Chapter 2 - Hardware and Software

Other Hardware Considerations

Integration. Many separate hardware components are being integrated into one piece of equipment. For example, reputable manufacturers are integrating the capabilities of scanners, printers, faxes, copiers and telephones into one piece of equipment. This saves space and money. Some other examples:

Plug and Play. The plug and play standard in Windows lets you add hardware peripherals to your computer without worrying about jumpers, dipswitches, or any other hardware adjustments. The software will search for any new hardware components on startup and then configure the appropriate drivers to play the device. Plug and play configures your PC for you.

Connectors. There are generally three types of connectors that are used to connect to other peripherals: parallel, serial, and USB ports. Parallel refers to processes that occur simultaneously. Scanners, printers and other devices are said to be either parallel or serial. Parallel means that the device is capable of receiving more than one bit at a time. Serial data transmits data one bit at a time. USB stands for Universal Serial Bus, a new external bus standard. A single USB port can be used to connect up to 127 peripheral devices, such as a mouse, keyboard, etc. It is expected to completely replace serial and parallel ports. USB ports on your computer are a must buy.

Service and Reliability. In my opinion, this is a main priority in purchasing software or hardware. Over the years, I have had to rely upon many service departments to support both hardware and software products. Some software vendors require that you call long distance, and then put you on hold for 20 - 40 minutes, even though you may have a major problem while preparing for trial. On the other hand, once I was to present at a major seminar and could not locate the key to switch my computer screen to a LCD projector. The manufacturer's technical service representative was available at 7:00 P.M. to solve my problem in minutes. Before purchasing a piece of equipment, call the service department or technical support for the manufacturer several times to determine their responsiveness. Also, ask for references from other attorneys you know.

Upgrading and Obsolescence. The greatest promise of computers is the speed at which they are improving. The processor speed is doubling every 18 months, generally without an increase in cost. Other hardware components, such as storage drive space, are increasing in capacity by 20 to 30 percent every year. The price/performance in hardware will continue to cause software developers to develop new applications that will take advantage of this new power. These, in turn, result in many new and improved software applications that can only run on the new machines. This causes computers and software to become obsolete within 18 to 24

months, resulting in the need for more training. Older technology may be cheaper to purchase, but often ends up costing you more because of its limited life span. Repairing older machines and software becomes difficult if the manufacturer does not support earlier models and versions. Newer versions of software may not support earlier version formats. It is suggested that organizations replace ¼ of the computers each year, giving older models to staff with less demanding needs than the power users.