all times and adopt a management philosophy that reflects this. Be a 'hands-on boss' not an 'absent landlord' (see Theories 19–22).
- To get the most from staff encourage them to use their discretion within clearly defined parameters. Provided they act in good faith never criticise staff for trying and failing (see Section 3).
- Stick to what you know best.
- Keep organisational structures and systems simple. It's complexity that causes cock-ups.

Questions to Ask

- Who are my customers?
- What are their true needs and expectations?

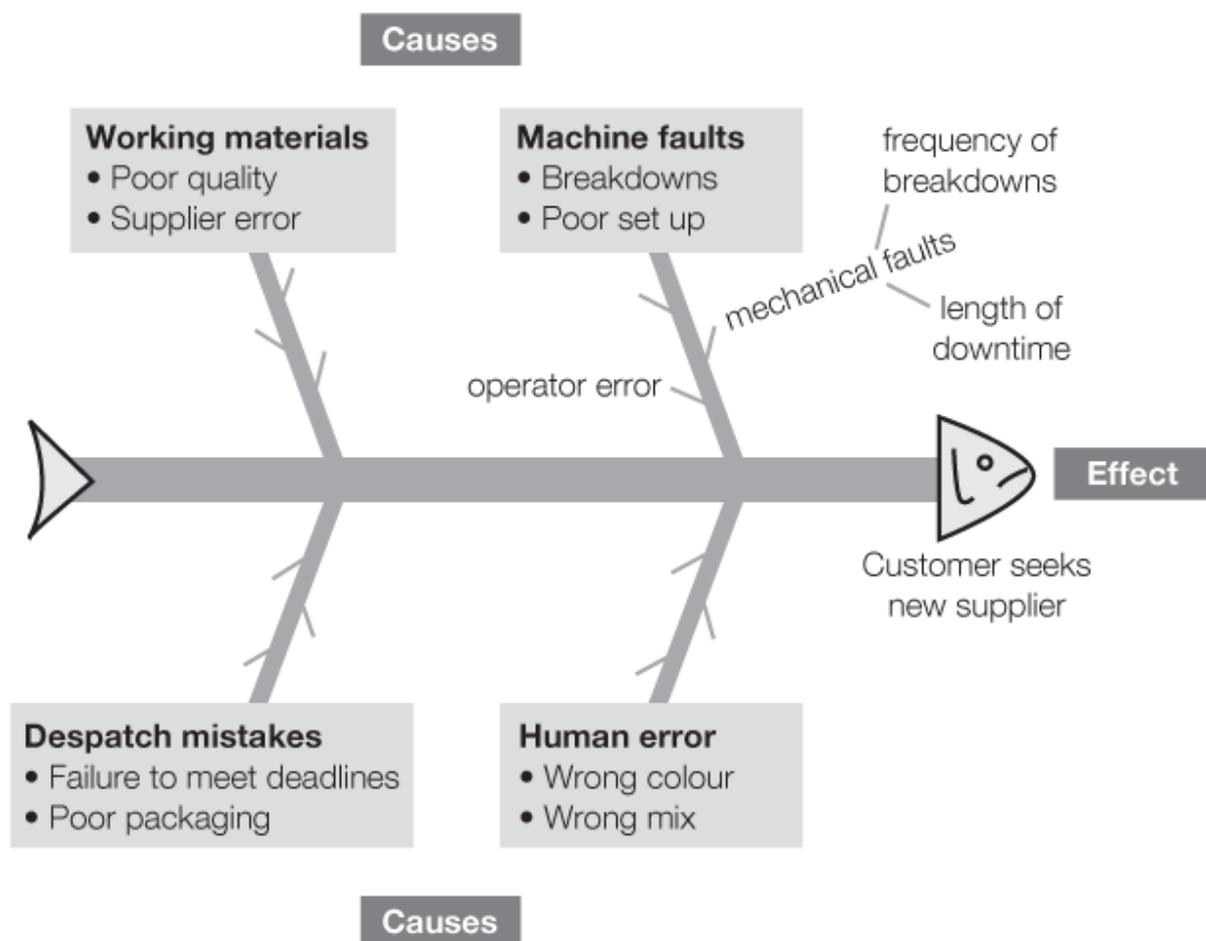
Theory Seventy Two

Ishikawa's Fishbone Model

Use this model to explore quality problems

Kaoru Ishikawa argues that it's important to explore all of the things that could cause a quality problem before you start to think about a solution.

His fishbone model, developed in 1990, is a way of analysing cause and effect and can be summarised as follows:



The model is a bit like a mind map and is used to represent the problem and its causes diagrammatically.

The difference with Ishikawa's model and more conventional mind maps is that the process is linear (better for logical thinkers).

How to Use It

- Identify and define your problem. Write it in the box at the right-hand side of the page (you can draw the box as a fish's head if you are really keen on the symbolism). Then add the central spine of the fish.
- Work out the major factors involved in the problem. Use brain storming to identify as many relevant factors as you and your team can think of (see Theories 65 and 66). These factors are the 'large bones' running off the fish's spine (the ones you can choke on if you're not careful) (see diagram).
- Analyse each problem ('big bone') and identify as many possible causes as possible. Connect these causes to the appropriate large bone as a series of 'medium-sized bones' (see diagram for start of analysis machine faults).
- Analyse the results and investigate further. For complex causes you may have to attach 'small bones' to the medium-sized bones as your analysis of the problem delves deeper.
- When complete don't sit back and admire your artwork – do whatever it takes to test and identify which of the possible causes is actually contributing to each problem. When you know what the real problem is identify and implement a workable solution.
- The process isn't as complicated as it looks. Try it out on a work problem that you have already solved. I'll bet it throws up new factors that you didn't previously identify

Questions to Ask

- Do I have the detailed knowledge required to identify the factors and sub-factors that might be causing the problem/s?
- If not, who can help me?

Theory Seventy Three

Imai's Kaizen 5s Housekeeping Theory

Use this to appreciate the impact that very small-scale changes can have on quality.

Although Kaizen is a Japanese philosophy meaning change (kai) and to become good (zen), it was the work of Masaaki Imai in the 1980s and 1990s that reinterpreted and popularised the philosophy in terms of management theory.

Imai suggests that Kaizen is a continuous improvement process that relies on teamwork, personal discipline, good morale, quality forums and suggestions for improvement. Much of what he has to say can be described as a plea for good housekeeping.



Kaizen relies on incremental rather than abrupt change and the belief that all employees recognise that it's in their interests to produce high-quality goods and services.

This is achieved by the elimination of waste and inefficiency (muda) throughout the organisation.

How to Use It

- Zen is all about simplicity and so is this theory. Read the theory again and you will see that there is nothing here that requires further advice from me. But just like Zen, to master the simple principles you need steely determination, self-discipline and consistency of purpose.
- With Kaizen you must walk the talk and provide a role model for all your staff. After all, you can't demand that they keep their work areas tidy, and avoid accidents, if your office looks like a tip.
- Remember, Kaizen is not about improving one aspect of your team's activity by 10%; it aims to improve each activity by 1%. The sum of these minor improvements will be huge in terms of quality and the pride your team takes in its work.
- If you decide to adopt Kaizen start by doing a bit of management by walking about (see Theory 10). Spend time on the shop floor or in reception to get an idea of how time, effort and resources are utilised. What you're looking for are small incremental improvements that you can implement easily and which will improve quality. You should also look out for good practices that you can spread across the organisation.
- To help maintain the flow of ideas encourage staff to submit their ideas for improvements. Acknowledge and reward all suggestions made, even those you don't use.

Questions to Ask

- Do I have the self-discipline to implement Kaizen and continue the programme indefinitely?
- How can I convince staff that by improving each activity by 1% the aggregate effect on quality will be huge?

Theory Sixty Two

The Benchmarking Matrix

Use this as a framework to identify internal and external best practices that you can use in your setting.

Benchmarking is a concept introduced by Frederick Taylor (see Theory 3) at the start of the twentieth century. He identified excellent performers by putting a chalk mark on their benches. This indicated to staff whose output or working practices they should emulate. This rather crude method of quality management has been refined over the past 100 years and is now a sophisticated tool used by many organisations

	Product/Services	Function/Processes
Internal	A comparative analysis of the products and services produced or provided by different departments in the organisation	A comparative analysis of the functions and processes undertaken by different departments in the organisation
External	A comparative analysis of the products and services produced internally with those that exist in other organisations	A comparative analysis of the functions and processes undertaken in the organisation with those that exist in other organisations

Note: When undertaking external comparisons it is not necessary for the organisation to compare itself with other organisations in the same sector.

For example, banks may learn a lot about the management of queues by comparing their practices with what goes on in supermarkets and fast food outlets.

How to Use It

- Key to any benchmarking process is understanding where you are on the journey to excellence (*use Theories 65, 66 and 70 to identify your position*), and making sure that you go through the following four-stage cycle (*see Theory 49*):
 1. **The planning stage** is the most important and time-consuming activity in the model. Find out which subject areas are most important to your organisation. Which activities within each area need to be benchmarked? What's the best way to collect data on each activity? Who are the best practitioners of each activity?
 2. **The doing stage** is where you start to experiment. Agree with your benchmarking partners the scope of the study and any ethical issues that may arise. Choose the most appropriate people to undertake the study and ensure that the organisation, at all levels, is committed to the project (*see Theories 55 and 62*).
 3. **The checking stage** is where you start to analyse the data and determine any gaps in quality. Use Ishikawa's fishbone model (*see Theory 72*) to identify the reasons for the gaps in performance and only then decide what action is required.
 4. **The final stage** is where you take action. Involve everyone who has a stake in the changes, monitor the progress of the initiative and revise your strategy if necessary (*see Section 6*). Use SMART targets (*see Theory 88*) to monitor progress.

Questions to Ask

- How am I going to collect data from external organisations?
- Am I prepared to deal with all the findings from the exercise? What if pay or training levels are below best practice?
- Will the organisation be willing to invest in these areas?

Theory Seventy Five

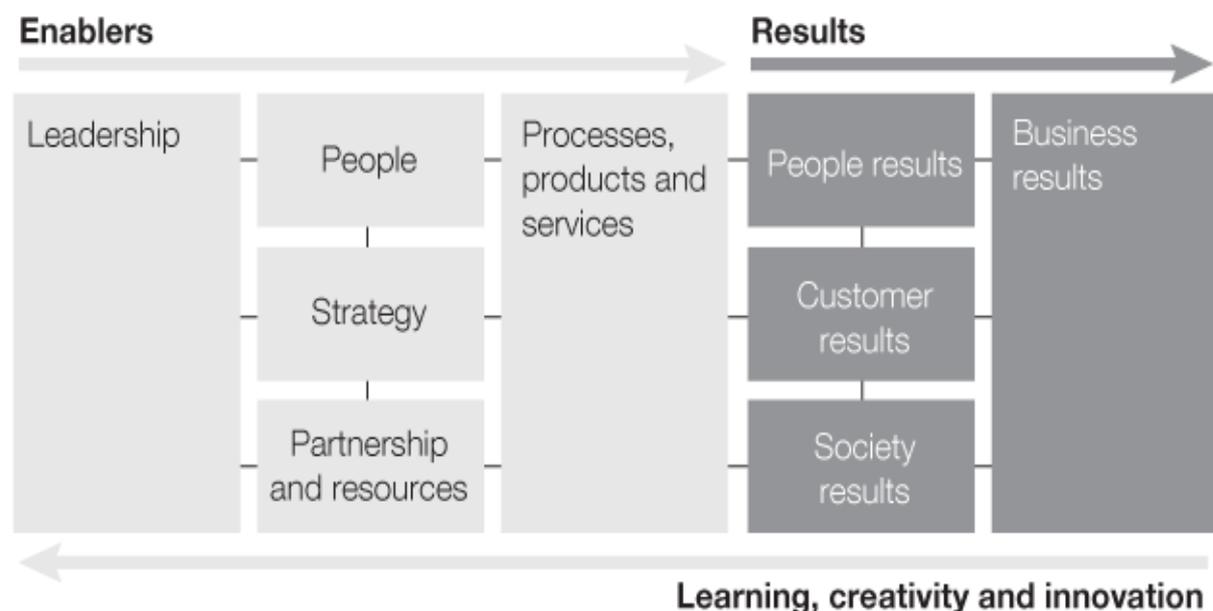
The Excellence Model

Use this as a means of promoting awareness of, and action to improve, performance.

Malcolm Baldrige was the driving force behind the use of the Excellence Model as a means of promoting quality awareness in organisations. Baldrige's work was influential in America and it was the European Foundation for Quality Management (EFQM) that adapted and adopted his model for use in Europe.

The EFQM Excellence Model is underpinned by nine fundamental concepts that are divided into five enablers and four results:

- **The enablers** are the activities that the organisation must do well to be recognised as an excellent.
- **The results** are the measures used to assess the impact of the above activities.



Although the EFQM does attach an award to the Excellence Model for organisations that want such recognition, application of the model is often used as a self-assessment tool for grading how an organisation is performing in each of the enabler and result areas.

How to Use It

- Complete the online questionnaire available through the EFQM website. Grade your organisation/team against each of the nine categories. There are some helpful descriptors to help you grade each category.
- If possible get a cross-section of your organisation/team to complete the questionnaire or better still everyone in your organisation.
- Total up the scores and work out the average score across the organisation. Don't be alarmed if you only score 350 out of a possible 900. This is par for the course first time up. Of course 350 or less won't do in the long run. If you are a large organisation you may need to appoint someone to act as a quality champion. If you just did it for your team or department you may end up doing the entire job yourself.
- Focus on the better scoring categories first to see if some quick wins can be achieved. Then work towards the categories where there is greater scope for improvement. Keep returning to the questionnaire and measuring what improvements have been made.
- Remember, this is a self-assessment process; therefore your assumptions and impressions have to be tested. Get someone impartial to look at your assessment of what is going on and to challenge your analysis.

Questions to Ask

- Would going for the EFQM award motivate me and my team more than just using the process to improve performance?
- Once the aims of the initial project have been met, how am I going to monitor, maintain and improve performance in the future?