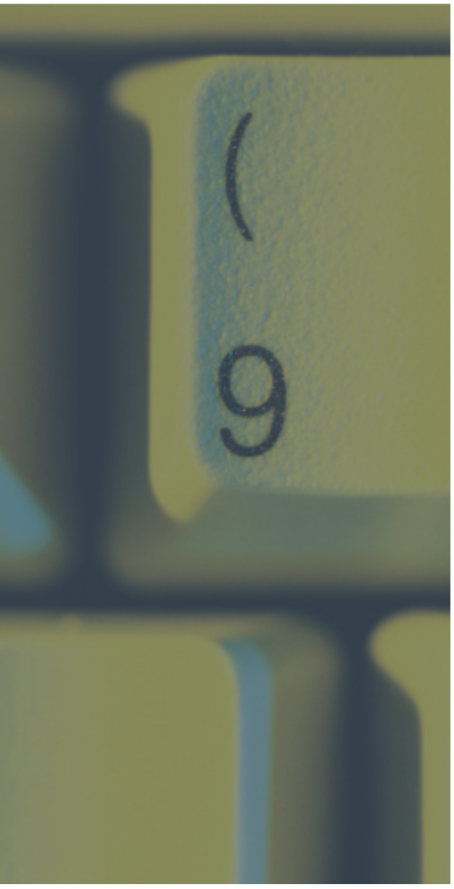
25 Ways to Intelligently Cut IT Costs



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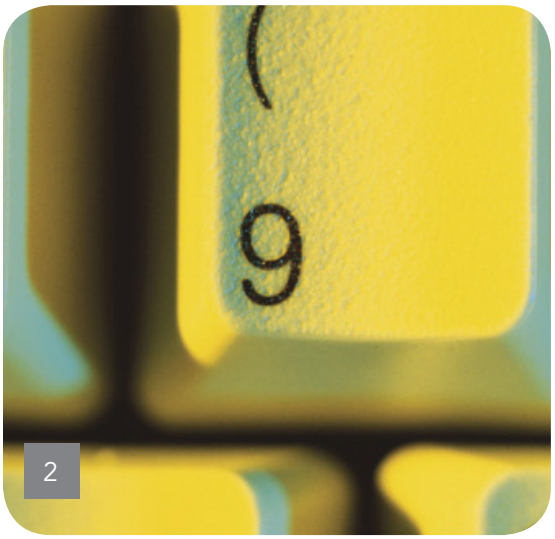
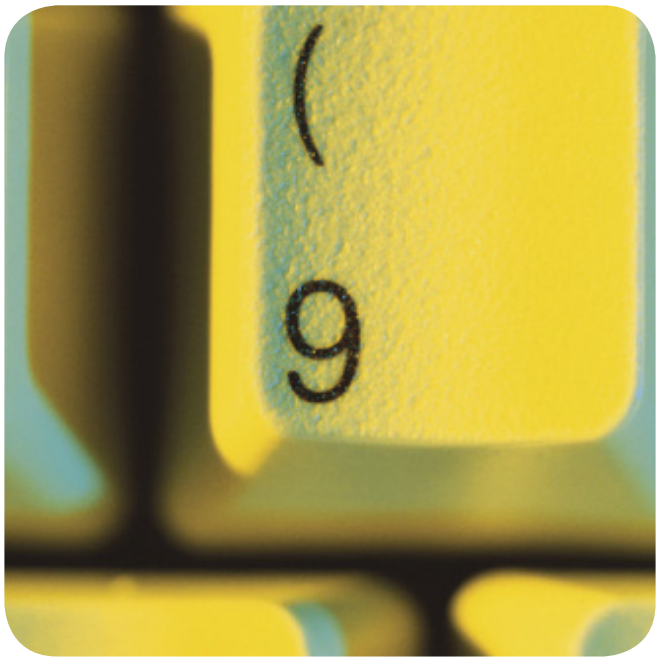


This content was adapted from Internet.com's CIO Update Web site. Contributors: Jeff Vance, Valerie Arraj, Robert McGarvey, and Drew Robb.

9 Ways to Cut Costs Without Cutting Services

By Jeff Vance

When an IT manager gets the order to "do more with less," a shiver runs down the spine. IT managers know that this usually translates into doing less with less and finding ways to hide that fact. Compounding the problem is the fact that IT has already been in cost-cutting, efficiency-boosting mode for several years now.



Haven't we squeezed every last ounce of efficiency out of IT? When I started researching this story, that's the questions I wanted to answer.

I posted a request for sources on the Web site Help a Reporter Out, and I wasn't expecting much. I figured I'd get the usual suspects: virtualization, SaaS, outsourcing, and little else.

Was I in for a surprise? Sure, I received plenty of e-mails about virtualization and SaaS. However, the more than 100 responses suggested plenty of other cost-cutting strategies; everything from replacing dark fiber with wireless to actually cutting back on service levels, especially if those services, such as 24/7 help-desk availability, aren't mission critical.

Culled from input of more than 100 IT pros, here are nine ways to trim IT costs without cutting services. A few ideas are along the lines of what you've heard before, such as data center automation, but even in these categories you might learn some tricks that you may not have thought of.

1. Embrace Automation

It's no secret that virtualization is one of the bright spots in this economy. According to a survey by Robert Half Technology, 40 percent of CIOs planned to invest in virtualization in 2009. Data center automation in general (including automated application discovery, consolidated event management, and change and configuration management) is also holding up strong, mainly because it too promises to cut costs by eliminating cumbersome manual tasks and boosting efficiency.

Automation isn't limited to the data center, though. VDI (virtual desktop infrastructure) can drastically reduce the cost of managing employee desktops, and some organizations are taking a closer look at a range of "manual tasks" and finding plenty of room for automation throughout the enterprise.

A case in point is the New York Office of Temporary and Disability Assistance (OTDA). OTDA is responsible for most types of assistance that New York citizens can receive, from food stamps to heating assistance to housing to disability benefits. Until recently, anyone applying for assistance had to visit an OTDA office in-person, where an agent would fill out paperwork and enroll them in the program. Making a cumbersome process even more arduous, various offices handled various types of assistance, meaning that a person would have to go to one office for food stamps, another for heating assistance, and still another for disability services.

Clearly this wasn't a cost-effective way to provide these services. In 2008, OTDA launched the Web portal MyBenefits, allowing citizens to apply for a range of assistance online. Even with the Web site in place, though, service costs were still high. Each help desk call cost the state about $25. With approximately 62,500 people accessing the site each month, and about 10 percent of those calling for help, usually because of a service interruption, costs for the help desk alone were more than $150,000 per month.

Using monitoring tools from Precise and Symantec, OTDA was able to pinpoint problems and trim these costs. "We were able to identify a number of application and system errors that could have led to a surge in help desk calls," said Daniel Chan, CIO of OTDA. "With better monitoring and benchmarks, we're now able to find and fix problems before outages occur."

2. Open Source

OK, switching to open source is a pretty obvious cost saver. However, many organizations worry that whatever they save in reduced licensing costs will simply be shifted to training and support.

"A few of our clients plan to switch from enterprise systems to open source, perhaps just for a year or two, as a way to ride out the recession," said Barbara Gomolski, an analyst with Gartner. She noted that those make the switch tend to be mid-sized companies. "It's not Fortune 500 companies doing this."

OTDA fits the bill here as well. "We're in the process of sun-setting commercial software," Chan said. "And we're already saving $700,000 per year."

Chan pointed out a hidden cost of commercial software: specialized software consultants. "Commercial software is highly proprietary, which means that you have to hire people with that specialized knowledge. Of course, you pay a premium for that knowledge."

If you do switch to open-source software, be sure it's a mature product. According to J. Schwan, managing partner of Solstice Consulting, you should choose an open-source project based not on its feature set, but on how strong the community is behind it. Projects with a strong ecosystem offer better support and service options and have been proven by a large user base.

3. Eliminate Duplicates

Believe it or not, there are still plenty of duplicate systems out there, even in relatively lean organizations. Organizations will often purchase a bulked-up enterprise software suite that contains, for example, a business intelligence (BI) feature. Since they didn't purchase the suite with BI in mind, they go out and purchase a separate BI suite.

Other companies pay too much for software they use sparingly. Bimba Manufacturing Co. of Monee, Ill., found that it was overpaying for its ERP package because the company, which manufactures pneumatic equipment, had too many ERP licenses when very few employees actually used the software. While many people accessed it, most were only checking on very specific and limited information that didn't need to be walled off in the ERP system.

Bimba moved that information into a separate database and developed some simple Web apps and saved plenty of money in the process. The company wouldn't reveal exact figures, but said it "experienced six-figure savings."

4. Cut Services

I know, the title of this article promises to discuss cutting costs without cutting services, but that may be a wrong-headed approach. "Are there opportunities to reduce service levels without impacting operations?" Gartner's Gomolski asked. "Do you really need to have help-desk availability in the middle of the night? Would it hurt to extend the turn-around time on a work order from 12 hours to a couple of days?"

If you trim excess services properly, the cuts may not even be noticed by end users. "You have to be careful about this," Gomolski said. "Pay attention to the flow of your business. If you're always busy in the early morning, be aware of that and be sure that whatever you cut doesn't come into conflict with your organization's workflows."

5. Examine Wireless

If you have a mobile workforce you may be spending too much on wireless. The Yankee Group's CIO Guide to Cost Cutting series of studies found that many organizations have a piecemeal approach to wireless. Different individuals or business groups adopt their own plans, and, as a result, organizations have little control and spend more than they should.

The report looked specifically at SMBs and found that a 125-person organization can save simply by stopping the practice of reimbursing individuals for their cell phone use. Instead, the organization should sign up for a corporate plan with an "enterprise-savvy carrier," a switch that translates into roughly $100,000 in savings. That $100,000 is the savings per year, with the upfront migration and implementation costs totaling less than $15,000.

As dual-mode phones and plans become available, organizations can save even more money by adding a WiFi component to their cellular plans.

Picking wireless networks over traditional cabled ones is another cost-cutting wireless option. Gold Key/PHR Hotels and Resorts manages hotels, restaurants, resorts, and time-share properties in the Virginia Beach, Va., area. For site-to-site communications Gold Key currently relies on costly T1 lines.

"We're in the process of deploying Motorola wireless bridges to replace our T1s," said Phillip Prestipino, telecom engineer at Gold Key. With a range of seven miles and no need for line-of-sight, the wireless bridges can connect every property they manage. When the Motorola deployment is completed, Gold Key will migrate to VoIP and Prestipino estimates that it will achieve ROI in 20 months. After that they'll continue to save a minimum of $1,000 per month per property versus T1 lines, adding up to more $100,000 per year.

6. Get in the Cloud

Cloud computing has moved beyond the hype phase. Sure, there's still skepticism out there, and vendors are treating cloud as some sort of magic bullet, but there are plenty of applications ready to migrate to the cloud that can save you money today. The most obvious is e-mail. Google has put together some compelling numbers about outsourcing e-mail. Compared to hosting Microsoft Exchange in house, Google's enterprise-class e-mail offers the same feature set as Exchange at a much lower price.

According to Rajen Sheth, senior product manager for Google Apps, switching to Google can cut the typical cost of e-mail from $250 to $300 per user, per year to $50 per user, per year. Before you dismiss Sheth's number as biased, he's backed up by a Yankee Group study. Yankee argues that a 75-person SMB will save nearly $70,000 per year switching from in-house e-mail and messaging to a cloud-based solution like Google.

"As your organization moves more services to the cloud, you have the opportunity to look for other cost savings," said Jeffrey Breen, CTO, Yankee Group. Hardware costs should go down as you outsource server management and maintenance. "You may also end up purchasing cheaper equipment, such as netbooks instead of laptops," he said.

Cloud computing does have its drawbacks, especially in terms of security and compliance, but Breen believes that third-party providers will tackle these problems as the space evolves.

7. Haggle

How much of your IT budget do you consider locked in? If you think of ongoing service and licensing contracts as fixed costs, you're probably spending more than you should. "Vendors are definitely more willing to deal now," said Marc Snyder, managing director, IT advisory practice, KPMG. "Consider your options and work with them to trim costs."

Snyder said that it's important to do your research and have alternatives lined up. Don't simply ask vendors to cut their prices. Knowing your options helps you negotiate from a position of strength.

Carolina Advanced Digital (CAD), an engineering company that provides IT infrastructure, security, and management solutions, recommends that its customers switch to HP ProCurve and away from other networking solutions from vendors like Cisco. "HP ProCurve products come standard with free lifetime firmware updates and free lifetime warranties, maintenance, and support, including next-business-day replacement or repair," wrote Sarah Burris, marketing manager, CAD, in an e-mail for this article. "The difference in support costs alone has saved our customers more than $100,000, not to mention the cost of ownership advantage and strong ROI."

8. Go Green

Talk of Green IT usually turns back to something I mentioned earlier: virtualization. "If you still have each server tied to an individual application, you're probably seeing, to be charitable, a 20 percent utilization rate," said KPMG's Snyder.

According to Snyder, server consolidation through virtualization is a good first step on the path to Green IT, although you should also start working with outside entities, such as utilities (more on that later). The Yankee Group's Breen cautioned that you need to have a sense of purpose before starting a Green IT initiative. "What does Green IT mean for your organization?" he asked. "Is Green IT just a bunch of signs and a feel-good story for your employees? If so, don't invest. If you can actually save on electricity, cooling, floor space, etc., then do it. However, you need to demonstrate ROI."

According to a report by IDC commissioned by Redemtech, a provider of corporate computer recycling and reuse services, Green IT efforts should go well beyond simple power reductions. Companies should study the entire equipment lifecycle, from how a piece of hardware was produced on through to its environmental impact when disposed. The study, Beyond Power: IT's Roadmap to Sustainable Computing, advises organizations to first develop best practices for sustainability, rather than approaching sustainability in a piecemeal fashion, which is common today.

Other advice includes extending the equipment replacement cycle, often by redeploying equipment to other departments that could still benefit from it; choosing equipment designed to be recyclable; refurbishing equipment in the middle of its lifecycle to help extend its life; and seeking alternatives to disposal, such as donating used equipment to charities.

9. Found Money

A benefit of that final piece of Green IT advice — donation — has the added benefit of providing a tax write-off. I asked Snyder of KPMG what he has seen to be the most common mistake companies make when cutting IT costs. "Leaving money on the table," he said.

"Are there tax write-offs, tax incentives, or even utility-sponsored incentives that you qualify for?" For instance, PG&E in California will subsidize virtualization efforts.

Many utilities give incentives when organizations agree to cut back on power usage during peak usage times. This can be as simple as turning out every other row of lights. Visit the Database of State Incentives for Renewables & Efficiency to see what's available in your area.

Gold Key's Prestipino mentioned that his company is exploring these sorts of incentives, while also pursuing other state-sponsored ones. In Virginia, companies can get incentives for allowing workers to spend part of the week working from home. ■

5 Tactical Ways to Control Costs

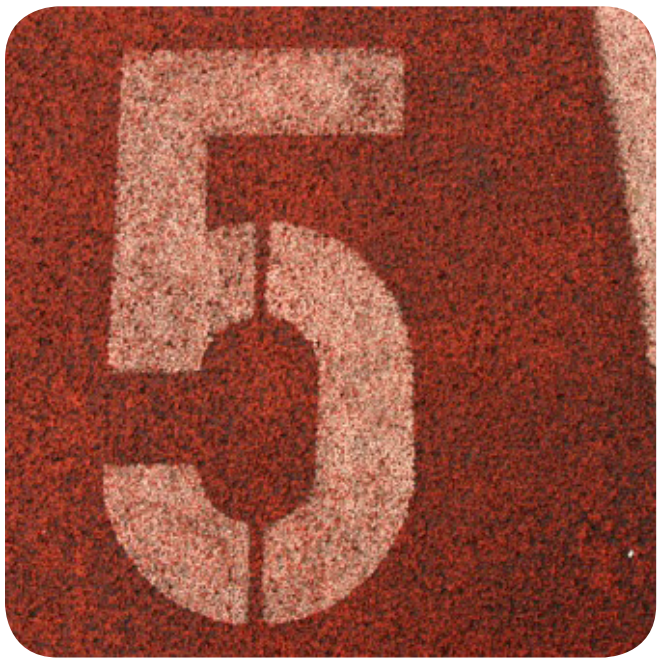
By Valerie Arraj

If 2009 was the year of doing more with less, you shouldn't expect much to change in 2010. Even if the economy improves there's still practical ways — and reasons — to keep watching your costs.

Here are five ways to identify and cut specific costs within your organization. As an added bonus, some of these suggestions will also help to reduce your overall carbon footprint.

1. Eliminate Unnecessary, Legacy Services

The chances that you are supporting systems that are obsolete may seem very slim, but it happens more often than you think — especially in organizations that are extremely busy with day-to-day support activities and don't have a good handle on their services, applications, and infrastructure.



If you have an up-to-date service portfolio and/or catalog, configuration, and asset repository, your ability to more readily identify these opportunities is much greater. But if you don't, your first step is to get a handle on the list of components you do have. If you can't locate an application owner or consumer, chances are this is a good candidate for retirement. Finding and retiring these obsolete services allows you the potential to save money on application, OS, and tool licenses; hardware and associated power costs; and support costs.

2. Identify and Eliminate Unnecessary Hard Copy Reports

Look at your inventory of paper reports. Capitalizing on the inventory of services you collected to eliminate unnecessary legacy services, your first step is to identify the reports you are producing. Make sure these reports continue to be a requirement for decision making or analysis. In addition to eliminating obsolete reports, this may be a good time to consider implementing a strategy and training program for electronic content management. Minimizing hard copy reports can translate to significant savings by reducing paper consumption; reducing recycling costs; and reducing report processing support costs.

3. Evaluate Your Third-Party Contracts

If you don't have a central repository for all of your contracts, now might be a time to implement a supplier management process, which begins with getting a handle on all of the contracts you currently have in place.

Once you've inventoried these, evaluate the contracts for opportunities to save money by:

- **Consolidating contracts:** tactical, point solutions in siloed organizations obscure visibility. Combine contracts where possible to negotiate better pricing and simplify contract management.

- **Right-sizing service levels:** determine if your service levels as represented in the contract remain appropriate to the business need. In busy, reactive IT organizations, contracts that automatically renew are oftentimes not reviewed prior to renewal and service levels needs may have changed leading to better contract pricing.
- **Shopping for better pricing:** where you have options for service provision from multiple vendors, now may be the time to shop around for better pricing. The economic climate is pervasive and both your current vendor and any competitive vendors may have better deals to consider.

4. Evaluate Your Capacity Management Strategy

Now more than ever it can be extremely beneficial to look at virtualization to assist maximizing the value of infrastructure and controlling costs. The benefits of server virtualization can include a reduction in:

- Server hardware and hardware support costs
- Energy consumption and costs
- Data center space and associated overhead

5. Understand and Manage the Cost of Changes

Good practice for IT governance suggests that all IT investments are managed for value. As such, it is important that you manage IT projects to assure that you are getting value for money spent. Large projects that require significant capital and resources should be managed closely to determine whether they are on track to produce the value that they were originally approved to provide. Projects that overrun costs and/or no longer will deliver the value proposed should be cut to eliminate unnecessary ongoing costs.

This is always a difficult decision once money is spent, but is important when evaluating business investment. Smaller components of work that are used to enhance or modify existing services, but don't fall under the governance of a managed project should also be looked at for cost to value. Initial projection of cost along with post implementation review of changes along with a review of the number of changes being backed out or changes causing subsequent incidents should be analyzed on a consistent basis to drive continuous improvement into the change process to assure adequate value for the investment.

A single small change may be a small investment, but many small changes that are introducing risk and not providing value over time add up to significant cost. ■

5 Ways to Cut IT Costs Without Cutting Deliverables

By Robert McGarvey

Cutting IT budgets may not be easy, but when you know where to slice, the savings can add up. Here are some tips from six experts on how it can be done.

1. Do an Inventory

Just maybe the biggest IT savings come from "cleaning out the closet," says Peter S. Greis, principal, IT Planning & Management, Capgemini Financial Services Strategic Business Unit.

"The first step in saving money is to understand what you really have," he says. According to Greis, it's shockingly common for Capgemini to do an IT portfolio review — as Greis calls this intensive review of a company's existing IT infrastructure — where it discovers that "1,000 applications are in use enterprisewide, but they only need 100. There's often considerable waste. That is why we say the first step is: Understand what you have."

Cuts that nobody will notice will immediately present themselves, he says. "Portfolio rationalization is, in our experience, the biggest opportunity for real cost savings in any IT operation."

2. Go "Good Enough"

That's what Rene Bonvanie, senior VP and head of IT for Redwood City, Calif., application developer Serena Software, says is his mantra for spearheading broad cost controls in his company's IT budget. He points to a recent decision to switch to Google's GMail.

"We are saving $750,000 a year by moving from Microsoft Exchange," says Bonvanie, who indicates the switch will involve all of the company's 850 global employees. Is GMail as robust and versatile as Exchange or Microsoft Outlook? Bonvanie says the question misses the point.

"GMail may not have all the features, but it is good enough and, for now, that is our criterion," he says. "We won't be spending more for features we don't need."

Chew on that: If "good enough" is the signpost, does a company need to upgrade from XP or go from Office 2003 to 2007, to pick two glaring examples? Bonvanie says no and, at Serena, unless an employee can demonstrate a vivid need to go with Microsoft's latest, they will keep using what they already have because — to repeat — "it's good enough."

3. Offshore More

That's what Hackett Group senior research director Erik Dorr says his clients tell him they will be doing — and, says Dorr, the pace of new offshoring initiatives will be brisk.

Right now, the surveyed companies say they are offshoring around 15 percent of their IT labor — but Dorr says that will jump to 26 percent within two years. Bigger, more complex projects will probably soon be winding down in Dallas and Chicago and moving to Bangalore and Beijing, says Dorr.

"We have seen what we can only call a dramatic increase in offshoring — the pace is really accelerating," he says. A strengthening dollar vis a vis the Indian rupee is making the savings look even more attractive, Dorr adds.

4. Automate More IT Tasks

What if your organization had a widget, a bare-bones instructional set, that every night at midnight turned off all IP telephones, every WLAN access point, maybe every scanner and photocopier? Multiply that over hundreds, possibly tens of thousands of devices and, instantly, the savings add up to real money, says Doug Murray, VP and GM of Volume Products Group at Extreme Networks in Santa Clara, Calif.

A study of IP phones that are shut off at 5 p.m. and turned on at 9 a.m. showed network costs dropped a staggering 75 percent, per Murray, who indicates he sees a trend where more companies deploy more widgets to cut energy use and network costs.

Automation also can lead to need for less staff, says Sharon Chang, HP's senior product marketing manager for server automation, who explains that automating routine chores such as pushing out Windows patches to all networked computers — rather than doing this ad hoc, computer by computer — can have significant impact on staffing needs. In a company where there is one admin to every 35 users, automation of simple tasks can alter the ratio to 1 to 100.

"That frees up IT staff to do a lot more work that will make a difference for the organization," says Chang.

5. Stay Flexible

That's the advice from IT consultant Steve Jenkins of the Lyndon Group — that's how to avoid getting locked into expensive and even unnecessary projects.

His advice is to divide projects into small units deliverable in, say, 60- or 90-day timeframes, and keep alert to the need to alter course at those same intervals.

"IT, acting in isolation, sometimes gets a reputation for going off on tangents that aren't meaningful to the business," Jenkins says.

The way to stay on a focused course, he stresses, is to view every project as consisting of tiny, deliverable steps — and to maintain close contacts with end-users. Do they still need what they said they needed nine months ago? Do the goals need to be tweaked? Keep up a steady examination of just those types of questions, says Jenkins, and this is a prime way for IT to win a reputation for a flexible focus on end results that matter to the enterprise. ■

6 Ways to Cut Energy Costs Outside of the Data Center

By Drew Robb

The analyst community is rife with webcasts, press releases, and new research studies about the glories of Green IT. Most of it, however, focuses on the data center and most of it comes with a heavy price tag — just change out all your servers, put in this new power and cooling configuration, and, hey "Presto" a brand new Green IT world.

Yet there are many simple and mostly inexpensive ways to save big on IT outside of the data center. This includes centralized power-off of PCs and peripherals, buying Energy Star devices, more efficient power supplies, right-sizing desktop components, defragmentation, and moving to thin client architecture.

1. Centralized Power-Off

Only a few years back, people actually debated whether it was better to turn off equipment at night or not. Particularly with desktops, the argument went that it might be better to leave the hard drive spinning away than to have it started and stopped on a daily basis. That's a sure way to win friends at the local utility and enemies in your own finance department.

But rather than having someone hoof around the building turning off all desktops, printers, and other equipment, there are various ways to turn gear off. Computer management software, for instance, can be installed to turn off networked devices (not just PCs) when not in use. And the savings can be significant.

"Central control of desktop sleep modes to turn desktops off at night, during holidays, and weekends can reduce consumption by 30 to 75 Watts per machine," said Kenneth Brill, executive director of the Uptime Institute. "While individually small, the savings cumulatively add up when tens of thousands of units are involved."

If your electric rates are $0.08 per kWh that equates to annual energy savings per machine of around $24. That doesn't include power and cooling overhead savings.

Miami Dade County Public Schools, for example, applied such a solution across 80,000 PCs at 370 locations and projects annual electricity cost reductions of $2.1 million. It uses BigFix Power Management by BigFix, Inc. of Emeryville, Calif. Now the school district is working with the facilities department to add this technology to the management of AC systems. The savings from this could potentially dwarf those being realized on the electricity front.

2. UPS Delivers

A way to extend the savings beyond the desktop to spend a few bucks more on higher quality uninterruptible power supplies (UPS) that provide more efficiency and less waste. The Back-UPS ES series by APC features SmartShedding, which senses when the computer has either been turned off or has gone into sleep mode, so it can shut off power to unused peripherals plugged into the controlled outlets.

"All devices, not just desktops, have a certain amount of losses just for having them plugged in and on and not performing any useful work," said Carl Cottuli, vice president of APC's data center science center. "Turning off these units saves energy, which has a cascading effect in terms of power and cooling of savings."

The APC Back-UPS ES 750, for instance, provides surge protection and battery backup. Cottuli laid out the economics as follows: with an all-in-one printer, speakers, and an external storage device plugged in to the UPS panel, you can save about $32 annually. This assumes three hours of daily use on average at a $0.10 electric rate. Another $8 can be saved via the unit's more efficient charger. The UPS itself consumes around $2.63 in electricity yearly for $37.37 per year. Once again, factor that against the number of desks and the gains grow substantially.

3. Right-Sizing

The desktop electricity footprint can also be cut down by smart purchasing policies such as right-sizing of desktop components. Every watt reduced at the CPU saves an additional watt or more on the fans, power supplies, power distribution units, UPSs, and HVAC systems. AMD and Intel are both releasing lower power processors, and vendors are designing more efficient fans and power supplies. It can pay big dividends if you give some attention to the efficiency of individual pieces of equipment and even the efficiency of the components within them.

Take the case of memory. Is all that RAM really required? Adding a little more memory might equate to 10 more Watts. Over the life of the desktop, that unneeded 10 Watts has an energy cost of $28 a year, according to Brill. "Depending on type, memory consumes energy whether used or not."

Of course, if you are using Windows Vista, you may need all the memory. So another strategy is to slim back to Linux for routine desktop functions as that typically requires a lot less power and energy.

4. Getting Energy Smart

The U.S. EPA began the Energy Star program in 1992 as a means of saving energy and cutting greenhouse emissions. The program involves certifying home, commercial, and electrical/electronic products as being energy efficient as a means to encourage their purchase. The program initially targeted computers and monitors, but over the years it has grown to cover more than 50 categories of certified products. According to the EPA, Americans have now purchased more than 2 billion Energy Star products. Their use reduced electrical consumption by 150 billion kilowatt hours annually, saving $12 billion dollars. Go to www.energystar.gov to compare power usage rates and features on hundreds of qualified Energy Star devices.

"We always try to get people to look at the lifetime cost of products," said Andrew Fanara, product development team leader at the EPA who works on the Energy Star program. "If you are just buying a server or desktop based on what the stated cost is and don't take into account operations, you are missing half to two thirds of your expenses."

It is also worthwhile to check out the 80 Plus program (www.80plus.org), which focuses on more efficient power supplies.

"Five years ago the average power supplies were operating between 60 and 70 percent efficiency and the power factor correction was horrible in these devices," said Kent Dunn, director of energy and OEM partnerships for PC power management firm Verdiem Corp. of Seattle, WA. Dunn is a program manager for 80 Plus. "An 80 Plus power supply on its own saves 85 kWh compared to its predecessors, then add 25 kWh for power factor correction, plus the benefit you get from reducing the load on the cooling system, and you start looking at 130 to 140 kWh per year."

5. Bring in Outside Air

Some may argue that a few pennies here and there are dwarfed by the huge cost of keeping the building or data center cool. Well, there is a solution to that: bring in outside air. Branch offices and administrative buildings can slash their cooling bills by using outside air economizers as a means of having less reliance on chillers or AC units.

"You have the choice to switch to outside air and keep the chiller plant operating, or as the outside air temperature drops even more, you can save even more money by turning off the chiller plant," said Vali Sorrell, a mechanical engineer for the Syska Hennesssy Group of New York City.

In most parts of the world, he said, outside air can be used around the clock all year. This has the added benefit of improving the reliability of chillers and AC systems, which are historically the flakiest of all equipment on the mechanical side.

6. Thin Clients

Finally, thin clients are a great way to slim down the electricity bill.

"Total power consumption of a typical PC and monitor can be as high as 175 Watts, whereas thin clients can use as little as 4 Watts," said Andi Mann, an analyst at Enterprise Management Associates.

Amerisure Mutual Insurance Co., based in Farmington Hills, Mich., for example, utilizes Wyse 5150SE, S50 and X90 devices. "The electrical pull for these thin clients is about ten percent of the pull from a regular workstation environment," said Jack Wilson, enterprise architect at Amerisure. "You can also keep them for seven to nine years so you also save on PC refreshes and exert far less landfill impact."

And if your clients are Windows, that old faithful of the desktop and server, disk defragmentation, is a time tested way to keep energy costs down. According to a study by 3D Professor.org, for instance, running Diskeeper by Diskeeper Corp. of Burbank, Calif., enables systems to run with lower energy usage and produce faster results. Test results showed an average of 0.12 kilowatt hours of energy savings per PC per day. That equates to over $20 per PC per year. For 1000 PC's that's $20,000 or more.

If you look beyond the data center you'll find a lot of ways to make the business a lot of green. ■