



Custom Digital Photo & Graphics

IMAGE CAPTURE

Some Thoughts: Digital or Film?

by Mike Borum

A Very Brief History:

The earliest photographers had to do it all themselves, mixing chemicals and coating tintypes and glass plates with light-sensitive emulsion, even building cameras. After George Eastman invented consumer-friendly Kodak cameras and roll film, Eastman Kodak Co. began setting the film standards still used today.

Now we also have affordable, filmless digital cameras, web cams, video/still cams and even cell-phone cameras. Anyone wishing to record a scene has an astonishing variety of choices for capturing their images.

With so many variables, making sense of the choices and selecting the best ones for different situations requires more experience and knowledge than ever before. Once-familiar concepts like "film speed" and "daylight film" are no longer adequate and the choices have brought a whole new lexicon of unfamiliar terms and concepts.

Digital Cameras Arrive:

Early digital cameras (late 1990's) found acceptance where the user's highest priorities were speed and/or saving money (with no film to buy or process) and where film's high resolution wasn't needed. Included were newspaper photography, basic catalogue photography and simple stuff, like

photographing houses for real estate flyers. Otherwise, digital cameras were mostly a disappointment, for many reasons, until about 2002. Then they became good enough, and cheap enough, for a wider variety of uses.

Image resolution in most digital cameras still doesn't equal most film but, and here's the operative phrase, it's "good enough" for a wide variety of uses. So good, in fact, that it's replacing film for many photographers. And, the digital cameras have welcome new imaging capabilities that help with technical problems like white balance, that can be difficult to manage when using film. In many ways they're more convenient but they do bring some inconveniences as well!

Who's Using Digital Cameras?

For starters, include nearly everyone who needs or wants pictures, to some degree.

To average snap shooters, the newest low-cost digital cameras hold tremendous appeal. Resolution is more than "good enough" for snapshot size prints, reviewing the little LCD screen image is really fun and most everyone is computer literate enough to manage image storage, a little manipulation, some cataloguing and some home printing. And there's no film to buy! Wow! No wonder so many people say film is dead.

Many advanced amateurs are having a ball with digital cameras and getting more creative all the time. The true techies with extra time on their hands couldn't be happier. The wow factor is enormous.

For professionals the story is, as always, more complex. According to the most recent reliable surveys, 90% of them have a digital camera of some sort but less than 50% of them actually use a digital camera in their work.

Like all numbers, it's important to read behind the headlines. The term "professional" in photography covers an enormous range of different business models and photographic endeavors. It's fair to say that most press photographers are shooting exclusively digital but huge numbers of portrait, wedding and school photographers still shoot film (and a lot of it). Most catalogue shooters shoot exclusively digital while many corporate and advertising shooters use both film *and* digital capture. You get the idea; different strokes for different folks.

Weaknesses of Digital Cameras:

For the snap shooter, weaknesses are still high cost and unwanted complexity of operation. Cost is rapidly falling, though, and manufacturers' struggle mightily to simplify operation. Still, some people are still just too computer-phobic and photo-illiterate to use any digital camera. Instamatics they're not.

For advanced amateurs, the cost-quality ratio improved dramatically in late 2003 with Canon's Digital Rebel. Pixel counts still don't equal film resolution but they're more than "good enough" to meet most peoples' needs. If you loved the little dials and numbers of film cameras, digital cameras have even more to play with. Way cool.

Professional photographers have a lot to love and a lot to hate about digital cameras, depending on their field of endeavor. Pros often forget how many years they spent learning the technical side of their craft using film and lighting and many have greatly underestimated the time and effort required to adapt to these new digital tools.

The promise often exceeds the reality because many people just don't realize that the

learning curve to achieve their customary professional results can be overwhelming when trying to make a living at the same time.

A professional digital camera is not just another camera. It's a whole new way of working. There are benefits, for sure, but also minefields.

The Post-Production Minefield:

Most professional photographers were accustomed to dropping film off at the lab for processing after a shoot. Post-production time was primarily limited to quickly editing before handing film over to the client. The technical steps that prepared images for actual publication were handled elsewhere by specialists in the prepress industry.

When using digital cameras, photographers' workflow can be very different. They're often expected to deliver printable files that can go straight to press. Many of the prepress specialists have been obsoleted and the photographer now has their responsibilities for color management, resolutions, ink limits, screens, printing issues, etc.

For the technically savvy, this is okay and for real control freaks it may even be welcome. But..... while many clients don't want to hear about the amount of post-production effort required, it often exceeds the actual shooting time itself.

Many times, clients assume the post-production work is just a matter of a few computer keystrokes and only want to pay for the actual shooting time. Many poor photographers don't have the clout necessary to command payment for that post-production time and they're hurting.

Photographers are frequently finding that their equipment investment has gone up considerably and they're working more hours but their actual profit has gone down. This is a big problem the industry is wrestling with and many rue the day they left film behind.

Another Source of Anxiety:

Storage Cards create much paranoia! A single Compact Flash Card, Smart media Card or whatever kind-of-card can hold a tremendous number of important images, depending on the card capacity and image resolutions. Media cards can and do fail, often with financially disastrous

results for working pros. Careful ones feverishly download cards as quickly as possible to their computer hard drives to insure backups. Some wireless systems have emerged to transfer images immediately to nearby computers but cost is high.

Film, on the other hand, is extremely mature and dependable, and a roll holds a relatively few images (usually 36 or less). It can be damaged by mishandling (heating, wetting, poor processing, etc.) for sure but the loss of a roll, or a few frames, can often be tolerated. And digital media cards can't tolerate physical abuse, either.

At least with media cards we can often shoot more without changing rolls. That's a maybe, if the resolution isn't too high. And have you ever lost a little 1 Gb media card? I'd much rather lose a few rolls of film (cheap by comparison!).

By the way, a single, average 100-speed 35mm negative, just one, holds the rough equivalent of about 30 Mb of data; highly respectable, but not always needed since most prints are small. That's why we do so well with lower-resolution digital cameras shooting 1-3 Mb Jpegs.

When Will I Be Saving Money?

Most snap shooters don't really save money by not buying film and processing. More dollars than ever go to the camera purchase, media storage cards, batteries, more batteries, accessories, the printer-of-the-day, wasted ink and "photo" paper, etc. BUT, one thing is undeniable. There's a tremendous "wow" factor to using digital cameras, editing out bad shots on the little LCD screen and printing a few snapshots at home. I love it, too.

Advanced amateurs, as always, are in a category all to themselves. The pure pleasure of technological pursuit and a really serious "wow" factor, not monetary savings, are their primary motivators. We all know it. They generally love shooting pictures, too, especially with the latest gadgets and they're masters of rationalization when acquiring new toys. You gotta love 'em!

Professional photographers, on the other hand, have a lot more explaining to do, to their accountants especially. High-end digital cameras aren't cheap and the requisite gear and software to actually make the things productive can cost far

more than the camera itself. Add in the learning curve and you've got serious expense that must be recovered, very quickly, because it will rapidly become obsolete.

Many a photographer has learned to his or her dismay that they greatly underestimated the real cost of "going digital." Some returned to film. Some left the business. Thankfully, some smart ones that planned realistically and carefully actually thrived.

The Obsolescence factor:

Why is obsolescence so pervasive in digital cameras? Because, any time any tool, no matter what it is, is not really good enough for the job for which it's intended, there are continuous incremental improvements that rapidly obsolete the previous models. In consumer electronics (and most digital cameras are indeed consumer electronics) this effect is very aggressive.

The snap shooters won't have to give obsolescence much thought, the advanced amateurs will want to give it a lot of thought and the smart pros know they have to give it a lot of thought.

Never consider any digital camera an "investment" unless you can make a lot of money with it very quickly or you'll get a whole lot of satisfaction out of owning it. Satisfaction's enough, for sure, but be aware the money's really gone. They're not like collecting vintage Leicas!

Where Does This Leave Us?

We have choices galore and they're welcome. Today's film is marvelous. Digital cameras are so much fun to use that I really want to take more pictures. How cool!

Everybody gasped when Kodak announced they wouldn't continue pouring research dollars into film, as if that meant its death. My thought was, "Why should they keep researching film? It's already better than the vast majority of photographers' ability to use it. Film doesn't need to be any better and it's only common sense to spend the money on something more important, like designing better digital cameras."

But, read that book-length manual, no matter how much you hate it. We could often ignore the manuals on film cameras because there was so

much standardization. But, there's too much hidden in those digital camera menus and not nearly enough standardization to call them intuitive (unless you really, really know what to look for).

Security:

Just a quick note: The new airport baggage scanners used a baggage drop-off will damage your film. The security scanners that people walk through, though, are generally considered okay.

Digital storage cards don't seem to be affected by the scanners, making some photographers turn to digital for that reason alone. Less to carry is another.

Industry Trends:

Snap shooters are abandoning film cameras (and even cameras in general, for cell phones with cameras), printing some of their own prints at home and, increasingly, using retail services for printing.

Advanced amateurs are using both film and digital cameras, sometimes one or the other exclusively, depending on many factors. Some are printing their own prints and using labs for larger prints or more consistently professional quality.

Professionals are moving toward more digital capture, albeit slowly in some areas but quickly in others. One size doesn't fit all, or even most.

Again, making sense of the choices and selecting the right ones requires more experience and knowledge than ever before. That is, if you're anal-retentive about it, like me. Good luck to all!

Does Chromatics Process Film?

You bet! Our experienced technical craftspeople process E6, C41 and B&W film to the highest standards ever available, every day. No one, anywhere, handles film with more dedication. There may be less film to process but it's no less important to us.

We continuously reinvent ourselves and, as a technically advanced digital and conventional photolab, we still offer the experience and mastery of film processing required for accuracy, consistency and cleanliness. Digital imaging doesn't change that at all.

We'll process film as long as it's there, and to the same high standards.

Author's note: I founded Chromatics primarily to process my own E6 film over 24 years ago. My career includes 27 years working (until 1997) as a commercial photographer, shooting all formats for all manner of publishing from advertising to album covers to magazines. I've experienced a lot of changes in both the photography and the lab business during that time and it's never been dull!

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