



# Tech Check

BY MIKE HOGAN

YOUR BUSINESS IS  
GROWING, BUT IS YOUR  
TECHNOLOGY KEEPING UP?

**G**rowth is good. Managing cascading revenue, remembering new faces at work, finding enough desks, computers and space for everyone—these are the right kinds of problems to have.

But, of course, they're still challenges for a growing business. One of the thorniest? Managing the rapid turnover in your technology set—all those PCs and the stuff connected to them.

Big companies just turn the job over to a trained IT staff, one dialed into the knowledge base of best practices and procedures that have developed over decades of desktop computing. Cash-strapped businesses, however, have to improvise. But don't worry: There's good news.

First, it's time to recognize that you're pretty darn smart about tech, even though most of you downplay your skills and feel perpetually behind the curve. Really, it's not you; it's the industry. No one can keep up with the dizzying pace at which things turn over.



**Top priority:** "If we weren't technologically advanced, we couldn't take care of our customers," say Valerie and Paul Holstein.

Talk to Valerie Holstein, president and CEO of electrical distributor CableOrganizer.com, and you'll find her characteristically self-effacing. But she's clearly conversant in every imaginable business tool, from Apache web servers (apache.org) to Skype phones (skype.com). This entrepreneur learned about technology the old-fashioned way: by outfitting a work force for the fast-growing business she and her husband, Paul, started in their Fort Lauderdale, Florida, home. In five years, they've turned a \$30 investment in web hosting into a 32-employee, \$10 million e-commerce business, going through numerous turnovers in their technology set. But Valerie, 33, and Paul, 36, always shop on a shoestring so they can plow every extra dollar back into the business. "We are so high-tech it makes my head spin," says Valerie. "But we don't believe in debt."

CableOrganizer.com has recently taken to leasing some equipment to capture the tax advantage and preserve working capital. It's a good strategy, since even relatively expensive gear is disposable nowadays—and usually obsoleted by its successor before being fully depreciated. Where practical, it's often better to rent instead of buy your equipment, and that goes for your IT department, too. You don't have to manage IT alone.

There are plenty of longtime national resellers who don't just want to sell you *stuff*; they offer pay-as-you-go IT consulting as well. CDW (cdw.com), CompUSA (compusa.com) and Insight (insight.com) all sell IT expertise, as do Dell (dell.com), Hewlett-Packard (hp.com) and other large "PC companies."

Yes, they're one-stop shops for anything with a power cord. You won't sneak a new desktop through checkout without being offered a cool, new wide-angle display like Samsung's SyncMaster 244T (samsung.com) or a ridiculously cheap workgroup printer like the \$399 Dell Color Laser Printer 1320c. But these sites also include a la carte menus of support, leasing and technology consulting services (some bundled into product prices, some sold separately). A few dollars spent on CDW's network assessment and design services or HP's omnibus upgrade site (hp.com/go/pcupgrade) could save dollars in the long run because the true cost of technology comes after the sale.

The purchase price of technology makes up only a small share of its total cost of operation. The rest is

**ONLINE EXCLUSIVE:** We asked the members of our Hot 500 Editorial Board what tech tools they can't live without. Find out if their picks are the same as yours at [entrepreneur.com/shortcuts](http://entrepreneur.com/shortcuts).

counted in soft dollars that are spent on testing, deploying and managing new hardware, software or VoIP services—and increasingly in retiring old equipment. Minimize soft-dollar costs and nasty surprises by upgrading as much of your technology set

as you can at the same time and making a single vendor responsible for system integrations.

## Phone Home

That's easy to do for PC technology. But increasingly, PC networks are merging with digital PBXs like Avaya's Communication Manager (avaya.com) or virtual PBX services from providers like Covad (covad.com). New U.S. VoIP subscriptions are galloping along at a rate of 150,000 per week and should number 23.7 million by 2010, reports TeleGeography Research.

Unfortunately, VoIP network installation can still be rocky, as Nurse Next Door (nursenextdoor.com) discovered when it bought a six-line PBX phone system that wasn't a good fit for the fast-growing home health-care company. The price tag was only \$10,000, but co-founder Ken Sim figures it cost about \$100,000 in lost revenue, poor customer service and churned clients.

"And that's a low estimate," says Sim, 36, who started the Vancouver, British Columbia, company six years ago with John DeHart, 34. Now Nurse Next Door is switching to Cisco's Unified IP Contact Center (cisco.com).

The total price tag will be approximately \$1 million. But a strong communications backbone is indispensable for the uniquely outbound company, whose 30 call-center employees must schedule appointments for more than 1,200 nurse practitioners and whose revenue will reach \$17 million this year. Nurse Next Door's field managers and finance department minimize repetitive paperwork by uploading timekeeping, billing and client information to HomeTrak (hometrak.net) scheduling and QuickBooks (quickbooks.com) accounting programs, and now computing data and communications will be merged on the same network.

Managers use RIM BlackBerrys (blackberry.com) or HP Tablet PCs equipped with Kyocera Passport cellular cards (kyocera.com) to stay in touch. Canon Pixma iP90 portable printers (canon.com) let them print care plans for both clients and caregivers. Inside, each employee has a trio of flat panel monitors connected to his or her PC to work on multiple applications. Each monitor trio costs \$750 but adds about \$2,000 to the company's top line every year, says Sim.

The recommended cycle for refreshing core computing equipment like this is three years—around when the typical warranty runs out. You can stretch those life cycles if need be; the gear doesn't actually wear out. But understand that you'll be on this treadmill forever, turning over equipment as warranties expire or new product versions promise additional

## SAFETY FIRST

DON'T LET YOUR GUARD DOWN TO TECHNOLOGY THREATS.

Your first line of defense is an all-around security suite like those from Check Point (zonealarm.com), Panda Software (pandasoftware.com), Symantec (symantec.com) or Trend Micro (trendmicro.com). You may need ad hoc scanners like Lavasoft Ad-Aware (lavasoft.com) or Spybot-S&D (spybot.com) for certain subsets of the ever-morphing blob of viruses, spyware and infected images. And high-traffic networks may require industrial-size message scrubbers like Barracuda Web Filter (barracuda.com/webfilter) or Postini Communications Suite (postini.com).

Or just offload e-commerce traffic, e-mail and IM scanning onto third parties. Website or e-mail hosting firms like 1&1 (1and1.com) or Everyone.net have the tools, expertise and bandwidth to catch bad stuff before it hits your servers. Better theirs than yours.

productivity. So don't get too attached to today's purchases.

Populate desktops with space-, power- and dollar-saving network clients like HP's dc5750, similarly configured to simplify management. Of course, many of your mobile (and not-so-mobile) warriors will prefer portable equivalents. Laptops like Toshiba's market-leading, thin and lightweight Tecra ([toshibadirect.com](http://toshibadirect.com)) are not only ruggedized to protect critical components, but are also equipped with auditing components like Intel's Active Management Technology to help you secure and maintain a fleet of these wandering assets. A popular alternative is Sony's VAIO ([sony.com/vaio](http://sony.com/vaio))—usually more expensive but squeezes extras like a widescreen display and Blu-ray DVD burner into a super-slim envelope.

With a virtual environment like GoToMyPC ([gotomypc.com](http://gotomypc.com)), office workers can be equipped to securely access their work spaces from home or any web-connected PC. (Psst: Telecommuting saves you electricity, AC and other facility costs.)

## New Risks

But with mobility comes added risk: Off-site computers are more likely to be compromised, break down or go missing. Protect your data by opting for disk encryption, biometric security tokens and other security and auditing extras that vendors offer. For example, Dell offers Lo-Jack for Laptops ([lojackforlaptops.com](http://lojackforlaptops.com)) to track lost hardware, while your precious data remains encrypted until Lappie comes home.

It's also important to back up all PCs on your network as often as data changes. That's not as onerous as it sounds. A good network-attached storage server like Buffalo Technology's TeraStation Pro II ([buffalotech.com](http://buffalotech.com)) and its bundled Memeo software ([memeo.com](http://memeo.com)) can save up to 3 terabytes of data automatically in the background while you work.

If only that was sufficient. Unfortunately, as the Holsteins discovered when Hurricane Wilma shut down CableOrganizer.com's electricity and internet connection for days, your whole set of data, software, phone and web systems is at risk. Data recovery isn't enough; you need business continuity.

"Even if there's a hurricane, we don't want customers waiting for their orders," says Valerie. "So now we have reinforced doors, generators and five different ways to back up our servers. We'll take our satellite phones and laptops wherever we can find an internet connection."

The catastrophic nature of recent natural disasters has spending on business continuity growing 33 percent a year, reports market researcher IDC. But if you don't want



## Call

### forward:

Having an updated phone system is important for John DeHart (l.) and Ken Sim's home health-care company.

to maintain off-site systems like CableOrganizer.com does, you can back up data to internet warehouses like Carbonite ([carbonite.com](http://carbonite.com)), eVault ([evault.com](http://evault.com)) or Xdrive ([xdrive.com](http://xdrive.com)), or mirror your systems in continuity centers like Central Desktop ([centraldesktop.com](http://centraldesktop.com)).

Of course, when regular systems go down, they take your favorite Microsoft Office programs with them. A free download of the small OpenOffice.org 2.2 ([openoffice.org/product](http://openoffice.org/product)) can provide an emergency word processor, spreadsheet, presentations program and database manager. It lacks new Office 2007 functionality like project management and the Outlook communications manager. But many computer users prefer Mozilla's ([mozilla.org](http://mozilla.org)) Firefox 2.0 browser and Thunderbird 2.0 e-mail editor—both are small and downloadable for free.

Another approach is to work from inside your web browser using internet-based Office work-alikes from Google ([google.com](http://google.com)) or Zoho ([zoho.com](http://zoho.com)). Work is done online from any web-connected device. Similarly, if you use Netsuite ([netsuite.com](http://netsuite.com)) for your critical enterprise processes—accounting, customer service, e-commerce—they'll be continuously backed up at multiple Netsuite data centers and available through any web connection. Increasingly, PC users are helping each other through online communities like Dell's Ideastorm blog ([ideastorm.com](http://ideastorm.com)).

Striving for 100 percent uptime is a lot of extra trouble, but it can also pay out productivity dividends—as CableOrganizer.com has discovered. "If we weren't so technologically advanced, we couldn't take care of our customers like we do," says Valerie. "Then we wouldn't have grown like we have or penetrated the markets of big national distributors like we have." ■

MIKE HOGAN is Entrepreneur's "Digital Edge" and "Connections" columnist.