The PC pendulum

There are some interesting and revealing trends when we look at the personal computer and its sudden invasion of the office.

Remember the old days? There was your environmentally controlled white room, with a wall full of data processors silently spinning through the corporate database, and guarded by technological high priests. The PC democratized the computer, and put its power onto individual desks. And they are great machines for personal productivity. If the earlier technologies spawned too much centralization, the PC pushed the pendulum the other way. Some say, too far. So now we're seeing the pendulum swing back again.

As a result, the latest trends in PCdom are away from the stand-alone unit, to systems which network, multitask, and allow for messaging or for document transfer.

So what about the PC?

What should be the policy of the organization toward PCs? Here we find several schools of thought – some of them conflicting. Some say the PC is simply a personal tool, like a calculator or pencil, and should be treated as such in the organization. With the cost of stand-alones coming down, this may become an increasingly popular view. Others say, sure, let's not deprive our managers and staff of cost-effective personal productivity tools, but let's also look down the road a bit.

As these machines increase their ability to communicate, to perform many tasks, to help in the decision making process, to tap into the mainframe, and to share peripheral resources such as printers, PC policy should at least bear in mind the developing trends, and the potential for integration. It may come, but at the moment, different PC models and brands are difficult, if not impossible, to link together.

No single solution

Experts – and there are no exceptions here – will never recommend a single machine, or even a single equipment vendor, for all the workstations in an organization which has many different branches performing many different tasks. The logic is simple enough: a machine which may be ideal in your number-crunching accounting department may not be worth a hill of beans in the art department.

And the same goes for PC software. A package which blisters through reports under the flying fingers of a 120 word per minute typist, may be an anathema to the executive who only taps out a couple of letters a day and who may as well learn Sanskrit than break through the command codes. Likewise, off-the-shelf products from the popular software houses may be ideal for many purposes. But not necessarily for all. If you have specialized tasks, you may need specialized, or proprietary software. Round pegs have never fit into square holes before, and the last time we looked, that law of physics hasn't been repealed.

The ancient proverb – define your tasks, find the best software, then select the optimum machine to run it – still stands, even as office automation moves toward office integration.

The integrated workstation

From the user's point of view, the integrated workstation may not look much different from the same old screen and keyboard combination we've seen popping up on desks over the past few years like mushrooms after a rainstorm. But when the system is "powered up", as we're fond of saying, we begin to see the capabilities.

Let's take a look at a state-of-the-art integrated work station. We'll forego a technical description at this point, in favour of explaining what it's like, and what it can do, for the person sitting in front of it. Note that no single system will incorporate all of these features, but most are available now, in various combinations.

- *Full PC power* – Many integrated work stations are built with full PC capability on site. This means that anything a PC can do, can be done by these integrated units. Most vendors ensure compatibility with dominant PC systems so that the thousands of popular software packages on the market can be run. As with any PC, these may have local disk drives, for complete control by the user.
- *Central file server* – Most integrated systems link individual terminals to a central file server. This can contain all of the most commonly-used software packages which can be down-loaded to each terminal when needed. Instead of requiring a copy of a word processing program for each terminal, for example, a network version can do for all, with obvious cost savings. The file server also stores documents, corporate files and other work at a central location, again accessible by all terminals.
- *Friendly interfaces* – Most integrated systems are getting friendlier. Menus, help screens, tree structures and icons are among the devices which are helping to make integrated work stations easy to use.