

## Is IT bugging you?

Many organisations have a freeze on spending for Information Technology (IT). Having checked for 'year 2000 compliance', the hatches have been firmly battened down. No interference with IT systems is countenanced in case this introduces the dreaded millennium bug. Perhaps as we watch and wait it is a good time to reflect on the extent to which IT has been a Good Thing in our organisations.

Research on the effectiveness of IT makes sobering reading. Many IT projects never get to completion, the costs of implementation generally go vastly beyond what was planned, the consequences of implementation often fail to produce the expected financial benefits and sometimes result in higher rather than lower costs. In short, IT is frequently not the saviour it is claimed to be.

Beyond failing to deliver or delivering at higher than expected costs, IT sometimes seems to 'entrap' rather than 'enable' the way we work. When IT providers sell you what they describe as 'office productivity tools', they neglect to tell you that you may be swamped with e-mails. The tools we now have that enable us to make pretty presentations may result in more time preparing for and conducting meetings than getting on and doing things; have you ever experienced 'death by Powerpoint'?

Sometimes IT 'solutions' design in bad service and higher costs. For example, when you call BT's Directory Enquiries for the number of an organisation whose location you don't know, they cannot help you because their IT system can only search on the basis of knowing location. When you call an organisation and get answered by a computer - 'press one for..., press two for....' - you sometimes have to decide whether getting a service is worth the effort. And these are simple examples.

IT has become the backbone of organisational life. Those who follow this column will know I have deep antipathy to what is known as 'command and control' management, despite it being the way most of our organisations are designed and managed. My antipathy is based on the assertion that, quite simply, it doesn't work very well. The better way to design and manage work is based on systems thinking. By this I mean treating the whole organisation as a system (see previous articles and, in particular, the 'Fit for the Future' series).

However, what do you suppose is the thinking implicit in the design of organisation-wide IT systems? Naturally, for otherwise they would not be sold to managers, it is 'command and control' thinking. In practice this means we can now measure to the Nth degree the costs of everything but we know the value of nothing.

To illustrate: In one of my clients, IT had been used to record incoming work, sort it, scan it, route it, record how long people took to do it and to archive it. It was the 'command and control' manager's dream. Managers could tell you where everything was, how much work was being done by everybody, how much work was coming in, going out and in backlog.

When they looked at the work from the customers' point of view, they found they were unable to predict how long it would take to deal with any particular customer demand, hence they were unable to 'make and meet' commitments – first base in being customer-driven. Moreover, when they studied what systems thinkers call the 'value work' – just doing what mattered to customers – it was a minuscule proportion of the total work. The IT system was driving the sorting, scanning, batching, counting, routing

and recording of work under the misguided assumption that this was helping the work get done. Furthermore, as you always find with sorting, batching and queuing of work, errors were being introduced. If that was not bad enough, the IT system was consuming enormous resources because all of these IT applications needed maintaining. As, for example, more documents were scanned into the system, more memory was needed which, in turn, needed yet more maintenance.

The waste in this organisation was inextricably linked to the IT system. Managers had been sold a dream that was in fact a nightmare.

It is very difficult in such circumstances to get off the hook. Similarly, in my own small business, the day we networked our computers was the day our IT budget (and problems) changed forever and not for the better.

### **Improve first, then 'pull' IT**

There is, thankfully, some evidence of a more enlightened approach to IT implementation. I have discovered one practitioner who goes against the grain. He tells his clients not to follow the normal approach to implementing IT, where managers write a specification, the IT company delivers against it and when it fails, the IT people blame the specification or try to sell more implementation consultancy.

In simple terms, what he does is take a systems approach to the work before even considering the role of IT. It goes like this: First of all understand the 'what and why' of current work performance – and in doing so use the ideas of 'value' – what matters to customers and 'flow' – what the organisation does for any particular customer demand. Secondly, working with the people who do the work, improve the work flow against measures that relate to its purpose. Now and only now, ask if IT can further improve the flow of work.

What happens is that IT applications get 'pulled' into the work flow by people who know what they want from them, and only in places where the people can predict how it will lead to improvement. The result is always less spend on IT - something the IT companies are not so keen on – and more value from it. Which, after all, is why you wanted it in the first place.

It is not difficult to see why this should work. Decisions about the use of IT are only taken from a position of knowing the 'what and why' of current performance as a system. Traditional IT implementation leaves 'knowledge of the work' to a mixture of business analysis (provided by the IT people) and managers' views – both tend to think about work from a 'command and control' perspective. The traditional approach to IT implementation is 'push' – here is the new IT system, now how do we get people to do it. In this alternative approach, IT is 'pulled' – the people doing the work understand the 'what and why' of the work and 'pull' IT applications in to parts of the work knowing what to expect. The traditional problems of implementation – resistance and so on – simply do not exist.

However, I have to say, this approach is not typical. Most IT projects are introduced as 'top-down', 'how do we get them to do it' exercises. You might like to reflect on how you introduced IT and what benefits you gained.

The IT industry is continually re-inventing itself. The major players have moved from promoting 'mainframe solutions' to 'distributed solutions' to 'server solutions' to 'groupware' and, most recently, to

'knowledge management'. But has the IT industry really changed at all? Are these 'solutions' designed to improve your organisation or is their purpose just to sell more boxes?

Perhaps, as we wait for the year 2000, what should be 'bugging' us is 'what contribution has IT made?'. How can we ensure we don't repeat the mistakes of the past and get better value from our spending on IT?