

INVESTMENT OPPORTUNITIES FROM THE HOME DIGITAL FRONT.

By George Schussel

I was recently interviewed by a magazine on the subject of what the “hot” trend in home computing will be for 2001. Anyone who can accurately predict these trends can more easily figure which companies are likely to grow at large rates. After thinking about it for a while, my choice for the most practical, useful home digital device for 2001 came down to digital cameras. In the note below I'll talk about why and cover some of the other supposed “hot” new trends.

The choice of digital cameras as the technology, which is the most real and will have the most home impact in 2001, seemed pretty easy to me. Digital photography has been around for a number of years, of course. But only recently have I seen multi-megapixel cameras that can meet or exceed the print and display quality of single lens reflex 35mm film cameras. The miniaturization of these cameras, in combination with a zoom lens makes them much more transportable than a traditional camera of comparable quality. The price of high quality digital cameras is dropping quickly and should be in the \$200 range soon.

The digital advantage of seeing your photos instantly on the camera or through a TV or PC is huge. You can discard the poor photos and get immediate use from the good ones. Throw in the Internet and your friends or family can instantly see what's going on via email or via posting on a family web site. You can use your PC to edit the photos for more fun. Stitch together several landscape views for a panorama or edit dental work that needs improvement. (My 3-year-old granddaughter lost one of her front teeth in an accident last year. So, for this year's Christmas postcard photo everyone in the family picture coincidentally had a similar missing front tooth!)

In trying to quantify the size of the digital camera revolution, the October, 2000 issue of Upside said “...digital camera use will rise from 10.7 million units sold this (2000) year to 41.6 million units by 2004. A survey by Jupiter Communications says that 25 percent of 2,800 online households surveyed plan to buy a digital camera within a year...” In any case, I'm glad I'm not the manager of film operations at Fuji Film or Kodak. They're going to have a tough job maintaining their markets over the next few years.

Some other undeniable computing trends that came to mind, but that I don't see having the big success (in 2001) of digital cameras include:

- ebooks – I spend a lot of time reading newspapers and stories on a PC connected to the Internet. I also spend a fair amount of time reading conventional print magazines and newspapers. A computer screen, as the window into the Internet offers immediate access to information. But it's no competitor to a printed document for bandwidth into your brain. The ability to peruse an entire printed document with its index and superior print quality means that the printed book isn't going away soon. There will be some specialized uses for ebooks that are practical right now. I think college or professional school texts are likely to be one of the first to go this way. The ability to keep your text up to date – on a real time basis - is very compelling.
- Broadband into homes (especially DSL). A tremendous amount has been written on this subject. I don't want to add needlessly to the chatter, but I would offer a personal observation. During the course of a typical year, I regularly work at 4 different offices. Two are located in the suburbs of Boston, one in the Florida Keys and one in central New Hampshire. As of fall, 2000, no DSL service provider offered the service at ANY of these locations.
- Digitization of music and video. The success of Napster, Gnutella, Freenet and comparable utilities have clearly shown that people want the ability to assemble their own music collections (especially if it's free!). The Grateful Dead (the first Internet band) showed that it's possible to have a successful business while giving away music, too. But this matter is in the hands of the lawyers and courts now. I'm not going to try to predict the outcome.
- The integration of the PC with home entertainment and the merger of the PC with TV. I can watch Films on my PC now, with a DVD player. TV's are cheap. I don't see the advantage,

except in specialized cases, for combining the PC with a TV. Sure, some people will do it, but I don't see it as a major trend in the near future.

- The promised upcoming merger of PDA's, cell phones and pagers. This one is of great interest to the investment community. If you can pick the winner, you've identified the next Intel and Microsoft since there is no question that the sale of electronic "gizmos" will be in the 100's of millions over the next years. In Europe and Japan, the digital cell phone has take off with companies like Ericsson and Nokia leading the way. In the US, PDA's have led this parade with Palm Pilot being the leader. A lead story in the September 21, 2000 issue of the Wall Street Journal started off with this statement "The race for the next 'killer app' in electronics-a combined cell phone and handled organizer- is on." This particular story went on to discuss the new VisorPhone from Handspring, Inc. There probably is something here, but my guess is that it won't happen as early as 2001. The WSJ article concludes by quoting Mr. Hawkins, the founder of Handspring – "Later, I'll add data and e-mail and I'll make the machine even smaller. I can build over time the wirelessly enabled handheld device, with voice and everything." Well, maybe, but I probably won't be buying it in the next 12 months.