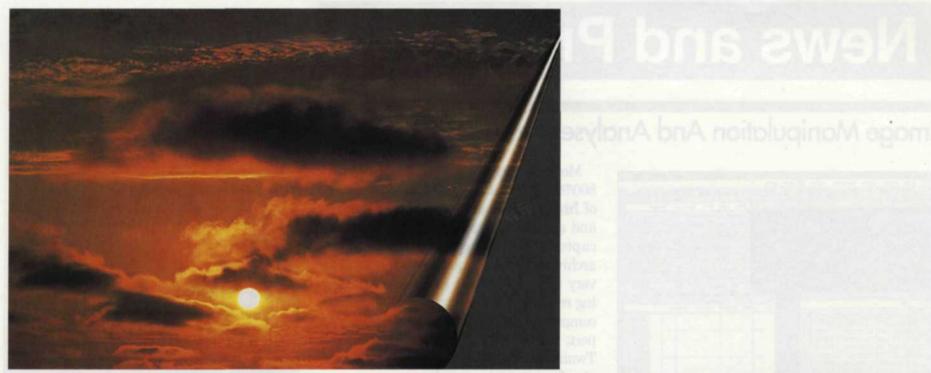
DIGITAL DIRECTIONS



This year will be remembered in imaging as the year many photo lab owners finally accepted the reality of the magic and speed of digital manipulation.



THE DEMANDING

ONE OF THE main differences between traditional and digital photography is the rate of technological change. Before digital, a new photographic process had time to evolve, be refined, tested and finally accepted into the photo marketplace. Digital photography, on the other hand, comes at us so fast we rarely have enough time to look at it, let alone use it, before it becomes old technology.

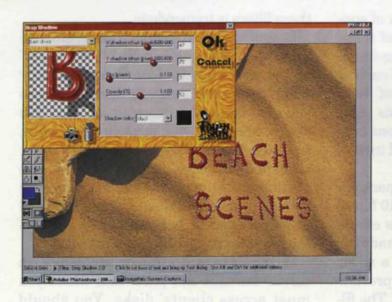
The best way to keep pace and cope with this problem is to research digital trends and try to stay ahead of them. The key is to learn when to jump, when to upgrade and when to add a service, so your business can easily adapt to the ever-changing digital world.

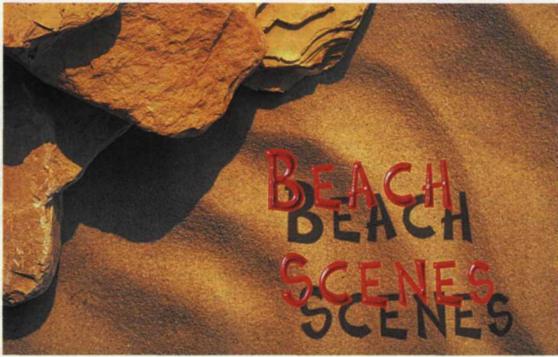
We have put together a collection of the digital trends evident in 1996, to help you plan for the coming year. Some of these concepts may apply to your business, while others may still be out in left field. You'll notice that we break these trends into two distinct areas: software and hardware. They both change at warp speed, but offer different sets of problems for the photo lab.

Software

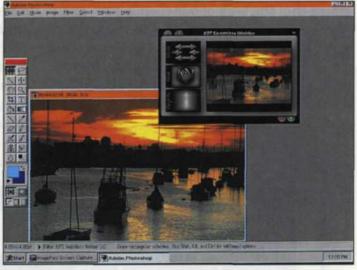
Probably the biggest change for most labs is the switch to Windows 95. We waited for almost a year before making the change, for several reasons. First, we wanted to see if the product was full of "software bugs." Many companies release software before it is fully tested and let the first users of the software troubleshoot the remaining bugs. The software manufacturer then makes the necessary changes and sends out an updated version. If you jump in right away you often end up struggling with all their unsolved problems.

Another problem with Windows 95 is the misunderstanding of how to install the software. If you are installing it on a new machine, it's pretty straightforward and









DIGITAL PACE Jack and Sue Drafahl

installs easily. It's when you upgrade from an older version of Windows that you run into problems. When you first install Windows 95 software, a flag comes up that recommends installing Windows 95 over your old software. It warns that only supervisors should make the decision, and that not doing it may cause problems. The reverse is actually the truth. We would never recommend installing Windows 95 over your old software. If you do, be assured that several of your old software programs and most of your hardware will not work.

The best way to install Windows 95 is as a separate program and re-install all your operating programs with a separate directory called "95". As each program tests out in Windows 95, you can then remove it from your older Windows program. This process takes longer than installing it over the old program, but it is a much safer way. It keeps the changeover control in your hands, not the automated Windows 95.

Windows 95 also has a problem with crashing the computer. Windows 3.0, 3.1, and 3.11 had more crashes than Windows 95, but you could generally recover by just re-booting your computer. Windows 95 does not crash nearly as often, but when it does, it is a BIG problem. This means that you

must back up your system more often and be prepared for those computer crashes.

Software is becoming more and more complex and the related problems sometimes seem unsurmountable. That's why software companies have technical support. When you had a problem in the past, you could simply pick up the phone and get instant answers. Now you must wade though 85 levels of phone automation, only to find that all lines are busy, and someone will call you back. Sure they'll call back—long after you've pulled out all your hair!

And remember: Sometimes this service is not free. Many software companies now charge you for answering your questions. The better way to get results is to use the technical support FAX line, or e-mail. We have been very happy with the results from both services and rarely use the old voice technical support system.

You will also find that the phone numbers and addresses listed for your software company may be invalid. Companies are being bought and sold or pick up and move so fast that keeping accurate numbers is almost impossible. In a recent article we put together about four 3D software companies, two had been sold and one had moved between the time we wrote the article and when it was published.

Another ongoing problem is the constant need to upgrade software. Besides the tremendous expense involved, it is a pain trying to keep tabs on what's what. As a service bureau, we must keep a half dozen programs that the bulk of our clients use—and worry about those other few when problems arise. We can then have the client save the job as a compatible file format to be translated using other software. If all else fails, we end up buying the compatible software so we will have it for future use.

This year we have seen an influx of supporting software programs. Most of these supporting programs work as plug-ins to extend the editing abilities of your current software, such as Photoshop. Two of these companies caught our attention this year, and although we don't recommend one over the other, they should be considered invaluable software editing tools.

Alien Skin makes a software package called "The Black Box." This set of 10 filters takes any image selection and adds effects like glows, glass, bevels, drop shadows, twirls and motion. Each filter has a slider menu for image adjustments and preview before permanent filter application. The filters are easy to use and help you create some of the most professional effects you have ever seen.

MetaTools makes a set of Photoshop filters called "Kai's Power Tools." Some of these filters include the Spheroid Designer, Gradient Designer, Texture Explorer and InterForm. The remaining part of the program includes individual filters that use a glass lens, make a page curl, create planar/ Vortex tiling, or create special effects with the lens f/x. The creativity capability with these filters is tremendous.

One of the most unusual programs we have seen this year is called "Power Goo" and is also made by MetaTools. Basically this program turns any picture into Goo, so you can distort the image in any way you desire. You can bend, stretch, warp, twirl, squeeze, bulge, blend, or mix effects for unlimited control. At first we were not sure of its possible applications, but when we showed it to several clients, they got excited at its potential. It helps to have a sense of humor when using this program!

Viruses are still a major problem with service bureaus and photo labs where you must access clients' disks. You should never let your guard down. We didn't check a floppy disk from one of our major clients and lost two computer systems. There are several types of virus protection programs available and demo programs can be downloaded from the Internet.

Speaking of the Net, the best way to stay tuned to the digital trends is to spend some time surfing the Net. Start an e-mail address, making sure that you allow enough room in your mailbox for large files. Build a list of addresses for technical sup-



port, software and hardware manufacturers. Take some time and get used to finding your way around the World Wide Web.

Hardware

The biggest change to the hardware market is the drastic drop in prices. When the price of RAM dropped more than 200% this year, so did everything else. If you were waiting to buy because of budget restraints, now is the time. We are actually getting close to a point where we have "throw away computers." It is almost cheaper to buy a brand new system than upgrade an old one. For what you used to pay for one workstation, you can now buy three and spread your workload. If your system crashs, you only lose a small segment of your system. Hardware and software compatibility is better because you have less on each computer.

We still see the CD Writer as the best media for image storage. The price of a writer is now well below \$1,000, and we have seen blank CDs below \$8. Almost every computer today uses a CD ROM reader, so the data you save to CD can be read on almost any computer. No more problems with hardware incompatibility. The software today is very user friendly and the writers themselves are designed to run on almost any system. We have even seen software that automatically backs up your entire computer to CD.

On the PC side there is still a battle for hardware running through IDE control or SCSI control. The IDE system is usually much cheaper, but still cannot compete with the speed of a SCSI controlled device. Unfortunately on the SCSI side, the manufacturers cannot seem to standardize on connector types.

One strange direction our digital business has taken this year involves configuring of our client's computers. As computer hardware and software becomes more complex, our clients have complained about the problems they constantly battle with their systems. We ended up setting up a service for our clients, where we send a digital imaging technical support person to their site. This technician shows them how their system should be set up for digital imaging, and answers questions. This service may not fit into every photo lab's plans, but we found that the increased communication in-

creased business considerably.

Finally, a word of caution. In the past year we have seen several digital imaging businesses get into trouble because they leaped before they looked. There are a lot of great digital toys to buy, and they all look like they're going to solve the world's digital problems. Make sure to research and examine your digital needs, and be sure that the new hardware will indeed solve the problem. Remember: The life-span of some of the digital hardware today is less than one year, so plan accordingly.

We're sure we haven't touched half the problems you might encounter in your digital photo labs. Be sure to designate at least one person in your company to research and stay in touch with the digital trends that effect your business. If you don't, you may find yourself becoming a digital dinosaur. Hang on tight, 'cause here comes '97!

Jack and Sue Drafahl own and operate a custom lab in Portland, OR. They are also professional photographers, specializing in underwater photography.

