HOW TO STRUCTURE A SYSTEM

TOP DOWN RULES OK!

When you start on a project to convert to a process based management system, there is a tendency to start with the procedures you know best, or those which are simple, or those which are currently causing problems and which you want to sort out first. You will almost certainly run into problems if you attempt to define your processes by taking an almost random selection of existing procedures and converting them, or by starting with a particular department or project, and then trying to build a coherent and logical system structure for the entire business.

I first came across the "IDEF" concept at a Quality Scotland workshop in Edinburgh. My initial thoughts were that everyone else but me probably knew all about it, but I have subsequently been relieved to discover that I was wrong (again). (Unless you are excessively arrogant (!), you may well have gone through the same process of thinking that everyone else in a seminar room is bound to know more than you, and you then discover by mid way through the afternoon session that perhaps you understand more than they do).

IDEF stands for "Integrated Definition for Function Deployment", and is a methodology of US origin which was developed for the manufacturing sector. It is a structured methodology used to model an enterprise and to map its processes. Strict rules need to be learned and understood before it can be applied and used successfully. Although I have difficulty in applying some of the terminology associated with it, I have used the principle behind the approach to give the following basic "rules" for structuring a management system:

- decide on the extent of the eventual system you wish to define
- start at the top level (I am convinced that you must always start at the top and work down)
- build a hierarchy of processes, with no more than 3-6 elements at each of the higher levels
- specify the activities in processes at the bottom of the hierarchy in detail. Identify who is involved in the performance of these processes, the documents and other records which are accessed or updated, the standards and policies which may affect its performance and the competencies required.

STRUCTURE A PROCESS

When you have reached this bottom level (below which only sub-processes and Work Instructions exist!), it can still be helpful to start by identifying say 3-6 key stages or steps in the process - I find that this helps to maintain the structure better than starting "well, we do this first then he does this and the next thing that happens is..." which often results in a long, rambling and (too) detailed list. It is a bit like writing a report - you decide how long the report should be, define the chapter headings and decide the relative importance of each. As a result, the length and detail in each chapter is effectively defined for you.

Use available symbols constructively. For example, a number of the major oil companies use the RACI model (Responsible / Accountable / Consulted / Informed). In this model, being:

- "Responsible" for a task means doing it or ensuring that it is done
- "Consulted" means providing input to or being involved in the performance of the task
- "Informed" means after a decision or action has been taken eg being told of outcome or receiving a copy of a document or report.

Using symbols to indicate such roles can allow you to compress what would be perhaps 3 or 4 apparently distinct steps into one task on a flowchart. ISO standard symbols for flowcharting exist but they do not seem to have widespread use. The only time anyone has objected when I suggested that the ISO symbols were not wonderful for my purposes was when an internal quality auditor implied that if they were "ISO" they must be used. I think that his view of life will need to change by the time he gets round to trying to audit a process-based system!

As for "Accountable" - I admit to getting confused when I am offered too many different definitions or explanations of the difference between this and "Responsible". So I have abandoned the use of Accountable at the task level, and reserve it for the person who is accountable for the success of the process if it works well, or who has to sort it out if it doesn't - the Process Owner.

As with the meaning of words, it does not matter which symbols you use, so long as you are consistent and the user knows what you mean!

GET THE LEVEL OF DETAIL RIGHT

You need to be clear about why you are defining a process, who will use the definition, and for what. If you draw a flowchart, you should aim to make the overall process understandable by someone who scans through the flowchart in, say, 20-30 seconds. This usually means no more than 2-3 pages of A4, with no long, rambling text. You should assume competence in the user, so that all they need are the key elements of the process. If they are not competent, train them or find someone else to do the job!

A number of people are like the Quality Manager at an engineering company in Aberdeen who believes that staff will not read a flowchart any more readily than they will read narrative - to him, the key benefit in having processes defined in this format lies in the fact that initial training is easier since the process is presented far more clearly.

Thereafter, training reviews and competence assessments should prove that people are doing things properly. After all, most people will ask someone what to do if they do not know what to do next, rather than referring to a manual.

For example, in the example of a Task in Article 2, "preparing paperwork" may require the meeting organiser to make copies. This should not need to be spelled out, since this should be obvious to any one with a modicum of common sense.

MAKE IT EASY TO READ

One narrative NHS procedure I came across stated "the Nursing Officer will be informed", without any suggestion as to who should do the informing. There is a common tendency to use the passive tense for verbs when writing procedures. This may arise from a subconscious belief that it sounds grander and more official - although I am afraid that it may in certain cases be more a case of crossing fingers and hoping! It is rather like the classic "missing step" in project management of "and then a miracle happens". You need to specify who makes it happen (and how!).

Active verb / noun format is ideal to describe a task, as in

- "call a meeting"
- "raise a requisition"
- "assess supplier's performance".

As my 16 year-old son might put it: "active is ace, passive is pants".

Wherever possible, you should try to restrict the description of a task to this sort of format, with additional explanation shown separately. Do not repeat the task description in this additional explanation. It should be just that - additional.

Use a bulleted list rather than sentences for such explanation where appropriate, and make full use of symbols to identify who is consulted, where a document is used or reference is made to a file. The use of appropriate symbols can allow you to combine what may appear to be as many as three or four steps when read as narrative into a single task on a flowchart.

Be a minimalist - how LITTLE do you need to say to be clear and unambiguous? At the risk of repeating myself, don't repeat yourself.