

Out of the In-Basket

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Managing People With Computers—A Unique Challenge

In October, this column described some special characteristics of a new generation of employees. This month's discussion is about managing the technology those employees generally see as something they must have. That technology is the personal computer.

Before the time of computers, technology tended to get introduced in the workplace and then to migrate to the home. By contrast, personal computers (PCs) often are found in the home before they appear in the workplace. In the past, when employees entered the workforce, others already present possessed the skills to operate contemporary instruments and technology. The new employee learned from the seasoned veteran. In the case of computers, the situation often is reversed. Most employees now entering the workforce have many years of experience with computer technology, whereas the seasoned workplace veteran may have very limited skills. Managers may wish to take full advantage of contemporary computer technology, but they also are challenged by a conflict between employee expectations and the extent to which a business can provide state-of-the-art products, given the resources needed to keep up with rapid technology development.

Four issues illustrate this conflict between managers and staff: the rapid evolution of technology, the differences between personal computers and mainframe systems, the true cost of a computer, and the way an individual employee's point of view differs from that of a systems administrator.

The Rapid Evolution of Technology

New technology is evolving faster than our ability to implement it. Think back just a few years to 286s, 386s, 486s, Pentiums, Pentium IIs, and now Pentium IIIs. There was DOS, then Windows, and now Windows 98 and Windows NT. Each new version represents a major advance in function over the previous model. Stores are full of software titles that serve every need from accounting to GIS mapping to databases to games. CD-ROM drives and speakers offer the possibility of multimedia presentation. We have come a long way from the Commodore 64—and in a very short time.

Possibly the most dramatic recent change has been the exponential increase of information available through the Internet. Although some of that information is of dubious quality, it is still sought after by record numbers of users. The Internet has quickly become a leading vehicle for the rapid global movement of information. The term "e-commerce" has become a keyword of the new millennium, suggesting that the Internet will continue to increase in importance. Rapid growth in the value of Internet stocks confirms that notion.

All of this presents a dilemma—and sometimes a crisis—for managers as they negotiate what employees need versus what employees want versus what is affordable and how soon it can be delivered. The challenge is compounded by the employee's expectation that anything readily available for home use also should be the minimum standard in the workplace.

Personal Computers and the Alternatives

In the early to mid-1980s, personal computers (PCs) lacked the processing power, memory, and disk space to handle large, complicated jobs. Furthermore, they were not considered as stable and reliable, over the long term, as mainframes or minicomputers such as the IBM AS 400. The mainframe and mini systems also relied on "green-screen" technology, which prevented users from implementing DOS-based software or common off-the-shelf products intended for home and business use. Now, networks that use PC technology are common, and they offer greater stability and flexibility than they did in the past. The rapid growth in popularity of the PC for home and business use has led employees to conclude that the freestanding or networked PC is the only viable and current computer technology.

While there are probably many situations in which the green screen is suitable for an employee's job requirements, it is difficult to fight the familiarity of PCs and their recognition as the preferred alternative. Job requirements become secondary to the perceived need for PC technology.

The True Cost of Computers

At home, the cost of a computer is generally the purchase price paid to the retailer. At work, it is also argued that a new PC will cost only X.XXX dollars. Other costs are, however, associated with connecting computers

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together (networking), maintaining the network and its components, providing peripheral equipment such as printers, and covering the overhead that pays for staff to perform those tasks. Therefore, the process of budgeting for computer technology goes beyond multiplying the number of computers needed by the retail cost per unit.

Possibly a greater challenge is anticipating the level of ongoing expenses associated with computers. Both the rapid evolution of technology and the need for incremental growth (i.e., the need for additional disk space, greater system capacity, and faster processing) require planning that is loaded with assumptions and predictions and short on solid information. The result is a higher level of uncertainty in budgeting for ongoing capital and operating expenses. The importance of computer technology in today's workplace puts further pressure on keeping the system operational at any cost. When a computer fails, managers often cannot wait until the next budget cycle for replacement or repair.

The User Versus the System Administrator

Another complexity computers introduce to the workplace environment is the need for system security. That is, a system administrator is charged with preventing unauthorized access and averting potentially destructive viruses. In accomplishing that task, he or she may come into conflict with the freedom users desire to fully explore cyberspace. Security concerns may affect users' ability to load software, access files, browse the Internet, download files, and so forth.

Once again, individual users bring to the workplace an expectation of freedom comparable to the freedom they enjoy at home, where a freestanding PC is connected to a phone line and no other computers are at risk. The challenge is to find the balance between system security and user freedom, and that is often a difficult task.


What Does It All Mean?

Despite the unique challenge of managing people with computers, the story should end on a positive note. Computers have revolutionized the workplace. They have, for example, improved our ability to gather and use information, enhanced global communica-

tion, and improved productivity. The ongoing issue is that managers must learn how to be responsive to the computer needs of staff while balancing the budget. Some lessons in achieving that balance already have been learned. Consider the following tips, gathered from battle-weary managers:

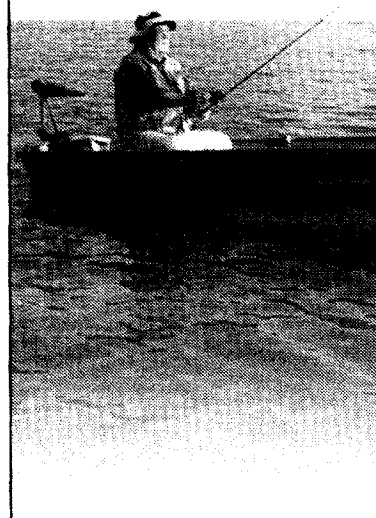
1. Have a plan. Map the overall design of a computer system that makes sense, and then follow that plan. Make sure the plan is flexible and can accommodate technology or funding changes. Remember that there is more than one way to serve the computer needs of staff.
2. Plan ahead for funding. Establishing a contingency fund or a computer equipment fund will help ensure that resources are available when they are needed.
3. Don't be afraid to challenge staff to justify how an upgrade or addition of hardware or software would improve productivity. Is the upgrade worth the cost? Will the new feature improve the employee's ability to do the job?
4. Establish a users' group to facilitate dialogue between system management staff and users. The dialogue may help clarify and resolve disputes about system security and discrepancies between management and user needs.
5. Hire qualified support staff who understand customer service, are objective, and can communicate effectively with staff and managers. Most individuals have a bias about what brand of computer or software they like. Challenge support staff to present more than one solution to hardware, software, or system problems.
6. Don't assume you need to teach new staff much about computers. In many cases, they can be the teachers. Take advantage of their expertise in designing your system and in training others in the company who did not grow up with computers.

The subject of computers provides another reminder that the workplace is in a continual state of change. If managers are to remain effective, they must continually sharpen their vision and skills to promote innovation and problem solving. More revolutionary technological inventions will materialize in the future, and they will probably occur at an accelerating rate.

What is unthinkable today will be routine tomorrow. After all, who would ever have thought we couldn't work without a mouse by our side all day? 

A blood transfusion helped Jack sail through heart surgery and into calmer waters.

It also may have put him at risk for hepatitis C.



If you received a transfusion or an organ transplant before July 1992, you should be tested for hepatitis C, a disease that can damage your liver and cause it to fail.



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Ask your doctor if you or your loved ones should be tested for hepatitis C.

