

Is Cloud Computing On Your Horizon?

Positioning new technology as the greener choice

BY REBECCA TRELA

The thing that everyone forgets about printing and communications, says Meta Brophy, director of publishing operations at Consumer's Union, New York City, is that it's a data-driven business, and that data has to be powered by something. Many end users think that paper is the villain of the print industry, but it's a recyclable and renewable resource—

and has been since before it was ecochic. Instead, electronic devices are the hidden energy hog of the business.

Print and electronic data are inextricably linked, although this isn't immediately apparent for many buyers. All communications have an electronic component—from ripping a VDP job to soft-proofing a business card. Even without the tremendous

draw of printing equipment, enterprise IT can consume about 40 percent of a company's total energy, some IT professionals say.

As the electronic aspects of the printing industry grow in importance and number, sellers have an opportunity to position their companies as greener than the competition and ahead of the pack. One of the easiest ways to do this is by virtualizing some or all of your business practices, through cloud computing or gridsharing. In fact, you may already be doing this and not even know it.

HIDDEN E-CARBON FOOTPRINTS

"According to information recently released by Apple, the lifecycle carbon footprint of an iPhone is responsible for the emission of 121 pounds of CO2-equivalent green house gas emissions over the course of a three-year expected lifetime of use, the same amount produced by 12 100-watt light bulbs glowing for 691 hours, or a car engine burning 603 gallons of gasoline. Though it is not a direct comparison, it is interesting to note that Discover magazine estimates the lifecycle carbon footprint of each copy of its publication is responsible for 2.1 pounds of carbon dioxide emissions, the same amount produced by 12 100-watt light bulbs glowing

for an hour, or a car engine burning 14 ounces of gasoline."

Don Carli Institute for Sustainable Communication

The Next Big Thing

If you've used software as a service, or have outsourced basic business practices or data storage over the internet, you've begun to dip your toe in the waters of cloud computing and its more complex counterpart, gridsharing.

This approach allows users to access computational power and storage space from third-party vendors online, which is the "cloud." It's a scalable technology, meaning it encompasses both very simple applications such as Salesforce.com, PayPal and data storage and very complex ones like BitTorrent and Skype.

Many gravitate to this approach because it's a good way to save money on capital investments. But it's also a green approach, because it centralizes the energy needed to process data.

Slava Apel, CEO of Amazing Print Corp., Ontario, Canada, admits he's always been curious about new technology. But he first became interested in the virtualization process as an organizational time-saver.

Source: sustainablecommunication.org

"For a long time, there was a threat of our hard drives dying about every three years," Apel says. "As a business owner, that's a huge headache." Dell introduced solid state hard drives several years ago, Apel says, and he leapt at the opportunity to invest in one of these quiet, low-power server machines. Now Amazing Print has a terminal service setup, wherein 15 "dumb terminal" desktops and laptops connect to the mainframe server through a local

keyboard to use. For \$30, we have a great collaboration solution, and it saves power, too."

One of the biggest benefits of virtualization is the cost savings, Apel admits, and not from the utility company. "We realized that we can just buy one license for Adobe, one license for Quark, one copy of all the software we need, and everyone can access it as needed from the server computer." For a web development firm, he estimates

the software, maintaining servers and storing data.

"From an infrastructure perspective, I'm extremely interested in moving off our own equipment," Wangaard says. Because Four51 has already invested in equipment, it will maintain the current investments but seek to virtualize the process in the future. It makes sense, he says, for his team to build e-commerce applications instead of maintaining servers. In that sce-

nario, a centralized data company would house Four51's information on servers, alongside other companies' information. Those servers would be cooled, secured, maintained, backed up and monitored by the data company.

"I think in a few years our infrastructure will be on the cloud, and the customers won't even notice a change," Wangaard says.

The printing industry can be proud of being ahead of the curve this time. "The reason why web-to-print was born in the first place was the biggest virtualization of graphic design services," Apel says, For more than a decade, the industry has realized that it's a cost-effective way to get printing done. But it's also a

green way to do business, too.

In the future, Apel anticipates that more and more users will offload their virtual work onto suppliers' systems, "If you're dealing with an agency that is proofing a job online, you could take it one step further. You could give them controlled access to your mainframe, and let their designer make the job online. You could watch them use it and help them. They'd be using your fonts, your colors—I could see that as the near future."

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alreadys

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John Wangaard, CTO Four51, Minneapolis

intranet. Each terminal is equipped with a web browser and some antivirus software, he says—that's it.

Except for logging into applications on the network, users can't even tell that most of the computers are stripped down—but Apel's electricity bill is about 30 percent lower.

Apel takes his leadership responsibilities as a business owner seriously, he says, and is always looking for ways to innovate. "We have so many meetings here, perhaps two or three a day," he says. "Everyone used to come to the meeting with his or her own laptops, and it was too much. Now, we just use one projector, and everyone at the conference table gets a mouse and a

the savings are thousands of dollars per computer.

What the Future Holds

Almost any application available, says Four51 CTO John Wangaard, can be moved onto the cloud. "The trend will be to continue to not own software, and more of it will move to managed applications because it makes sense to let companies focus on their core business," he says. "Those small pockets of data processing and data repository will be moved to more efficient pockets." For example, Four51 offers ecommerce services for clients, allowing them to extend their capabilities as subscribers, rather than purchasing