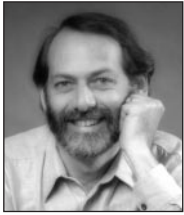


Digital Photography Coming of Age

Still Expensive and Cumbersome—But I've Shot My Last Roll of Film



Since my "End of Film" column two years ago (see MPR 3/10/97, p. 15), I've gradually moved my photography toward an all-digital environment. Although the technology still is not ready for most consumers (due to cost and complexity) or the serious art photographer (due to quality), the threshold has been crossed for the early adopters.

Digital photography is important to the microprocessor world for two reasons. First, the cameras themselves represent a high-volume application for fast embedded processors; IDC projects sales of 4.7 million digital cameras this year and 22 million in 2003. Second, the PC becomes the center of picture viewing and printing for a digital camera user. The importance of a home PC—and the desire for it to have high performance—becomes far greater once the switch to digital photography is made.

The latest consumer digital cameras offer 1,600 × 1,200 resolution. Although this is perhaps half the resolution (on each axis) of a high-quality 35-mm negative, it is at least as good as the quality achieved by a typical autofocus camera and one-hour processing. Good quality prints can be made up to 8 × 10 inches, meeting the needs of most consumers.

I won't go back to film—but I'm not a typical photography consumer. The learning curve and the number of separate items I had to buy, as well as the cost, say this technology isn't ready for the mass market.

Some problems are easily fixed. For example, the Nikon 950 I purchased ships with nonrechargeable alkaline batteries. For a \$1,000 device that eats batteries for lunch, this is inexcusable; nonrechargeable batteries cost as much as film, have to be constantly changed, and contribute to an ongoing ecological disaster. NiMH batteries solve the problem.

The next step is a big memory card. The camera comes with a puny 8M card. An 80M compact flash card, for about \$250, holds 160 pictures—plenty for all but the busiest vacation days. Then there is the USB flash-card reader, another \$80. After about \$1,400, the camera package is complete—but there's plenty more to be spent on software and storage. Clearly, this is an expensive setup; a \$200 35-mm camera can take better pictures, albeit at \$10–\$15 per roll for film, processing, and printing.

The digital photography experience is qualitatively different, however. Instead of taking just a few shots and hoping one comes out well, I can shoot a long series and then delete all except the best ones. I can see in the display how each shot came out and then make adjustments for the next shot.

There are, to be sure, some annoyances. Some of the camera features can be selected only through menus displayed on the color LCD, which is nearly impossible to read in bright sunlight. The camera has a small buffer, making it possible to take a few pictures in quick sequence—but then there is a delay of several seconds while the buffer is compressed and transferred to the flash card. It is frustratingly easy to miss a great moment because the camera is busy. Better buffering and background processing could improve the camera significantly.

The real joy of the camera comes at the end of the day, when a slide show of the day's pictures is just a few minutes away. Viewing pictures on-screen is much better than looking at small prints—and there is no driving, no one-hour wait, no loss of quality due to lousy processing, and no incremental cost (except storage).

The weak link in the chain remains printing. The current ink-jet photo printers are remarkably good, considering their cost, though they are slow. As long as you are a couple of feet away from the prints, they are generally indistinguishable from silver halide prints. The photo paper and the ink cartridges are expensive, however, so if you print most of your pictures, the costs are higher than for normal photo finishing, and it is a lot more trouble.

Software has a long way to go. Software bundled with cameras is generally inadequate. You must choose between cheap, simple, limited programs and expensive, complex programs; to take the high road, you need half a dozen different programs for different tasks.

Computer reliability and backups become serious issues once you're storing on your computer not only your work and your writing but also all your pictures. Losing pictures of your children because your disk crashed is unacceptable. Once faster Internet connections are more widely available, automated off-site backups will help a great deal.

Using a 35-mm point-and-shoot camera today doesn't have to be a hobby; it's an everyday activity. Digital photography is still very much a hobby. But in a few years, when today's \$1,000 cameras cost perhaps \$250, consumer digital photography will take off. We can only hope that by then better software will have been developed and that digital printing services will be widespread and inexpensive. Digital photography is where desktop publishing was in 1985—expensive and cumbersome, but well on its way to revolutionizing an activity and an industry. ■

See www.MDRonline.com/slater/photoage for more on this subject. I welcome feedback at m Slater@mdr.cahners.com.