

Taking the first steps



Having taken the decision to implement a quality management system, small and medium-sized enterprises in particular are often unsure just how to get started. This feature takes SME managers through the first steps.

towards a quality management system

This advice comes from the highly successful handbook ISO 9001 for Small Businesses developed by ISO/TC 176, the ISO technical committee responsible for the ISO 9000 standards for quality management. The advice is reproduced here largely as it appears in one of the annexes to the handbook with only minor editing for publication as an article.

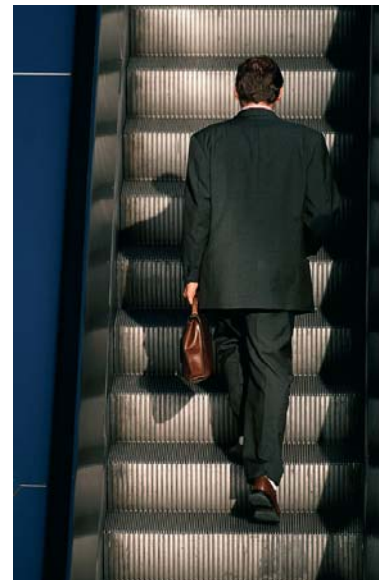
Introduction

There are many ways a small business can go about implementing a quality management system. This advice is intended to provide one such example of implementation in a small business. It is provided solely as an example and should not be regarded as the only method of implementation nor the best method of implementation.

There are three stages to the process:

- **Development** – Considering what happens in your business (i.e. your business processes).
- **Implementation** – Putting the quality management system into operation.
- **Maintenance** – Supporting and improving the quality management system.

These stages are achieved via a number of steps, as follows:



The idea of a quality management system is not to inhibit the academic, intellectual or creative processes involved in business



Stage 1 DEVELOPMENT

Considering What Happens In Your Business

Now that you have determined you would like to analyse your business and would like to work in a more efficient manner, where do you start?

Step 1: Consider what your main business activities are

You and, if appropriate, your partner or business associates should discuss and jot down what are your main business activities and who are your customers. You could use a flowchart for this purpose.

Before attempting this activity, you need to stop, think and question: What are my products or services? Some examples are shown below.

Manufacturing

- If you are a manufacturer, you might have a single product or you could have a range of products you manufacture.
- You might warehouse and distribute those products.

Stockist/distributor/agent

- You could carry a single product or a product range.
- You might purchase components and repackage them or assemble them into varied lots to satisfy customers' needs.
- You might supply an information service on the use of the goods to clients so, as well as being a provider of raw materials, you are also a consultancy service.

Wholesaler/warehouse

- You might buy a product or warehouse products manufactured by somebody else.
- You could carry a range of products that are perishable and need to be monitored and rotated regularly.
- You might provide a transport/distribution service for goods.

Repair or after-sales service agency

- You might service a range of products but you need to consider if your servicing is conducted differently for different clients.
- You could also provide equipment and parts and participate in the actual delivery of the service.

Professional consultancy

- You might provide initial research for clients.
- You could actually design the concepts and develop the project plan.
- You might also provide project management and provide ongoing consultancy services throughout the life of the project.

There are other service sectors in which you may be involved, such as

- legal advice,
- property advice,
- educational or training,
- public relations,
- media placement,
- graphic design,
- specialist electronic design, or
- individual specialist consultancy services.

Remember that the idea of a quality management system is not to inhibit the academic, intellectual or creative processes involved in any of the above businesses

All of the above industries or service businesses can outsource components or services required for their activities (ISO 9001:2000, 4.1). This needs to be identified and noted against the relevant process areas when jotting down your main business activities as the standard requires you to manage your suppliers and your outsourced processes.

Having finished the above you now need to establish what your people are doing. An organization chart might help you do this. Don't forget your marketing, sales, after-sales, maintenance or other personnel who might

Anything you exclude must not be at the expense of the quality of your product or service

not be directly involved in your core production or service activities.

Step 2: Listing your business activities

To achieve this next step, you need to make a list of the main business activities you initially thought through.

It might help at this stage to take each of the main business activities you listed originally and produce them in the form of a flowchart. Display this in your office or at home for easy reference and look at it regularly to remind you of what you are attempting to develop a quality management system around.

The purpose of setting out your business activities like this is so you can

- identify the different components of your business and decide if they all fit together well,
- change something to make the whole process work better if you need to, and

- identify where and if the requirements of the standard are covered in your business activities.

Don't make any changes yet. This is covered in Step 5. Rather the idea, at this stage, is to think about the framework and structure within which your business operates and to ensure all activities are known and repeatable. This will allow you to provide consistent products and services each time you deliver to your customers.

Look at the list of main business activities you have jotted down. Do any of the activities require you to do design work?

Design (7.3) means taking raw ideas or concepts and through design drawing, computer design or academic thought processes to the development of a product, or a service to suit the needs of your customer.

If you do either design or development, you will need to apply the requirements of 7.3 of ISO 9001:2000.



ISO 9001 for Small Businesses

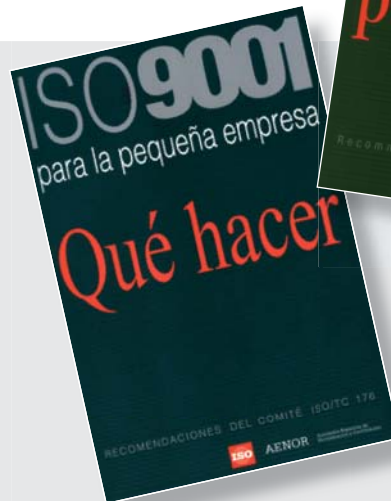
The standards institutes of more than a dozen countries have published or are preparing their national editions of the ISO handbook, *ISO 9001 for Small Businesses*.

The English-language edition (ISBN 92-67-10363-6) was published by ISO in 2002, followed the same year by a Spanish edition, published by the Spanish national standards institute AENOR (*ISO 9001 para la pequeña empresa* - ISBN 84-8143-303-9). They have now been joined by a French edition (*ISO 9001 pour les PME* - ISBN 92-67-20363-0), published by ISO.

National editions are also available or planned by the national standards institutes of Bulgaria, Denmark, Estonia, Finland, Hungary, India, Japan, Republic of Korea, Norway, Poland, Slovenia, Sweden and Uruguay.

ISO 9001 for Small Businesses explains the standard in plain language, giving examples to illustrate its application. In addition, the full text of ISO 9001:2000 is included in boxes, section by section, accompanied by explanations, examples and implementation guidance in everyday terms.

The handbook includes the eight quality management principles on which the ISO 9000:2000 series is based, plus revised sections on the steps involved in setting up a quality management system - which is reproduced here in slightly edited form - and doing so with or without the assistance of a consultant.



The English and French editions are joint publications by ISO and the International Trade Centre (ITC - www.intracen.org) UNCTAD/WTO. They each cost 46 Swiss francs and are available from ISO's national member institutes (listed with contact details on ISO's Web site - www.iso.org), and the ISO Central Secretariat (sales@iso.org).

The Spanish edition published by AENOR (www.aenor.es) costs 31,25 euros and may be ordered from that organization: E-mail comercial@aeonr.es; tel. +34 91 432 60 36; fax +34 91 310 36 95.



If you don't design, and the manufacturing activities or service delivery is done against tried and previously developed standards or specifications, then you can claim 7.3 as an exclusion (see 1.2).

If you are responsible for design but outsource the design process, you will need to describe how you control the process of accepting that the design meets the specification requirements (see 4.1).

If in your business you have the skills and expertise to approve the design, you could include 7.3 in your quality management system and carry out the approval within the business.

Alternatively, you could outsource the approval process to an independent design consultant in whom you have confidence. In this case you would need to demonstrate how you control the process (e.g. using records of your supplier).

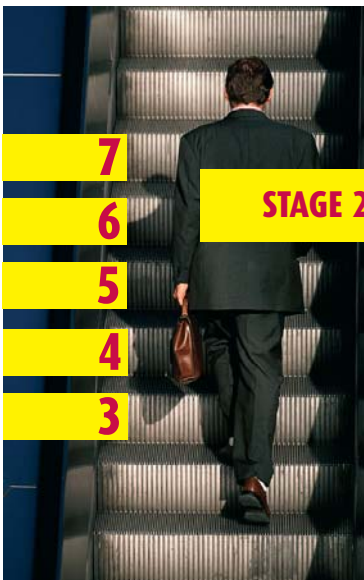
Are there other activities in clause 7 which your business does not do? These too can be considered for exclusion as per 1.2. Remember, anything you exclude must not be at the expense of the quality of your product or service.

You will also have to justify these exclusions in your quality manual (see 4.2.2).

Some important points you will need to think about are:

- a) If it is a job done by a trained person or specialist, it may well be that you only need to reference the type of person and the qualifications, rather than detailed descriptions of the job; for example, welder, professional consultant, graphic designer, etc.
- b) Another specialized situation is in research work, where people keep notes on what they did and what the results were. You need to ensure that your research workers make details of their work available, so that others in your business can make use of them.
- c) If, however, the work is done by casual labour, or there are specific in-house requirements, more detail might be required.
- d) The sequence of the activities might still need to be defined, for example:
 - How is the initial enquiry recorded?
 - How is a file initiated?
 - How does the work get started?
 - Who monitors the progress?
 - How is the work processed and inspected?
 - Who decides when the work is finished?
 - How is delivery made?
 - What follow-up action is needed and who does it?
 - What records are kept and who keeps them?
- e) If in your organization, these details are already written down as operating or work instructions, your job is half done. Do not rewrite what is already documented. Make a note of the name and title of the document so it can be controlled and, if necessary, referenced in other quality management system documentation at a later date.

Do not create unnecessary paperwork



STAGE 2 IMPLEMENTATION

Putting The Quality Management System Into Operation

Step 3: Get people involved by writing down what their jobs cover

Now is the time to get everyone concerned involved in writing down how they carry out the parts of the business activities they are responsible for, stating

- who is responsible for performing and checking activities,
- where the activity takes place,
- when it will happen, and
- what happens, i.e. how the activity is performed.

- f) You will also need to consider how information is passed between people. If there is a risk of this information being forgotten, misunderstood or inadvertently changed, you will need to insist on a way to avoid this. Suitable methods include written or electronic transfer.
- g) Most important – *Keep written documentation simple!*

Step 4: Collate this in sequences relevant to the list of business activities (Step 2)

Once everyone has written down (or collected previously written) work instructions relevant to their part of the activity or particular job responsibilities, you, as the manager, should take time out with someone else from the business

- to look at what has been written,
- to satisfy yourself that it all fits together, and
- to deal with any gaps or inconsistencies.

You also need to record your quality policy and objectives and then ensure that everything that has been written is in accordance with the policy and objectives.

By appointing someone to assist you, you have basically appointed a management representative or, if you are doing most of this yourself as manager, you have assumed the role of management representative. You have now addressed one of the principal management requirements of the standard.

By collating all these documents, you now have a basis for your documented procedures and other documentation that you will need. If you adopt a consistent style for these documents which you and your people are comfortable with, this would provide an opportunity to review and improve the procedures themselves.

Step 5: Identify where the standard and this list of your business activities link together

You or your management representative need to go through the documents you have written with a copy of the standard beside you and determine if you have met

- the requirements of the standard, and
- your business requirements.

If you identify an area of the standard you have not addressed you will need to consider how your business covers that particular requirement. You might need to add some detail to one of the existing procedures to ensure the requirement is met. It could require some additional documentation, but be careful, make sure it is relevant to your organization.

If you use external documents in your business activities, (such as dealers' manuals, maintenance manuals and installation manuals), it is not necessary to rewrite these to include them in your quality management system. All that is needed is to make an appropriate reference to the process control document in your manual.

Step 6: Apply the standard and the quality management system

If you continue to involve others in your organization, they are more likely to grow with the quality management system and have input. The quality management system will then reflect reality rather than become irrelevant paperwork. The following points should be noted.

- a) Do not create unnecessary paperwork, forms, and the like. Look at what is currently done and write down your procedures or define your processes to show how the job is being done. The procedure needs to be factual and not indicate how you wish it were done. If you find that the procedure does not reflect the way the work is done, you need to either revise your procedure or



A realistic approach and steady progress will build confidence and maintain enthusiasm



**It is important
to remember to measure
your progress**

develop a new one. Only create a form if it is going to capture a critical activity or is going to help someone. A signature on or an extension to an existing form may suffice.

- b) Remember, keep a record when
- a problem arises,
 - a good suggestion is raised, or
 - a customer or employee expresses a need for action.

NOTE: If the business is a partnership, this could just be a notepad which each partner looks at regularly. They can then discuss and agree on appropriate action for the situations which arise.

- c) To implement the quality management system, everybody needs to have access to the documentation that relates to their activities. They need to be given some insight into how the quality management system works and why, for example, document control ensures that they have the latest copies of information relevant to their jobs and can rely on up-to-date information when making decisions.
- d) Everybody needs to be trained to understand how to keep the quality management system up-to-date themselves, if changes take place in areas for which they are responsible. They also need to know how to make changes to the quality management system as well as noting problems and putting forward ideas for improvement. Remember that you need to approve any changes before they are put in place.

It is important to plan and carry out an internal audit programme and to regularly ensure the quality management system is being maintained and supported throughout your organization. It is not always easy to schedule the time required by internal auditors, but internal audits can be a most effective tool to keep everybody engaged in the quality management system and they often identify opportunities for improvement.

Step 7: Keep the quality management system simple, functional and relevant to the business operations

The following points are worth noting.

- a) The purpose of implementing a quality management system is to ensure that the business activities are operating in a controlled manner and the people responsible for the various activities know and understand their roles and responsibilities.
- b) Quality management system documentation should be a ready reference point to identify how, when, where and sometimes why a job should be done, or an activity managed. For that reason, the wording should be simple and in the language used in the workplace on a daily basis.
- c) If job details have to be extensive or complex, then the use of a checklist could be the way to make sure that everything is done and in the correct sequence. Airline pilots, for example, use a checklist for this very reason.
- d) Don't forget that people also need to know what to do when things go wrong and need to have the information readily available. For example, a car owner's manual should sit in the glove box.
- e) Documentation should be in a format that is easily used in the organization. For example
- if computers are available, it could be easier to have a computerized system, rather than a paper system; and
 - where there are language or other differences in the workforce, it could be necessary to use pictures or several translations of the documents.
- f) Documentation should reflect what is currently happening in the business. During the audit process, questions will be asked and objective evidence sought to show that

personnel use and understand the quality management system. This objective evidence is provided by the records and other documentation.



Supporting And Improving The Quality Management System

An effective quality management system uses feedback loops to improve how things are done in your business, which in turn should lead to an improvement in product or service quality.

Step 8: Consider the feedback of information from the quality management system to lead to improvement in ideas and activities

Many small businesses do not consider they are in a position to take on major quality improvement programmes. You are in fact able to commence these activities in your own time and in your own way.

By noting areas of concern from corrective action activities and internal audits (Step 6), you will gather data, or note trends that you can look at and consider for improvement.

Improvements can be simple and easily achieved in the initial stages but could become more challenging once the obvious opportunities for improvement have been taken. It is worthwhile persevering with a

systematic approach to quality improvement, since the benefits can be considerable.

Normally, improvements are adopted over a period of time as money and resources become available. A realistic approach and steady progress will build confidence and maintain enthusiasm.

Step 9: Monitor and measure the changes so you know what you have gained

It is important to remember to measure your progress. One way of doing this is to monitor mistakes and their cost. This gives you the opportunity to identify areas where cost savings could be made.

Measurements can also be obtained by noting how long or how many resources are spent on an activity or service delivery. This should always be recorded on any activity that has been chosen for improvement, prior to commencement and compared again at the end, even though the activity might be small and simple.

The various requirements of ISO 9001 should combine to support the achievement of your business's quality objectives. However, it could be useful for you to categorize these according to their particular relevance to different aspects of the business, since this could influence the order in which you introduce these requirements.

Conclusion

Remember: Small steady changes, leading to improvements, well thought through and effective, are going to have long term advantages.

These nine steps can help you take advantage of the quality management system approach and allow it to contribute to the growth of your business. ■



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