The Three Steps of Digital Photography

Digital cameras are just one link in a long chain leading from the original scene through to the final image that you display or distribute—a sequence photographers refer to as workflow. In fact, a digital camera isn’t even an absolutely necessary link in the chain. The key element in digital photography is an image in a digital format made up of pixels. Although a digital camera captures photos in this format, you can also convert slides, negatives, or prints by scanning them.

To understand how the camera fits in with other parts of the digital workflow, it helps to understand the three basic steps involved in creating and using digital photographs—capturing, editing, and sharing.

**Step 1. Capturing Photographs**

The first step in digital photography is to get a digital image and there is more than one way to do this.

- Digital still cameras capture photographs in a digital format.
- Film cameras capture photographs on slides, negatives, or prints which you can then scan to convert them to digital photographs.
- Video cameras capture images in a video format. You can then use a frame grabber to isolate out individual frames and save them as still images.
- Digital video cameras sometimes are able to capture still images just like a digital still camera. You can also use a video-editing program to extract individual frames from the digital video.

**Step 2. Editing Photographs**

Once a photograph is in digital form, you can store it on your system and then edit or manipulate it with a photo-editing program such as Photoshop. The things you can do to a digital image are almost endless. In some cases you improve an image by eliminating or reducing its flaws. In other cases, you adjust an image for other purposes, perhaps to make it smaller for e-mailing or posting on a Web site. Finally, you might take an image to a new place, making it something it never was. Here are some ways you can process images:

- Crop the photograph to emphasize the key part.
- Reduce the size of the photograph to make it smaller for posting on the Web or e-mailing.
- Use filters to sharpen it or even make it look like a watercolor or oil painting.
- Stitch together multiple frames to create panoramas.
- Merge two images to create an animated image for display on the Web.
- Change brightness and contrast or expand the tonal range to improve the image.
- Cut and paste parts of one image into another to create a photo montage.
- Convert the photograph to another format.
Various filters and techniques were used here to blend three separate images into one

Step 3. Sharing Photographs

Once an image is the way you want it, you'll find that there are lots of ways to display and share it.

- Print the image on a color printer.
- Insert the photograph into a word processing or desktop publishing document.
- Post the photograph on a photo sharing Web site or a blog.
- E-mail the photograph to friends or family members.
- Send the photo to a service on the Web for prints, or to have the images printed as a bound book or onto T-shirts, posters, key rings, mouse pads, even cakes and cookies.
- Store the photograph on your system for later use.
- Create slide shows that play on a DVD player connected to the TV or a DVD drive in a computer.

Image sharing at Flickr.com