

Cum Laude Paper Policies

One of the least-understood components of a sustainable IT strategy is printer and paper management. Success comes from three different areas: reduction in the number and variety of printers used to reduce the total carbon footprint (embedded and operational) of the devices, and the quantity of spare supplies needed; printer management to reduce the number of physical pages printed, the amount of ink/toner consumed (e.g., through use of duplex printing and greyscale modes) and power consumed (via power management settings); and effective paper policies that require use of recycled supplies with high PCW (post-consumer waste) content.

It can be difficult to find role models that illustrate the steps required to bring these considerations into balance, however, the University of Regina is in the process of adopting a comprehensive sustainable print program. In a conference call, U of R's David Wilson, associate VP of information services, and Ray Konecni, director of customer support services – joined by Mark McCullough and Rick Taylor of Lexmark Canada – walked IT in Canada through the processes, technologies and outcomes associated with their Print Optimization Project.

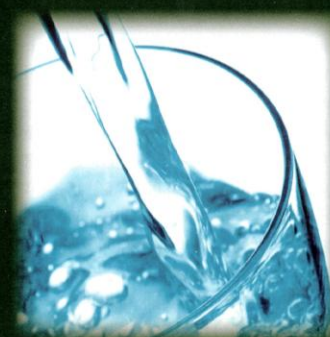
The business context: At the outset of the project, U of R “suspected there was some opportunity to improve our print environment...productivity, infrastructure, document output quality, things like that.” The university engaged an independent consultant (Print Operations Group of Calgary) to analyze the current state: to identify and quantify potential cost reduction opportunities, to help the university develop a campus-wide print strategy that would enhance end user satisfaction and productivity, and to benchmark U of R's costs against peer organizations. The current environment was

“a mish-mash” including 95 digitally-capable copiers (only 20 of which were connected to the network), and a total of 173 different makes and models of printers ranging from current technology to 15-18 year old devices. Printers were located seemingly on every desktop, resulting in a ratio of 1.2 staff per output device.

Based on the consultant's work and recommendations, the university was able to define some concrete objectives: reduce the ratio of devices per staff member to 1:3 and reduce average per-page costs from \$.09 to \$.039 (the average for U of R's peer group). The pre-project plan also uncovered green opportunities; David Wilson noted that the consultant “identified for us a variety of sustainability marks and metrics...electrical cutbacks, paper utilization” and other quantifiable green objectives. He added, “people were extremely interested in how we were going to be able to save dollars for instruction and research. [There is] significant belief that universities have a responsibility to lead the country in becoming more environmentally friendly and sustainable and this is one area that actually does that.”

The technology solution: After the analysis and a subsequent RFP, U of R worked with WBM Office Systems and Lexmark to deploy a managed print solution, using PaperCut software for back-end management and administration. Ray Konecni pointed out that through deployment, the U of R has managed to reign in both the

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It takes **5.5 Million glasses of fresh water** each year, just to produce the paper used on uncollected print and copy jobs at organizations of similar size to U of R.

Source: Lexmark Paper Waste Study, May 2006

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quantity and diversity of print devices: in the departments that have been upgraded through the program, U of R has succeed in “bringing our device count down from over 600 devices to about 138.” Konecni added, “we also established hardware standards for each of the production categories – a small monochrome printer, medium monochrome printer, large monochrome printer and a medium color printer and a large color printer.”

The business benefit: The U of R has realized multiple benefits in several different areas from the new print solution. Rick Taylor told IT in Canada that Lexmark's



David Wilson,
associate VP of
information services,
University of Regina;

latest technology has effective power-savings settings, which can lead to “a significant energy reduction.” David Wilson shared the university's estimates: “we're looking at approximately 130,000 kilowatt hours of electrical savings per year...about the equivalent energy to power 17 households of five people, for example, per year. The targeted CO2 reduction would be about 148,000 kilograms per year.”

Paper management provides another important source of benefit. As Mark McCullough noted in our interview, “paper consumption...makes up a huge part of the overall carbon footprint of the [print] device.” U of R uses Print Release software from PaperCut that reduces waste print jobs, and has embarked on an active communications campaign to educate users on print issues ranging from the use of toner-friendly fonts (Calibri, Times New Roman) to methods of reducing unneeded pages, which account (according to Lexmark statistics) for 17% of printed output.

Concluding observations: U of R's project has been an unqualified success; the university has “gone from worst to among the best” as compared to its peers. Beyond planning and technology, though, this kind of transformation requires active outreach to support cultural change across the organization. U of R has taken some innovative approaches to this issue, such as buying ad space on the student union's large screen TV network, focusing TV marketing activities “on the sustainment and environmental aspects of the projects and on how we can be better stewards of the environment...to get people on board, this is the right thing to do.” By reducing the number and variety of printers, applying effective management software and policies to the remaining devices, and focusing on reductions in the use of paper and other consumables, U of R has succeeded in moving to the head of the class – and in provided other private and public-sector institutions with a role model for sustainable print management. ■