column < **Computing Needs**

Going green

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Chicago law firms, like the rest of the country's businesses, are hopping on the "green" bandwagon. The benefits of an environmentally friendly business can be both altruistic and economical: firms can practice corporate responsibility while focusing on waste reduction and efficiency. Whether firms recycle, go paperless, or institute energy savings with lights and other appliances, they can reduce their ecological impact.

But examining a firm's computing needs can take the green initiative a step further.

A new way of running law firm software has arrived with a profoundly positive effect on the environment. While traditional, installed software requires hardware and headaches, Software as a Service (SaaS) and the Cloud help decrease electricity consumption and reduce landfill materials considerably.

What are SaaS and the Cloud?

Think of all of those extra computers, monitors, backup devices, and other equipment humming along in a firm's server closet.

SaaS and the Cloud eliminate the need for such hardware by allowing users to perform all tasks through a web browser. Both terms refer to outsourcing computing needs.

For example, if a lawyer decides to use a SaaS application for time tracking and invoice creation, the SaaS software vendor will provide a URL with a username and password. Instead of purchasing a server, connecting it to a network, and installing software, the attorney will use a web browser to log in to the application and enjoy its use immediately.

When firms use a SaaS solution, computers are housed offsite, in ultra-secure data centers — ideal environments for computers with redundant power supplies, backup generators, and surveillance systems.

SaaS providers take care of software instal-

lations, upgrades, security patches — pretty much anything firms have an IT person do. Law-related SaaS choices now allow firms to run their e-mail, backups, billing and invoicing, contact relationship managers, and other legal productivity software through the web.

How does using a SaaS solution reduce carbon emissions?

Like most green initiatives, change happens when vast amounts of consumers alter their habits. In the case of SaaS, consider your firm's server closet.

Servers rely on continual energy consumption and, in many cases, are operational 365 days a year, 24 hours a day. A small firm of up to 20 lawyers may operate three servers: a file server, a backup server, and a dedicated server for practice management software.

The carbon savings can be calculated by determining how many machines can be eliminated by using a SaaS solution.

To determine carbon emissions, we first factor in the total kilowatt-hours for one year for a typical computer.

Conservative estimates put computer electricity consumption at 150 watts an hour. For three servers, this translates to 3,942 kilowatt-hours per year. According to the Department of Energy, a kilowatt-hour produces 1.341 pounds of carbon dioxide (CO_2).

So, the total amount of greenhouse gas produced by a single, typical small law firm's server closet weighs in at 5,248 pounds of CO_2 yearly.

As many firms are discovering, going green is not just about saving the planet: It can also have a powerful effect on the bottom line.

In the previous example, based on ComEd's June rates of about $0.09 per kilowatt-hour, a firm would save $353 a year on electricity alone if it got rid of its three servers, not to

mention money saved by not having to purchase hardware, software, and support.

A well-designed SaaS application can accommodate the computing needs of around 300 firms. If each of those 300 firms requires three servers each, that would total 900 computers. However, three SaaS servers can do the work of those 900 machines, eliminating the need for 897 servers. With some quick calculations, we see that a SaaS solution can save 1,580,580 pounds of yearly CO_2 emissions.

Based on these figures, we can examine the hypothetical savings if all of Chicago's attorneys were to abandon installed software and hardware in favor of SaaS.

ABA demographic data suggests that 28 percent of Chicago's 13,600 law firms, or 3,808, would fit the three-server profile. If all of these firms replaced their 11,424 servers with SaaS solutions, they could save 20,057,560 pounds of CO_2 emissions every year (as well as $1,344,224 in electricity bills).

Outsourcing computer needs has a more tangible benefit: the reduction of landfill from discarded computers. The average lifespan of a computer is four years, after which the plastic and metal are added to a landfill. If the 3,808 Chicago firms replaced their 11,424 servers with SaaS solutions, over 10 years they would remove 28,560 computers from the trash.

Another environmental benefit of using a SaaS solution is reduction in travel. In firms that use web-based software, attorneys and paralegals no longer need to be on-premise to use computer systems, since their software is accessible through a web browser.

A good place to explore green initiatives is through the ABA's website: The ABA-EPA Law Office Climate Challenge encourages law firms to conserve energy and resources. ∎

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