

## Quarterly Report, Spring, 2000

### **Change is Inevitable**

Like death and taxes, changes in information technology systems are inevitable. These changes are often resisted and frequently utilize an impracticably large amount of a company's resources. Problems in the transition can paralyze productivity.

The first step in the process of a major technology change is the selection of a leader for the undertaking. For many businesses, engaging an outside professional is the answer.

A systems consultant is not necessarily a technology implementer. Instead, he or she becomes the **project manager**, who will work with the company's personnel and lead them through the process of selecting and implementing the new system.

#### **Coordinating Consulting and the Internal Team.**

The first thing that the outside professional will do is to organize a small team of the company's personnel to work with him or her on the selection process. Later, this team will be expanded to carry out the implementation phase. Even when the decision is made to employ a consultant, it is crucial to involve internal personnel from the outset. The involved personnel will learn about the new system in the process of selecting and implementing it, long before they are required to use it on line. The team will develop a sense of ownership in the new technology and will work to promote rather than resist its implementation. And the consultant will learn the internal needs and processes of the company as he or she works with the team.

#### **Learning What the System will be Required to Do.**

The selection process begins with research, not of the available systems, but of the internal requirements. By interviewing persons within the organization, the team designs the **ideal system**. One of the dangers inherent in the process is to maximize the design for the needs of one group within the company at the expense of another. The team needs to determine the type and volume of transaction that the system will be required to handle. Allowance for anticipated growth is important. The process of selection is basically an effort to match the features of the **ideal system** with an **available system**.

#### **Selecting a System.**

The requirements of the ideal system should be converted into a written report and this should be submitted to a list of vendors, who in turn should respond by indicating what of the desired features their system can deliver. When the list has been narrowed down, the surviving vendors should be asked to demonstrate their systems. The demonstrations should be customized to the extent that they reflect the company's requirements.

A number of important considerations should be addressed:

1. No system will match the ideal system perfectly. The team must determine what requirements are critical and what are simply desirable. Obviously the selected system must at least be capable of fulfilling the critical requirements.
2. The team will want to find out how easily the system can be customized, because technology and the company's needs will continue to change.
3. The reputation of the vendor with respect to technical support and continual maintenance through updates is very important.
4. The team will have to decide whether the cost of the system is justified by its anticipated benefits.

### **Installation and Implementation**

The information technology professional will evaluate the environment in which the system will function (i.e. the network and desktop configurations) and make any necessary changes prior to installation. The changeover is also an excellent time to delete outdated, duplicate or superfluous files. Many companies will run the software off line. The implementation team can test and make modifications to the system before it is used on-line. At this stage a programmer may be required to modify or customize the system. This process is sometimes called "successive approximation."

Many companies believe that once the system is on-line, the job is finished. But a critically important step remains to be done --- training. The most effective training is done on site by a professional thoroughly familiar with the system. Of the costs of converting to a new system, the resources spent on training produce the greatest return.

*---Joseph C. Paparone II, CPA*

*Editor's note---Joe is a Partner in the Grove City Office and is a member the firm's information technology team. He is one of several professionals in the firm who are trained in information technology to perform what we call "management level consulting."*