

Hold on to your memories



Bits & BYTES

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Different formats pose different advantages

A recent syndicated article on these pages talked about the potential loss of digital images, and many articles ago I wrote about steps to take to help prevent that loss. But what about the all the existing recordings made before digital? Here's a run-down of things you can do to keep your existing memories going for as long as they can.

Prints — All prints eventually fade, it may take a few years or 100 years, but they will fade and how the images are stored is the key to their longevity. Generally black and white prints will have a longer life than color prints. Color prints have dyes that simply are not as stable. Color shifting on traditional prints can be expected within 30 years. Prints displayed without the benefit of being behind glass and being in direct sunlight will usually have a shorter life.

Be sure to use archival materials in the display and storage of your images. In years past, we were not aware of the long-term effect display materials had on our images. Images displayed with wooden backings and frames filled with corrugated cardboard for filler often would leach wood pulp acids into the print staining them. Ironically, we stored images in photos albums that were made of PVC, polyvinyl chloride, which actually harmed them. To keep your prints lasting as long as possible, replace any non-archival materials and keep prints out of direct sunlight. Many images that are faded can often be restored and a digital scan of the image will at least maintain a copy of the image in its current condition as it continues to fade.

Slides, negatives and movie film — Slides and negatives will generally last longer than prints. But a consistent environment that is climate controlled is the best thing for them. In other words, attics and basements are probably the worst place to store them. The dyes in color films are made of vegetable matter and this becomes food for mold that can develop on film stored in humid conditions. Extreme dryness can also have an adverse

effect on film by causing it to become brittle and crack. Film expands and contracts through temperature changes and just like roads eventually crack. This especially true of movie film in which the actual image is very small. When played back in a projector, scratches that are microscopic appear large on the screen.

Vinyl — Or record albums, for our younger readers, seem to show no effects in deterioration as long as they are stored properly. Record albums should be stored upright and be fully supported. Using something like a common bookend can cause albums to lean against the bookend and then eventually warp. Turntables, thanks to the DJ industry, are still alive and well even though the LP met its demise 25 years ago. You can, with the use of a computer, make a digital recording of your favorite albums.

Magnetic recordings are probably the most vulnerable of all our memories. Audio and video tapes are similar in construction. Fine metal particles are glued to long strips of mylar which hold a magnetic signal. This was and still is a very economical way to make recordings. However magnetic recordings probably have the shortest life span of any media we use. Over time, the glue that holds the metal particles can weaken causing the particles to shed resulting in loss of the signal. And just like refrigerator magnets weaken and no longer stick to the door, the magnetic signal on tapes weakens over time causing the signal to degrade.

Videotapes — The signal on videotape is much more complex than audio so it is more susceptible to becoming unusable. For long-term storage, video tape should be stored upright like a book. Occasionally they should be exercised, which is just simply running the tape to the end and back. If the tape is not filled, fast forward it to the end after viewing and then rewind it to as part of exercise regimen. Avoid repeatedly playing small sections of the tape, which can cause that part of the tape to wear out.

Fortunately with DVD recording now being very affordable, a modest investment will allow you to transfer all these recordings to



PHOTO PROVIDED

This image which looks like two pieces of wood is actually a print and the piece of wood it was pressed against inside a frame. The print now contains a mirrored imaged stain of the wood pattern from the acids that leached into the print. Using archival materials will prevent this.

Graphics tablets an alternative to the clunky mouse

One of the greatest inventions to assist in editing your photo images on the computer is the graphics tablet. This device used instead of, or in addition to, the mouse allows the user to navigate the computer screen using a special tablet and stylus. In addition to making more precise movements, it also can save the user from repetitive stress syndrome. The accuracy of the tablet so outweighs the mouse that many people quickly adapt to them. Graphic tablets are not just for graphics users. Any one who has a job that requires a lot of screen maneuvering will benefit from this product. For artists, not only will the stylus emulate working with a brush, the device has pressure sensitivity feature to mimic the workings of a real brush.

Wacom is the largest manufacturer of graphics tablets and make a full range of products in both size and capabilities. Some of these least expensive models have sold for less than \$50 after rebate. On the most expensive models the tablet is also the screen so the user works directly on the image. A bonus with the Wacom is the bundled software, which includes a version of Photoshop Elements, which makes the purchase a great deal.



PHOTO PROVIDED

Even a three-year-old had no trouble adapting to a Wacom for doodling from pen and paper.

digital.

Audiotapes — I have had very diverse experiences in the longevity audiotapes. A reel to reel recording I made in college, some 30 years ago, sounds as good as the day it was made while some audio cassettes made during the same time period have shed so many metal particles in their playing that the cassette deck had to be

thoroughly cleaned afterwards. The quality of the original tape certainly is a factor in the difference. Fortunately if you can make a good recording of your tapes to CD, you have stopped the process of losing information.

None of our original recorded memories will last forever, but fortunately we now have methods of copying our original material

without generation loss, which means they should look or sound as good as the original. We may have to move those memories from one format to another as new technologies are developed. But if the material has been digitized, our grandchildren should be able to view or listen to those memories with the same quality as we enjoy them today.

Tech workers, bosses still seeking change

SAN JOSE, Calif. (AP) — The placards made clear this was not your typical immigrant rights march: "We played by the rules, now it's your turn," read one. "Legal immigrants keep America competitive," read another.

High-tech workers here on federal permits are speaking out — many for the first time — over rules that leave them for years in personal and professional limbo.

After Congress failed to reform immigration laws for the second year in a row, hundreds of the largely India- and China-born workers protested this summer in Silicon Valley and Washington, D.C. They were frustrated that the divisive debate over illegal immigration had overwhelmed efforts at comprehensive immigration reform.

"I've never held a banner before, but I don't know what else to do," said Gopal Chauhan, a high-tech employee who has been waiting seven years for a green

card. "We usually have better things to do, like invent the next iPod."

Legal immigrants who feel squeezed by limits on the number of green cards issued each year are trying to separate their complaints from the protests by illegal immigrants. And high-tech companies that say they can't fill jobs because of a cap on skilled-worker visas have stepped up their long-standing plea for the cap to be raised.

"It gets too frustrating sometimes," said Sandeep Bhatia, a software engineer from Mumbai who first applied for a green card in 2001.

Since then, Bhatia has completed an MBA, and was joined in the U.S. by his wife Preeti, who also has an MBA. But he cannot be promoted to a job that would use his new skills, and Preeti can't get a job, until the government finishes processing his green card.



This composite of Putsee Vannucci shows him in front of his old store. Although he sold the business years ago and the building was empty for a long time, his name remained visible until the building's razing for the new movie complex.

Recalling a mainstay of regional photography

On a personal note, the valley recently lost a photographic legend in the passing of Putsee Vannucci. Probably no other photographer recorded more of the Susquehanna Valley's history. And with the proliferation of photography, it is likely no other single person will replace him in that mark of distinction. I had the privilege of knowing him and calling him a friend...God-speed Putsee!

— Wayne R. Palmer

Corporate sponsors headline Pentagon robot challenge

LOS ANGELES (AP) — When the Pentagon's research arm first called for innovators to design and race a self-driving car to make warfare safer, a ragtag bunch of garage tinkerers, computer geeks and even

high school students answered.

No one won the Defense Advanced Research Projects Agency's inaugural contest in 2004. An encore the following year produced five robots that crossed the finish

line, and a team from Stanford University drove away with the \$2 million prize.

This year, the field is more savvy, the terrain is urban and corporate sponsors and public relations machines have entered the fray.

"They've become like NASCAR teams with multiple sponsors and stickers on everything," said Peter Singer, a Brookings Institution senior fellow who has followed the DARPA competitions. "It shows that it's becoming big business."