

NVPCUG is still without a newsletter editor, so you are still stuck with mine. There is a meeting the Wednesday before Thanksgiving. I am going to share some of Rick Edwards' photography and presentations he has given to other groups in the Big Bear area where he lives.

I am still not using Judy Taylour's articles in my newsletter, but they are sitting in a folder on my computer fo me to access anytime I have time. The person who becomed your newsletter editor will have the same privledge.

Putting a newsletter together when the articles are handed (well e-mailed) to you is really easy. Mine goes together really fast once I get my part written. There are several programs you can use, or you can just do it with Microsoft Word, like I did when I first started. Soon you develop your own style along with some tweaks and tricks for filling the empty spaces. Here is another line of graphics I created using Publisher. It is really quick and easy to do.



Here is this month's short email message that goes with my nesletter:

Greetings Everyone--

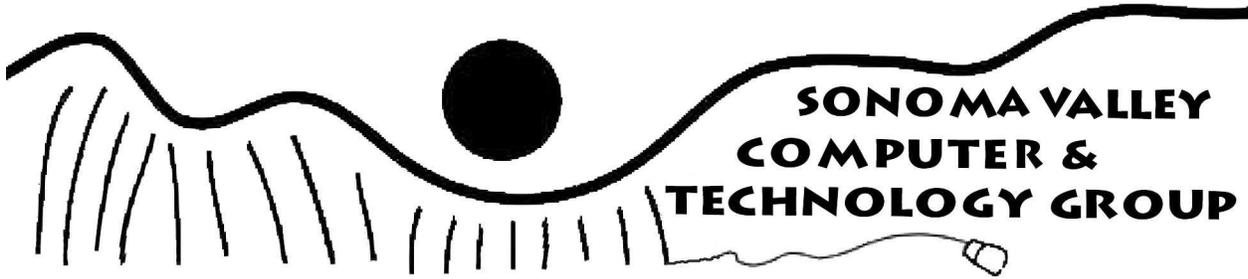
It seems much too soon for the holidays to be upon us, but here they are

Last Sunday was "Turkey Box Day" (my name for it) for the food giveaway program I work with. It's a long day! The donations start coming n at 7 AM and the box give out starts at 2 PM. I picked up the celery late Saturday afternoon – all 170 of them. That is almost 6 cases. Every year it seems to get bigger, but so far we have had a box for everyone who comes to pick one up. The last boxes went out about 4. We cleaned the room, I did a couple of deliveries, and took a nice long nap.

The Consumer Electronics Association (CEA) – the folks who put on the electronics show in Las Vegas - gave me an invitation to get their "Smart Briefs" newsletter. It turned out to be a lengthy collection of emailed articles that arrive daily. Even requesting the computer topic articed didn't diminish the quantity. Many of them were interesting, and I will share some of them with you, but I'm opting out of getting more. The sheer volume swamped me.

Have a tasty Thanksgiving.

--Beth



SONOMA VALLEY COMPUTER & TECHNOLOGY GROUP

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Southwest Computer Conference continued.

Sunday dawned bright and sunny. Another beautiful day, but we have no time to dawdle. Breakfast starts at eight o'clock sharp. It will be a busy day, so we'd better get a move on. I have yet to place my vote in the digital photo contest. There are prizes for first place in each of the categories and a prize for People's Choice.

As always, our full breakfast was delicious and plentiful. We didn't have a presentation, we took care of conference business such as more drawings for door prizes. Then it was time for our 15 min. break before the morning sessions began.



**Beyond
Digital
Painting?**

Tools for painting,
sketching, animating, 2D
& 3D illustration, game
content creation and
more fun...

**Project
Dogwaffle:**

The first group covered three topics I was interested in, but I finally decided on Dogwaffle. Susy went there too. I don't know how they came up with that silly name, but Dogwaffle is a very powerful paint program for the PC that even includes animation. It was developed by an artist for "starving artists". The program is

loaded with fast mobile time filters for color enhancing digital photos and animations, special effects, and many built-in natural media brushes. It also has powerful user-defined custom brushes, fractal particle brushes, full tablet support, layers, artist guides, powerful color gradients, special effects for sky, snow, wet pavement, and even some commonly used in 3-D CG such as lens flares. Much of what was in the movie Avatar was created with Dogwaffle. Philip Staiger, the owner, made it all look really easy to use. Dogwaffle has several versions. You can pick the skill and price level that suits you, and are allowed to install it on more than one device. The earliest versions are free, but they have fewer tools to choose and don't

have animation. The newest version with all the bells and whistles costs \$131. Philip gave us a 70% off discount code. I opted for a free version. I'm not much of an artist and it has enough tools for the projects I have in mind. Susy has the newest one - her review of it is the next article.

Another short break and it's time for our final session. Have FUN with Digital Photography by Helaine Cummins sounds interesting. Both Susy and I decide to go there. Helaine showed us a lot of fun things you can do with a digital camera and a computer, including some easy and interesting ways to make money. For those who don't have a photo editing program, she suggested using Gimp. It's like Photoshop, but it's free. You can also use Topaz with it. She uses Dropbox to share her photos.

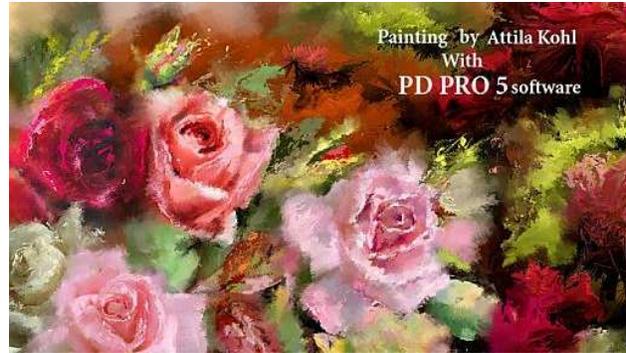
No time for a break, so we hurried to the big room for the last of our conference. We had to find out who won the digital photo contest and finish the door prize drawings. There were four categories in the photo contest, Susy won first place in the digital arts section. Her prize was Corel Paint Shop Pro and a 16 GB SD card. As we leave for the final time, we get a certificate for Ashampoo's Photo Optimizer 4.



Susy's award winning photo

What a jam packed weekend! It is hard to put a monetary value on it, but the food alone (2 full breakfasts, 2 lunches and 2 dinners) was well worth the \$75 registration fee. There were lots of small freebies, but for the first time, not enough door prizes to go around. Forgetting the small stuff, I also got:

- An 8 gig mini flash drive - \$14
- ZAGG foam antibacterial cleaner - \$10
- Four certificates - \$190
- 2 T-shirts - \$10
- XP (my computer's OS) reference book - \$10
- Hours chatting one on one with internationally known wildlife photographer Rick Edwards – absolutely priceless. —Beth



This is an Attila Kohl digital painting created with version 5 of the Dogwaffle Project. Last July they released version 8. There are more examples and training videos on their website - www.thebest3D.com

Dogwaffle - a Review

By Susy Ball, Board Member, Napa Valley PC Users Group
susyball(at)aol.com

www.NVPCUG.org



Howler 8 (which, BTW just came out today, 7-6-2012) is a product from the two man company of Dogwaffle. Philip, the demonstrator, explained that the program is completely written in Visual Basic. In the demonstration, he made the program look very easy and made the program sit up and beg to be bought. The 70% discount he offered to attendees also added to the enticement to purchase the product. So after his demo, I purchased and downloaded the 7.2 version the program and have since found out that I will need to do a lot of reading and follow several of the tutorials from the Dogwaffle website (www.thebest3D.com) before I understand all the digital painting and animation tools this program contains. This program was used when developing such movies as Avatar. BTW, Howler 8 costs \$139 for this their newest program, but they do have other versions for sale that are less expensive.

There are a couple of things that are interesting



Adding animated glows and lens flares to a 3D animation



Painting with the new rules-based foliage brushes & particle brushes

and useful about this program. 1. the program must always be RUN AS ADMINISTRATOR and 2. there is a completely free version (1.2) available as a download from the website given above. One person in the room testified that the company has been very helpful to her personally with the use of the free version.

Would I say get this program. Well, it's not as easy as it looks, but it sure seems to have almost everything you would ever need and there is lots of free help available to anyone from the website and I have even found some useful videos on YouTube. It's not for everyone, but if you've ever wanted to create your own projects from scratch or to enhance existing picture of photos, this might be the program for you.

The five best Black Friday deals I've seen yet

By Rick Broida
November 14, 2012

<http://news.cnet.com/cheapskate>



This year, there are a few deals that might actually be worth the long lines and deal-crazed crowds.

I'll admit that in recent years I've become pretty jaded on the subject of Black Friday. Grinchy, even.

That's because I don't think it's worth standing in long lines and fighting crowds just to save a few bucks. And I literally mean "a few": many stores' "doorbusters" aren't much cheaper than they are during other sales held throughout the year.

Still, as The Cheapskate, I couldn't help but peruse all the store ads that have been conveniently leaked during the past week. And you know what? I've spotted a handful of Black Friday deals that have my pulse racing. I've listed them below, along with a few thoughts on what makes them such standing-in-line-worthy buys:

1. Kmart

Proscan PLCD5092A 50-inch HDTV: \$288 (plus tax). Available starting at 8 p.m. on Thanksgiving, this blows the doors off any other 50-inch HDTV deal I've seen. It's a lower-end model, sure, with a 60Hz refresh rate and only three HDMI inputs, but the user reviews over at TigerDirect are surprisingly positive.

2. OfficeMax

HGST Touro Desk 2TB USB 3.0 hard drive, \$64.99 (plus tax). It's rare enough to find a 2TB external drive at this price, but one with a USB 3.0 interface? That's unheard of. Speaking of which, I'd never heard of HGST, but apparently it's a Western Digital company. I searched high and low for warranty information and couldn't find any, so assume one year. Still: amazing price!



3. RadioShack

SanDisk Cruzer 32GB flash drive, \$9.99 (plus tax). This is definitely an example of saving

only "a few bucks," as 32GB flash drives have been selling for as low as \$17 for the past couple months. Still, that's an incredible amount of keychain-friendly storage for a sawbuck. And it has my favorite design: a retractable USB plug.



4. Target

Nook Simple Touch e-reader, \$49 (plus tax). There's a debate to be had about whether dedicated e-readers have a place in the world now that full-blown tablets are so cheap. But the Nook Simple Touch is one of the top-rated products in its class, and for \$49, it's just

an amazing deal -- and a great gift for yourself or someone else.

5. Walmart

Vizio E601i-A3 60-inch LED HDTV, \$688 (plus tax). This monster flat-panel already made waves when it debuted last month at \$999.99. Not surprising, given the specs: 120Hz, LED, Wi-Fi, apps, and even a keyboard-equipped remote. Oh, and a 60-inch screen. At this very moment, I've got one of these in my living room for review, and although it's not perfect, at \$688, it's the TV deal of the year.

Seriously.



Why I'm not a fan of System Restore *discs*

By Leo Notenboom
Leo (at) ask-leo.com

<http://ask-leo.com/newsletter.html>

System Restore discs allow you to reset your system to the state it was in when delivered from the manufacturer. That is, when they work. Because of that uncertainty, I much prefer a different approach

Q - My Acer laptop was running perfectly fine until one day I was infected with Live Security Platinum "scareware". So I went through a lot trying to get rid of it. Everything from using anti-malware programs to removing it manually, but it kept coming back. So, I finally decided to "Restore system to factory defaults" (my laptop does this from a hidden partition).

By the way, my OS is Windows 7 Home Premium.

Anyway, after everything was installed and the whole process finished, my laptop went to the login screen (you know when you have to pick a user profile if there is more than one). For some reason, the profile I created during the restore process was disabled; it said something like "User profile disabled. Please see System Administrator." And there was also another profile with no picture (the box was there for the profile pic, but no pic) and there were boxes to type in both a user name and password.

Nothing I tried worked and after not finding any answers online, I gave up and restored my system once more. This time, after everything installed, I can log on to my profile now, but there are still problems. Every now and then, Windows Explorer crashes or sometimes, I see the desktop then the screen goes completely black aside from the mouse pointer. Then, after a few minutes, the desktop comes back with a bunch of error messages, but after dismissing them, everything runs fine. Everything except for Internet Explorer, of course, which is now slow and has trouble loading web pages and sometimes only loads half the page or can't load the page at all, even though I still have an internet connection. Sometimes, I even get an iexplorer.dll error (I occasionally get other .dll errors, but I can't remember them).

And here is the final and weirdest problem. When I turn on the computer after Windows loads up at the login, there is a circle with a line that looks like it supposed to be a clock and under it says two min. No matter how many times I reboot, it stays there but it wasn't there before I restored.

Is it possible that something went wrong in the restore process or is there some other problem or problems?

A - Wow.

It's really difficult to say exactly what's gone wrong here.

I have a couple of suspicions, one of which is probably evident by the title of this article, but in reality, it could be many different things. It could be anything from (as you say and I suspect) a bad restore to something that's causing malware to reappear, to even coincidental hardware problems.

For anything short of hardware, however, my recommended approach will be the same.

System Restore is not System Restore

I have to start by clarifying something extremely important.

Restoring your system to manufacturer's defaults using the System Restore discs that were provided by the manufacturer is not the same as using the System Restore feature in Windows.

They are completely unrelated.

The System Restore feature in Windows, which I don't like either, is basically a glorified registry backup and restore that resets certain files back to a prior point in time depending on when restore points were taken. When it works, that is.

Restoring your system to factory defaults, on the other hand, basically wipes out your system completely and replaces it with the copy of Windows and applications that were originally installed on the machine the day it was delivered from the factory.

Typically, all of your data and subsequently installed applications are lost in the process.

When it works, that is.

How restoring your system to factory settings



Ask Leo!
by
Leo Notenboom

probably works

In an effort to save money (and perhaps licensing costs), most computer manufacturers don't actually provide a copy of Windows on installation media like CDs or DVDs when you purchase your machine. Instead, they pre-install Windows for you.

In case you ever need to start over, they also provide a copy of Windows in an often hidden partition on the computer's hard disk. The theory is that a "restore to factory settings" is nothing more than erasing the primary partition and copying the recovery partition into the primary partition. (In practice, it's not that simple but conceptually at least, it is.)

So what's with that "System Recovery disc" that came with your system? Well, it doesn't have Windows on it, that's almost certain. What it does have is a small program, unique to your computer's manufacturer, that does what I just described. After warning you about the consequences, it copies the System Restore partition over the main partition, handling all the pesky details relating to booting properly and what not along the way.

That's how a CD with only a small amount of data actually on it can restore a system that's typically so large, it needs to be distributed on DVDs these days.

And of course, I have to say that this is how it "probably" works, as of course, there is no standard. Each computer manufacturer decides how they want to handle this situation and each provides its own tools and techniques to do so.

Why restoring your system to factory settings might fail

The most common failure that renders this hidden-partition approach useless is a hard drive failure. If the hard drive goes bad, it takes all of the partitions with it. Your primary partition is lost as is your recovery partition. There's nothing for the system recovery disc to recover and it fails.

Some manufacturers will only send you a complete Windows installation disc if in fact your hard drive has failed and they provide you with a replacement.

Another, less common scenario involves malware.

If your machine is infected, it is possible that the malware could infect or damage the hidden system recovery partition. In fact, sufficiently aggressive



malware would try to do just that so as to keep your machine infected even after you've attempted to restore to factory settings.

While the process of restoring your machine to its factory default settings might appear to work, it's very possible that the net result will not be factory default at all.

I'm honestly not saying that this is what's happened to you. There's no way for me to know, but I have to say that it sure does feel that way.

Fixing it after the fact

If your recovery partition is lost or damaged, either actually (hard disk replacement or clear failure) or empirically (things don't work right after a reset to factory settings), there's really only one solution:

Reformat and reinstall from scratch.

That means you'll need actual Windows installation media, not system recovery media, that can be used to install Windows onto a completely empty hard disk.

If all you have is a System Restore disc provided by the manufacturer, you may not have what you need. You'll need to either contact the manufacturer for an installation disc, or go out and purchase one.

There is a better way

Recovery partitions, as you can hopefully see by now, are not something to be relied on. Even if you believe your chances of contracting malware that would damage it are small (and they are), the

simple fact that a hard drive failure could render it useless should be an important realization.

The solution?

Regular image backups kept on an external drive and/or elsewhere.

Take and save an image backup as soon as you get a new machine, and that becomes your System Restore media. If you ever need to restore your system to its factory default settings, simply restore to that backup and you're done.

Take periodic image backups and there's a good chance you won't need to take that drastic a step.

In a situation where you've encountered malware that refuses to be removed, simply restore your system to an image backup that was taken before the infection, and you're done. No complicated removal instructions to follow, no questioning whether or not, it's really gone, just a restore from a backup image.

And of course, if your hard disk dies, replacing and restoring to the most recent backup image has you up and running again quickly.

There's a reason I frequently say, "Nothing can save you from almost any problem like a proper and recent backup."

The Pros and Cons of 64-Bit Windows

By Chad, WorldStart Staff Member

This information has been reprinted with permission from WorldStart

Vernon from Tennessee writes:

What advantage/disadvantage is there between 32 bit and 64 bit Windows?

If you've ever tried to compare different computer or laptop models to see which is a better deal, you've realized it's like comparing apples and oranges. There are just too many variables to be able to make this comparison valid. While browsing, you may have noticed that most non-Macintosh computers come with Windows pre-installed, though some come with a 32-bit version and others with a 64-bit Windows.

Memory

Higher numbers are typically better when looking at computer components and software, and this instance is no different. The 64-bit Windows is newer and better than the 32-bit in a number of ways. The 32-bit version of both Windows Vista and Windows 7 can only handle up to 4 gigabytes of RAM (random access memory), which is what your computer relies on when running programs and loading files. Your computer can't truly utilize every byte of RAM, so you're left with about 3 gigabytes of RAM to work with. The 64-bit version, on the other hand, can handle up to 17.2 billion gigabytes of memory. That's four-billion times more RAM than the 32-bit! Don't rush right out to buy that much RAM just yet though. Your computer's motherboard can only handle so much RAM too, so you'll need to check the specifications for it before adding mass quantities of RAM.

Security

For those concerned about security, the 64-bit

version of Windows offers better security than the 32-bit version. While the 32-bit version's security is adequate for most of the general population, many individuals who are worried about online identity theft prefer the 64-bit because of its enhanced security features.

Hardware Compatibility

Like all new technology, the 64-bit Windows is not without its disadvantages, at least until the rest of the tech world catches up to Microsoft as far as technology is concerned. If your computer or any of your peripherals — printer, scanner, monitor, etc. — are even slightly outdated, chances are they aren't compatible with the 64-bit version of either Vista or Windows 7. When Microsoft created the 64-bit Vista, they stopped supporting older devices, which means you won't be able to find 64-bit drivers for these devices anymore. No drivers means you've got to upgrade to new peripherals. This is not always the case 100% of the time, so do double check with a professional before upgrading.

Software Compatibility

The same situation exists with software, although you can run software that is not 64-bit on a 64-bit operating system, it just won't be as fast. If you plan to use the Internet on your 64-bit Windows operating system — and who doesn't — you'll need to use Microsoft's Internet Explorer 64-bit for optimum performance. Fans of other browsers, such as Chrome or Firefox, can still use these browsers, but they are 32-bit, which makes having a 64-bit operating system unnecessary. Though Firefox has released a 64-bit version,

most users have had extreme difficulties trying to install and run it, so it's best to stick with the 32-bit version for now.

You may be asking yourself which version of Windows is better. The answer depends on your computer needs. If you use your computer primarily for Web browsing, e-mail and word processing,

the 32-bit version is perfectly fine for the time being. For users who run more memory-intense programs, such as video games or graphics programs, it may be time to upgrade to the 64-bit Windows, along with 64-bit hardware and software.

You can learn more about 32 vs. 64 bit here, too.

32 bit or 64 bit Operating System?

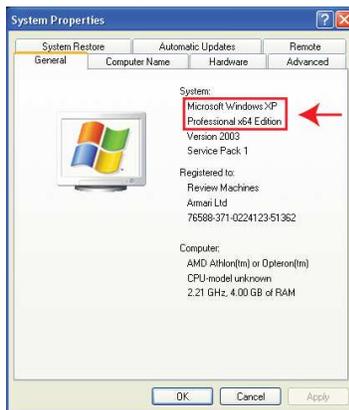
By Andrew, WorldStart Staff Member

This information has been reprinted with permission from WorldStart

Marcus from IN asks:

How do I determine if I have a 32 or 64 bit operating system?

It's good to know what kind of operating system (OS) you have on your computer, that way you'll be able to download the appropriate kinds of drivers and programs that work best with your configuration. So, how about a tip within a tip for this one? Not only are you going to find out which type of operating system you currently have, but I'll even show you a quick way to get there!



For Windows XP users – Hold the Windows Key, and then press the Pause Key, which is located two keys to the right of the Print Screen key. As if by some form of electronic magic, the system properties window springs to life! I

know, I went a little loopy right there, but I just discovered this trick myself, so I'm giddy! This window shows all of the basic info about your computer like how much RAM you have and what-not, but it also can tell you what OS you're running. If it doesn't specifically say Windows XP x64 Edition, then you're running a 32 bit operating system.

For Windows Vista users – Same drill here: press and hold the Windows Key and then hit the Pause Key. Up comes the system properties window and you'll notice a specific field that says "System Type", which has your OS type listed after it. Vista will actually tell you 32 bit or 64 bit.



And there you have it!

Computers 101

By Kevin, WorldStart Staff Member

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32-Bit and 64-Bit Explained - Part Two

In part one of our series about 32-bit and 64-bit processors, we defined basic terms. This segment will deal with processing speed, memory, and how the balance of hardware and software affects performance.

Speed

Processing speed, referred to as clock speed, is generally measured in megahertz (MHz) which amounts to one million cycles per second, or gigahertz (GHz) equaling one billion cycles per sec-



ond.

A computer's architecture is a significant contributor to that processing speed, so CPUs (computer processors) with the same clock speed may not perform functions at the same rate. While a fixed number of clock cycles is required for each command (instruction), a faster clock will execute more instructions per second, and the machine will perform those instructions more quickly.

However, clock cycles (or clock ticks), like so many other terms in this bewildering lexicon jungle, is a term with multiple meanings. On one

hand, a clock cycle is as described above, the relative speed of a processor, but it also refers to the internal system clock, which always runs at 66 MHz (66 million clock ticks per second). So, more powerful CPUs can execute instructions more rapidly than their less sophisticated counterparts, while still displaying the same number of units per cycle.

Memory

While the clock speed of the CPU is the primary indicator of processing capability, RAM (Random-Access Memory) also plays a significant role in performance. When a CPU requests information from the hard drive, it's put into RAM, where it can be accessed with greater efficiency. But, if the memory (RAM) isn't sufficient, the information may have to be returned to the hard drive before the next request can be answered, thereby slowing overall performance.

Hardware and Software

Hardware and drivers (the software that controls the hardware) must match the device's system type, and this should be a primary consideration when upgrading a 32-bit system. For information about how to check device driver availability for 64-bit, click [here](#). For a more in-depth look at the processors themselves, see the article, [Switching](#)



Processors. While some software is system specific—antivirus programs are good examples—many will run effectively on either system type. To learn about software compatibility, go to either the Windows Vista Compatibility Center, or the Windows 7 Compatibility Center.

What all this means is that, with each operation, 64-bit processors can handle bundles of information that are twice the size of those processed by 32-bit systems, and the speed at which these bundles are delivered is determined by the overall balance of system resources (RAM, processors, etc.). In researching this article, I was directed to an analogy of a two lane highway that had been converted to a four lane highway to relieve bottlenecks. But, while that's a good comparison, the benefit is more than just a method of efficiently moving traffic. 64-bit is not just an increased amount of data per bundle, it's also higher quality data, as images, audio, and video files comprised of 64-bit elements are richer, with more depth and texture, than those made up of 32-bit elements.

The final article in this series, [How to Determine if a System is 64-Bit Capable](#), will explain how to tell whether a system is 32-bit or 64-bit, and whether upgrades are possible (or practical).

I hope this has been as enlightening to read as it was to write.

Analysis: E-readers grapple with a future on the shelf

By Jeremy Wagstaff

Oct 28, 2012

cea@smartbrief.com



(Reuters) - Amidst our growing love affair with the tablet, spare a thought for its increasingly shelfbound sibling: the e-reader.

Take Taiwan's E Ink Holdings Inc, which makes most of the monochrome displays for devices such as Amazon.com Inc's Kindle and Barnes & Noble Inc's Nook. After five years of heady growth during which shipments rose 100-fold, it got a jolt at the end of 2011 when monthly revenues dropped 91 percent in two months.

"The bottom fell out of the market," says E Ink Chief Marketing Officer Sriram Peruvemba.

E-readers initially benefited from their reflective displays, which can be read in sunlight and require very little power. But the success of Apple Inc's iPad, improved backlit displays, power-saving technologies and new smaller tablets all point to one thing: the e-reader has become a transitional technology.

Think the harpsichord, replaced by the piano. Or Apple's iPod music player, which helped popularize the MP3 player until the arrival of the iPhone, which could play music but also do a lot of other things.

Now electronic paper companies like E Ink are scrabbling for new ways to sell the technology or in some cases, are pulling the plug entirely.

A recent survey by the Pew Research Center found that of those Americans over 30 who read e-books, less than half do so on an e-reader. For those under 30, the number falls to less than a quarter.

Analysts have cut forecasts, sometimes dramatically. IHS iSuppli predicted last December there would be 43 million e-readers shipped in 2014. When it revised those numbers last month, the estimate was lowered by two thirds.

By contrast, Morgan Stanley in June doubled its

estimates for 2013 tablet shipments, predicting 216 million compared with its February 2011 forecast of 102 million.

"Frustratingly for the E Ink guys, it's a transition device," says Robin Birtle, who runs an e-book publishing company in Japan. "Kids won't need this."

POLE POSITION

Companies giving up the ghost include Japanese tyre maker Bridgestone Corp which ended e-paper production this year after six years in the business, blaming falling prices and the rising popularity of tablets with LCD displays. Its partner Delta Electronics Inc also said it was pulling out.

Qualcomm Inc, which snapped up two startups and launched several devices including the Kyobo Reader in South Korea, told investors in July it would now focus on licensing its Mirasol display technology.

UK-based Plastic Logic said it had stopped making e-readers and was now looking to license its display technology for devices such as credit cards.

That leaves E Ink, which this year bought one of its few remaining competitors, SiPix Technology, in pole position.

Not all the news is bad. A new generation of e-readers with front lighting, which allows reading in the dark, is hitting the market. The Kindle Paperwhite sold out quickly and that device and the basic \$69 Kindle e-reader are the No. 2 and No. 3 top selling products on Amazon, based on unit sales. Amazon also recently launched Kindles in two big new markets - India and Japan.

E Ink's revenues have picked up somewhat from late last year and Chief Executive Scott Liu is promising good numbers when the company announces quarterly results on Wednesday.

But E Ink is betting its future, not on consumers buying more e-readers, but elsewhere - including education, an area it sees as essential to growth.

It has started to focus on adding features for classrooms, such as a master device to control which pages students look at, preventing them from flipping ahead to, for example, an answers

page. Amazon this month announced a push to get Kindles into U.S. schools, selling e-readers at bulk discount.

But it will be an uphill battle. For one thing, Apple has stolen a march in the United States, saying that 80 percent of the country's "core curricula" is available in its digital bookstore. And while educational institutions are investing in e-books, they're not necessarily investing in e-reading hardware.

In Singapore, for example, one university library has dedicated 95 percent of its budget to e-books. But the country remains one of the few where the Kindle is not available, suggesting that those e-books are not being read on dedicated devices.

E Ink also hopes to see its technology in more devices than e-readers. Over the years E Ink displays have appeared in watches, on a Samsung cellphone keypad and on USB drives. One e-ink sign in Japan survived the 2011 earthquake and tsunami and was able to display emergency contact and route information long after other powered-displays fell dark.

Peruvemba travels the world to trade shows peddling an impressive array of prototypes he hopes to tempt manufacturers with, from a music stand with a built-in e-reader to a traffic light. Says CEO Liu: "I've told our people that in five years non e-reader applications will be as big as the e-reader applications."

This makes sense, analysts say. "We have dialed back our take on them," said Jonathan Melnick of Lux Research. "But we still think the technology is going to have a future. It's just not going to be in e-readers."

OUTFLANKED AND SLOW

But not all are so optimistic. Not only has E Ink been outflanked by the emergence of the tablet, it's also been slow to innovate.

Although the screens of the latest Kindles refresh faster than earlier models, critics say they still look a little old-fashioned alongside displays from Apple or Samsung Electronics Co Ltd.

"I don't see any significant improvements in the technology in the past few years," says Calvin Shao of Fubon Securities.



E Ink's own history is not encouraging. It took a long time for e-ink to emerge: Xerox had dabbled in it since the 1970s but it was only in the late 1990s that physicist Joseph Jacobson thought of mixing a dark dye and particles of white titanium dioxide in microcapsules. Stimulated by an electrical charge- a process called electrophoresis - one or other would move to the top to form shapes.

Even then it took seven years and \$150 million for the company he founded, E Ink, to create its first e-reader, and another two years to tease out production problems for its first customer Sony Corp.

And then it took Amazon's heft to persuade the public to adopt the e-reader by adding a compelling range of books, wireless connectivity and the promise of instant downloads.

E Ink says it is undeterred and intends to play a more central role in any new industry it finds a foothold in. "For our new products we will no longer be a component player," said CEO Liu.

Its chances of success are limited, says Alva Taylor, who uses E Ink as a case study for his classes at the Tuck School of Business at Dartmouth College. "The success rate for companies with a technology searching for a solution is pretty low."

Combining scientific innovation and personal determination, Claire Lomas, 32, who is paralyzed from the chest down, completed the London Marathon in 16 days *with the help of a \$70,000 "bionic suit" that allowed her to stand and walk on her own.*

The Year **in** Miracles

Reader's Digest

I saw the proto type of this suit at CES in 2010 and thought it was amazing. I'm really glad to see that it has been improved to the point that even a paralyzed person can walk!

Whoops! You broke the Internet!

No, really, it looks like you clicked on a borked link or something.

You could try searching for what you want here:

Or go live stream [Live events](#).

Or go to the [CNET homepage](#).

Or speaking of 404, you could always check out CNET's Internet snark machine, [The 404 Podcast](#).

Ever get a message like this one?

I really didn't think I did, but with my jinx record, anything is possible. Actually, I was just trying to navigate without a mouse. The small one had been returned, and my new one hadn't arrived yet. Many times the pointer would jump over what I

was aiming for – no matter how I approached it. Try opening a browser or a document without clicking on it. Then there were the links I wanted and the ones I actually activated. I can't believe all the places I wound up – places I never intended to go. Anyway, this one tickled my funny bone and I thought I would share it with you.

Affiliating with NVPCUG would give us non-profit status and a wider range of meetings and events to attend. Their members would gain an additional SIG and short newsletter. Check things out at their website - www.nvpcug.org

Please consider becoming a NVPCUG member. The dues can be tax deductible, and if you attend any of their general meetings or pot luck events, and win a door or game prize, you could come out ahead of the game.

Napa Valley Personal Computer Users Group Membership Application/Renewal *

New Renewal Information Update

Please Print

Full Name: _____ Nickname: _____

Street/PO Box: _____

City: _____ State: _____ ZIP Code: _____ - _____

Phone (check preferred): Home: (_____) _____ - _____

Work: (_____) _____ - _____

E-mail (check preferred): Home: _____

Work: _____

Occupation/Profession _____ Retired? _____

Do you want to be added to the following NVPCUG e-mail lists?

News and announcements: Yes No

General discussion of computer-related topics: Yes No

If you do not want your preferred phone number and/or e-mail address published in the *NVPCUG Directory*, which is for the exclusive use of NVPCUG members, check the appropriate box(es):

Do not list phone number

Do not list e-mail address

Family members whom you want to sponsor as Associate Members:
(Associate Members have the same membership rights as their sponsors,
except for receiving newsletters)

Full Name

E-mail Address

Annual Dues:

\$30 **Regular Member** - an individual who is not a full-time student

\$20 **Student Member** - a full-time student who is not eligible for Associate membership.

\$10 **Associate Member** - a family member of a Regular or Student member. Associate memberships run concurrently with sponsors' memberships.

Mail application/renewal to:

Napa Valley Personal Computer Users Group

Attn.: Membership Director, P.O. Box 2866

Napa, CA 94558-0286.

The NVPCUG is an accredited IRC 501(c)(3) nonprofit organization. Your dues payment may be tax-deductible as a charitable contribution.

* To request a Corporate Membership Application / Renewal form, e-mail: Membership@nvpcug.org