The threat of a global recession means senior managers must make difficult choices about budget priorities during an economically challenging 2008. However, because office printing tends not to be actively managed, most organizations can save money now without some of the difficult choices that other kinds of cost-saving steps entail.

Key Findings

• Actively managing office printing can lead to a reduction of 10% to 30% in recurring spending on document output.

• A 1,000-person organization could cut up to 1.6 million pages and save $33,500 per year by eliminating banner page printing.

• Reducing the density of ink or toner by 10% to 20% can reduce per-page costs by 5% to 10%, or $6 to $10 per user per month.

• Organizations can potentially reduce annual paper costs by at least 30% by selecting duplex printing as the default setting across the output fleet.

Recommendations

• Gain support for your print initiatives from senior management, and ensure that employees are informed about the importance of their role in such initiatives.

• Reduce paper consumption by adopting duplex printing where practical.

• Experiment with toner density settings to find the right point for your print output. Investigate toner-saving technologies that make it easy to do this.

• Beware of “quick fixes.” They may seem obvious, but most quick fixes aren’t really quick or don’t fix anything. Worse still, they may compromise your longer-term office print initiatives.
ANALYSIS
Introduction
A slowing economy in the U.S. is spurring CIOs around the world to consider which of their planned technology investments to implement fully and which to reduce. This is not the first time this has happened. It was the previous economic downturn and the promise of savings that really got organizations started on actively managing office print. Many have had some success, but at least half gave up or never tried. Now is an ideal time to start office print initiatives or make enhancements to existing ones. These initiatives can dovetail with your green initiatives, which will also help you cut costs. This means that you’ll be able to avoid the difficult choices that other kinds of cost-saving steps entail. Most initiatives will require long-term plans, but we highlight some short-term steps that can be taken to cut costs in 2008. The most important thing to remember is that these short-term plans should fit within the longer-term plans.

Take These Steps in the Short Term for Fastest Return on Investment

These three steps offer the fastest return on investment (ROI) and are the least likely to complicate any long-term savings effort.

1. Eliminate the Printing of Banner Pages

Print managers can reduce their organizations’ consumables cost by up to 20% by eliminating banner pages from office print jobs. Banner pages can represent up to a quarter of pages printed for some typical office print jobs. A 1,000-person organization could cut up to 1.6 million pages and save $33,500 per year by eliminating banner page printing.

2. Implement User Authentication at the Output Device

User authentication will save you money because it allows you to eliminate banner pages from documents while still showing users which print jobs are theirs when they go to the printer. It will also eliminate the wasteful practice of users sending jobs to print and then not going to retrieve them. One way to ensure ROI during 2008 is to use secure and private printing via PINs and other tools to control print jobs:

- **PIN printing** – Users key a PIN of their choice into the print screen immediately before printing, and then again to release the job at the printer. This is a good way of eliminating misprints generated by software glitches or user errors. Users need to be trained, but this approach is inexpensive and relatively simple. Most multifunction products (MFPs) and new workgroup printers have the memory and capability to allow PINs to be saved as a default setting. Those that don’t are old enough to be worth replacing as part of a longer-term technology refresh.

- **Pull printing** – Users log onto any printer on the network, view the list of print jobs they ordered, and then print the one they need. This approach costs more to implement than PIN printing, but offers greater flexibility.

- **Access cards** – These are a quick and easy option for automating pull printing, and can be the same cards employees use to open doors. Another option here is the use of biometrics. Fingerprint identification is one of the least expensive user authentication methods to implement, but its adoption is fairly limited at present.

3. Set Toner Saving Modes

Toner and ink account for much of the cost of printing. Reductions in the density of ink or toner by 10% to 20% can reduce per-page costs by 5% to 10%, or $6 to $10 per user per month. Savings will be higher by a factor of about three for color pages. Overall savings will be greatest for organizations with the least-efficient equipment, such as personal printers or aging printer fleets. Technicians simply adjust the default density settings on the printers or on the drivers. The only cost here is that of someone changing the settings on the machine, but this approach requires constant policing and could be very hard to manage across a large printer fleet.

A more comprehensive and cost-effective approach is to implement centrally managed software that reduces or controls the amount of toner applied to each page. This also has the least impact on readability. For example, software that can control toner usage can realize a 5% to 10% reduction in toner consumption with little noticeable difference in quality.
Examine the Possibility of Enforcing Duplex Printing Across the Organization

Another option is to enforce duplex printing across the organization. All devices with duplex capability could be set to duplex printing in the default settings. Users would then have to deselect duplex for any documents that could not have double-sided printing. There are forms, for example, that must be printed on only one side of a page. This initiative could be done almost immediately and would involve very little setup cost beyond the time taken to set the devices to duplex. A company could conceivably reduce its annual paper costs by at least 30% using this method. This approach is likely to be most effective in organizations that have very simple print needs, such as printing basic office documents.

Active Print Management Initiatives Can Cut Your Office Print Costs by Up to 30%

Deeper savings entail more-thorough changes in three areas:

1. “Right-sizing” or optimizing the fleet, starting with a needs assessment
2. Consolidating purchases and negotiating competitive prices
3. Setting up and staffing a process to keep the optimal state in place, including tracking and monitoring

This broader strategy will require some investment of time and money in 2008. But it takes months or years to carry out, depending on the size of the organization. Organizations with tens of thousands of workers can take two or more years to roll their program out over hundreds of sites, spending hundreds of thousands of dollars to save millions more over a three- to five-year period. This approach requires a working party to assess organizational and departmental output needs, examine right-sizing options, purchase competitively and actively manage the initiative. Seek sponsorship from a senior manager, ideally a high-level executive. This senior manager needs to emphasize that this initiative is a priority that must be started in 2008 even though it is unlikely to deliver ROI in 2008. The executive also needs to ensure that the organization’s different department heads work together on this initiative. Active management of office printing is a long-term strategy, but it can permanently reduce print spending by up to 30%.

Avoid “Quick Fixes” That Will Undermine Long-Term Print Initiatives

At the same time, organizations should take pains to avoid rushing to adopt the suggestions listed below. They seem like obvious cost-saving steps, but they either undermine the opportunity for long-term savings or tend to backfire:

- **Ad hoc printer purchasing** – Replacing equipment on an ad hoc basis is costly and undermines overall print strategies, so view this as a longer-term goal.
- **Stopping or reducing the use of color output** – As with the enforcement of duplex printing, setup costs are very low beyond the time it takes to set device permissions. However, users will tend to circumvent almost any restriction with personal printers, or by getting other people to do their printing for them by shipping it out at high cost, which will undermine any savings from this approach. In addition, more and more printers and MFPs are color or color-enabled. Therefore, print managers should avoid any quick fixes with color and should instead focus on the longer-term user-education strategy for dealing with color output.
- **Reducing all output by ensuring that only absolutely necessary outputs are printed** – A nice ideal, but printing tends to be part of a work process, and work processes take time, money and effort to re-engineer. Ad hoc printing could be better controlled with a little education on basic office applications. This includes ensuring spell checkers are installed and used, promoting the use of the “print preview” function before printing, and printing only the changed pages in a reprint rather than the entire document.

One-Time Cost to Implement Recommended Actions

The recommended actions would entail the following estimated one-time costs:

- **Cutting banner pages** – It costs nothing to simply switch this feature off, but outputs might be mixed up at the printer. User authentication can be used to solve this problem (see below for costs).
Implementing user authentication – This costs nothing if done via the private printing or secure printing features already installed on printers. Implementing pull printing in a 1,000-user organization would cost about $20,000. (The annual cost of using pull printing in a 1,000-user organization is likely to be $5,000 or less in licensing and service fees.)

Reducing toner settings – This costs nothing if an employee is tasked with setting machines manually. Using toner-saving software will cost approximately $50 per user for a license in a 1,000-user organization, or about $4,000 per 900,000 pages if charged on print volume. Toner-saving solutions usually require server infrastructure, which could mean additional costs. Costs for server infrastructure and support will range from $0 to $10,000, depending on the infrastructure already in place.

Range of Potential Net Savings in 2008 and Annualized Savings in Future Years From Recommended Actions

The recommended actions would yield the following estimated savings:

- Cutting banner pages – A 1,000-person organization could eliminate up to 1.6 million pages and save $33,500 per year by forgoing banner page printing.

- Implementing user authentication – With as many as one in 10 documents sent to the printer and uncollected or sent again before collection to correct user errors, enterprises could reduce ad hoc print costs by up to 10% by implementing a PIN authentication system.

- Reducing toner settings – Organizations tend to spend 3 to 5 cents per black printed page, with half of that on supplies, equaling 1.5 to 2.5 cents per page. A 10% reduction in supply costs would reduce the per-page spending by 5%; a 20% reduction by 10%. Office users average 1,000 pages per month. Implementing toner-saving software offers a potential ROI within six months.

- Actively managing the office print fleet – This could reduce spending permanently by 10% to 30%.