

Talkin' E-Trash

By William Powell

Where do old computers go to die? My aged Pentium tower, recently retired, is currently enjoying the Shangri-La at the foot of my bed—that is, after enjoying a brief stay in the bedroom closet, then the hall closet, and even an overnigher in the bathroom. (Don't ask.) But its days are numbered. After several stubbed toes, I was ready to throw that hunk of circuit board and tin as far as I could, if I only knew where. A trip to the Web was in order.

And lo and behold, what chip have I been living under?

A current National Safety Council study estimates that more than 315 million computers will be obsolete and ready for the dump by 2004. That same study also suggests that nearly 75 percent of computers bought in the United States remain stowed away in the closets and basements of people's homes. The fact that I'm not the only one forced to deal with the remnants of

The I Chromosome

A recent Nielsen/NetRatings online audience measurement determined that while **women dominate Internet usage at home (51 percent), men still dominate usage at work.**

According to NetRatings, women initiated 11 percent fewer surfing sessions, spent 18 percent less time online, and viewed 13 percent fewer Webpages. The explanation? NetRatings analysts point to decades-old occupational stratification. "Women are still clustered in clerical and administrative fields, while men dominate professional, executive, or managerial positions," says Dawn McCaffrey Brozek, a NetRatings senior Internet analyst.

Of NetRatings surfing population, 12.2 million men are employed in professional, executive, and managerial positions. Only 5.5 million women are employed in similar roles.

outdated technology is of little consolation. *E-trash*, as our discarded computers and consumer electronics are so cleverly called, is a serious problem, economically and environmentally.

Lead, mercury, and other heavy metals, such as cadmium, threaten the health of the nervous system, brain, and liver. When computers are discarded in landfills or their components incinerated, chemicals leach into the soil and toxins are released into the air. If the NSC esti-

mate is correct, obsolete computers and monitors will generate 1.2 billion pounds of lead waste alone by 2004. Estimates to dispose of the U.S. stockpile of discarded computers and e-trash responsibly and lessen deleterious environmental effects, run to \$.30 on the pound. Considering that a typical computer with a monitor weighs 50 to 70 pounds, the cost of disposal for all of our e-trash runs into the billions. But that's not the only concern of environmentalists and recyclers.



What does a computer programmer have to do to get a little cred? Sneak a video game into the middle of an Excel spreadsheet and a host of other entertaining (and not so entertaining) diversions into our computer programs, DVDs, even hardware. Computer hardware that is. Check out www.eastereggs.com and www.eggs.com for a list of the best and worst that these hidden tricks, called eggs, have to offer.

Some of the hunts are long, most are frustrating, and a few never pan out, as witnessed by the often angry feedback from egg hunters. But when they work, it's like being a kid again, cracking open a plastic egg and finding a shiny quarter.

Dan Bayha, vice president of the New Jersey-based recycler and reseller Back Thru the Future Microcomputers www.thegreenpc.com is all for a growing awareness, but he worries about a lagging infrastructure for handling e-trash. "In 1998, going to the most recent statistics we have, our entire industry processed only 3 million machines," he says. "When you start looking at the numbers that [the NSC] is asking us to handle over the next three years, you're hit with the realization that the computer recycling industry has to increase capacity by a factor of 20."

That's a sobering fact that tempers enthusiasm for current recycling and take-back programs. A growing number of cities are beginning to pick up electronic trash curbside for recycling, while

retailers and manufacturers such as Best Buy and Sony have rolled out take-back programs in limited areas. Computer manufacturers such as IBM and Hewlett-Packard will recycle your old computer for a nominal fee—usually \$15 to \$30—and have implemented take-back solutions for medium-sized and enterprise-wide clients. But it has been up to the growing segment of privately owned recycling centers, resellers, and concerned not-for-profits to assume the role of advocate. “A lot of people need direction,” says Bayha. “Part of that challenge is for entities to stand up and go to the effort to give users and enterprises the resources that will allow them to find their way through this mess”—a mess that is getting harder for companies to clean up.

Federal and state EPA regulations have become increasingly stringent, forcing corporations to handle their discarded hardware as hazardous waste, attaching liabilities to large-volume generators, and aggressively fining companies that don't discard their computers in an

environmentally responsible way.

“You'd be surprised by how many companies don't have a clue, because, in the past, they haven't had to worry about recycling the proper way. We're astounded by the conversations we have with billion-dollar corporations,” says Bayha.

So what should you do? What should your company do? The first step is to get informed. Individuals aren't subject to increased regulations that cover corporations. A call to a local waste-management facility or area Goodwill is all it takes. If there isn't a dedicated drop off, many cities offer events throughout the year in which residents can dispose of their e-trash. In addition, Websites such as the National Recycling Coalition's www.nrc-recycle.org offer resources and a list of approved recyclers. If there are no outlets in your area, out-of-state recyclers will often accept your computer by mail.

If your company is ready to dump 100 CRT monitors, you have to consider EPA regulations, as well as indemnity.

“Large corporations and state and

federal agencies should look for a recycler that can provide them with a full range of services but also give them a high-level of confidence against any future liabilities,” says Michael Alexander, senior research associate with the NRC. In order to do so, Alexander suggests that companies look for recyclers that can guarantee

- a zero landfill policy
- destruction of all hard drives
- zero export of whole units to countries with substandard recycling procedures, an issue that is as much a PR liability as a legal one.

“Computer recycling isn't a casual issue any longer. It's going to require a bit of research,” says Bayha. “But there are plenty of resources out there to help you.”

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Time to take out the e-trash?

The following list of agencies, organizations, and recycling programs should help.

Environmental Protection Agency

www.epa.gov

National Safety Council

www.nsc.org

Resource Recycling's E-Scrap News

www.resource-recycling.com

UsedComputer.com

www.usedcomputer.com/nonprof.html

Per Scholas

www.perscholas.org

AAA Environmental Inc.

www.aaenvironmentalinc.com

EIA Environment

www.eiae.org

Computer Recycling Center

www.crc.org

PEP National Directory of Computer Recycling Centers

www.microweb.com/pepsite/Recycle/recycle_index.html

National Recycling Coalition

www.nrc-recycle.org

Hewlett-Packard Hardware Recycling Services

www.hp.com/hpinfo/community/environment/recycle/index.htm

Dell Exchange

www.dell4me.com/dellexchange

IBM PC Recycling Service

www.ibm.com/ibm/environment

