



CASE STUDY

THE LCBO SAVES SOME GREEN WITH MPS

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When the Liquor Control Board of Ontario (**LCBO**) decided to manage and consolidate their imaging fleet in 2008, the savings realized were oh so green. The organization managed to reduce energy consumption by an estimated 58 percent and print related energy costs by 40 percent.

A provincial government business enterprise, the LCBO buys wines, spirits and beers from more than 80 countries and reports annual sales of more than \$4.3 billion. With more than 600 stores across Ontario, supplied by 5 regional distribution centres and employing a work force of more than 7,000 to serve Ontario's population of 13 million, the LCBO is the largest single purchaser and retailer of beverage alcohol in the world.

As LCBO grew and expanded their workforce they also grew and expanded their imaging fleet, printing costs and carbon footprint. Excessive equipment is one of the biggest factors in rising hardcopy costs. Walk into most offices and you will likely find several printers, fax machines, and copiers within reach of nearly every employee. Some staff even have a dedicated printer in their cubicle or office. In addition to a high per-page printing cost, many of these personal machines lack duplex printing functionality, which doubles the amount of paper used per job—thereby doubling your carbon footprint. Such was the case at the LCBO as they would later discover a device to user ratio of 1:3.

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Like many budget-conscious corporations worldwide, the LCBO was caught in a conundrum to provide printing access for legitimate, business needs while reducing wasteful, costly printing practices? The LCBO was also concerned that as well as the increase in departmental printing on personal devices, commercial printing was increasingly being outsourced, often not taking advantage of the capabilities of its in-house print and digital copy centre.

So they engaged external consultants from The DATA Group (Deb Blakely and Dan Ferland) and Integrated PrintManagement Inc. (Tim Newnham) to conduct a site audit of their printing practices and create a plan to better prepare for its printing needs. Detailed analysis and print studies on the LCBO's head office and the central print and digital copy centre located in downtown Toronto and its stores, regional offices and extensive distribution facilities throughout Ontario were conducted.

The consultants identified approximately 600 devices including more than 400 printers along with copiers and fax machines. With a device to user ratio of 1:3, this inventory was not only difficult to manage (and control), but total print costs were moving in the wrong direction. “We had a very large number of desktop printers and we knew that the purchase price was only a small part of the total cost of ownership. Some of the devices may have been inexpensive to buy, but the replacement cartridges made them very expensive to operate,” said Carol Lyons, LCBO controller and project sponsor.



The consultants were also able to quantify costs, and come up with recommendations that, if implemented, would enable the LCBO to reduce its overall printing costs, improve the management of printing activities and have a positive environmental impact.

The findings confirmed that:

- With costs spread across several budget centres, the LCBO did not have the desired level of control of its print environment, and did not have an adequate handle on how much it was spending on desktop, workgroup, internal production print, and outside print services.
- The printer fleet was widely distributed among the user community and the actual number of devices was far higher than users actually needed.
- Managing a non-standardized collection of devices was time consuming and expensive because of the need to purchase diverse imaging consumables and service contracts to support the different hardware.
- The equipment in the print and digital copy center was out-of-date, under-utilized and did not support the user's needs, especially in the marketing department. Accordingly, print jobs were being outsourced, due to user concerns about service, quality and turnaround.
- The LCBO needed a centralized mono and color print solution that would address user service concerns and could provide immediate opportunities to bring some printing jobs back in-house, thereby reducing external print costs.

ANNUAL FOOTPRINT SUMMARY

energy consumption	current	future	saved	reduction
Energy (kWh)	37,718	15,934	21,784	58%
Energy & Paper (CO ₂) Emissions (lb)	60,689	42,798	17,891	29%
Paper (lb)	34,927	26,195	8,732	25%
Energy & Paper Costs (USD)	47,340	34,712	12,628	27%

Estimates of the environmental impact of LCBO's print management program based on HP's Carbon Footprint Calculator

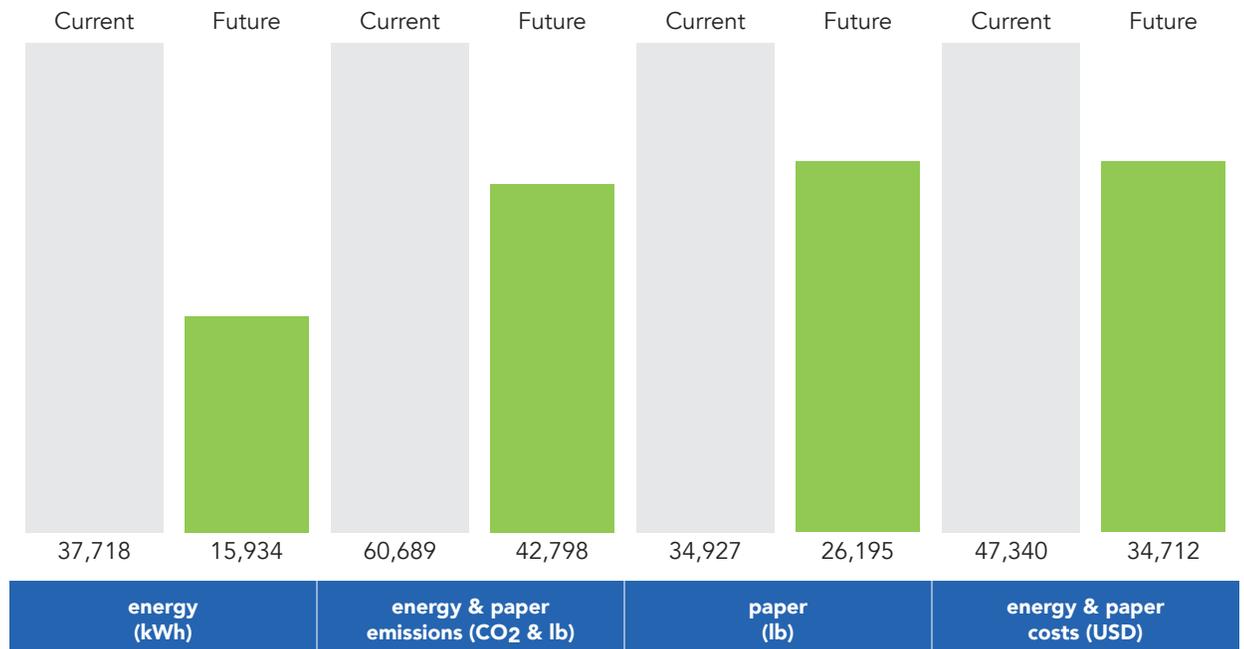
Using this analysis the LCBO developed a strategy and implementation plan for both short and long-term improvements to its printing capabilities. They issued a public RFP to solicit bids to replace their deployment of aging copiers and overly large printer fleet with a five-year agreement covering its head office, regional offices and distribution facilities, stores and its central print and digital copy centre needs. The head office, regional offices and distribution facilities contract was awarded to 4 Office Automation Ltd (4office), an MPS provider specializing in delivering quality service and affordable print, copy, scan and fax solutions to both the public and private sectors across Canada. Other vendors were selected to fulfill the print and digital copy centre and store aspects of the RFR.

On the LCBO side, the finance division drove the project with LCBO Controller, Carol Lyons as the sponsor. This brought a solid understanding of the LCBO business process and requirements, while assuring that the financial aspects of the project—both costs and benefits—would be properly accounted for and

a centralized approach for budgeting, tracking and reporting established. Chris Chang was the project manager and more importantly, the project received strong upfront support from LCBO President and CEO Bob Peter.

The management team understood immediately that an opposition to the changes could result from users fearing a loss of service and control. To address this, the project was approached as a straightforward change management challenge, i.e. convince users to give up their personal or departmental printing capability in return for improved services. Chang kept the big picture in mind, while also working on the details and specifics. Transferring knowledge, sharing ideas, solving problems and providing new or updated information to the user community were important aspects of dealing with the change management implications. The project team applied a deep understanding of the LCBO's business and workforce to the project. As a result, obstacles were easily addressed, and the level of user acceptance was high.

ANNUAL FOOTPRINT SUMMARY (CONTINUED)



Estimates of the environmental impact of LCBO's print management program based on HP's Carbon Footprint Calculator

The LCBO has now successfully replaced the ad-hoc acquisition of hardcopy printer devices with a deployment of fully-featured multifunctional print devices, strategically placed within 30 feet of users. Users now experience an average response time of Less than two hours for service calls resulting in high satisfaction levels. The total machine population was reduced by approximately 70 percent and ratio of devices to users has increased from 1:3 to 1:7. To achieve this, the LCBO:

- Replaced 68 copiers with 108 strategically placed 30-50 page per minute fully featured A3 multi-functional workgroup devices,
- Reduced the number of high page-cost printers from 400 to less than 60
- Reduced the number of fax machines from 80 to just 2

4Office is also providing an all-in cost-per-copy service on the remaining 60 single purpose printers, to further reduce costs and streamline fleet management. The improved configuration fully supports user workflow requirements and productivity. Dramatic print cost savings were achieved by migrating printing from high cost to lower page cost devices—more than 95 percent of fleet printing is now completed on the new lower cost per impression multifunctional devices.

“ The change in technology that came with the current equipment brought a **quantum leap** in quality to the print and digital copy centre. It is now near commercial grade



Project team: (left to right) Carol Lyons, Controller and Sponsor; Chris Chang, Project Manager; Andrew Lawson, Print and Digital Copy Centre Manager.

The replacement of antiquated equipment in the print and digital copy centre with new technology has measurably improved quality and turnaround. “The change in technology that came with the current equipment brought a quantum leap in quality to the print and digital copy centre. It is now near commercial grade,” said Andrew Lawson, print and digital copy centre manager. As a result, print and digital copy centre usage has skyrocketed, and the volume of work done for internal departments such as Marketing has increased significantly. This has had a direct positive effect on the LCBO’s commercial printing costs, by reducing the number of jobs done externally.

Ongoing program management is another key component to an effective print output management program. This involved setting up reporting from all network devices to read impression counts for colour and black and white impressions, providing the necessary detail to substantiate monthly billings. Additionally a robust suite of reporting was developed to enable the LCBO and 4Office to review usage of the fleet; monitor devices for potential under/over utilization, determine if specific machines need to be relocated to better meet changing print requirements, and to deal with any new print requirements.

Overall, the LCBO exceeded the targeted cost savings from its print management initiatives, and actually achieved a cost reduction of over 40 percent of its estimated previous printing costs. These results are in line with other case studies. Print migration projects of this type show that it is not unusual for companies to reduce their over all print costs by up to 30 percent, increase employee productivity and cut energy consumption by more than 75 percent.

Although a green initiative was not initially a key part of LCBO's original plan for its print management project, it has been able to achieve measurable "green outcomes". Some articles have suggested that 85 percent of all paper used is consumed by office copiers and printers, and the LCBO has already seen sheet usage drop 25 percent due to all devices being duplex. Some duplexing was already happening before the transition. Beginning to explore the Stage 3 possibilities, they are looking at a document management process that could save even more paper per day.

The LCBO has realized a reduction in its carbon footprint by addressing its print infrastructure. Since completing the project, the LCBO can now adequately monitor and control its printing devices. Paper usage has been decreased significantly, and the introduction of improved management control processes has enabled the LCBO to track the percentage reduction achieved by

introducing default duplex mode on the MFDs. The energy consumption of the former printers and fax machines has been eliminated, and the installation of Energy Star 1.1 compliant MFDs has directly reduced electricity costs. Another green advantage is that, unlike conventional printer cartridges, which contain multiple components and have to be transported to specialized disposal centers for breakdown and separation, the multifunctional toner cartridges are made of 100 percent ABS plastic (blue bin recyclable) to further reduce the LCBO's environmental impact.

"LCBO is focused on operational efficiency and customer satisfaction and therefore continuously seeks out opportunities to improve productivity, reduce operating costs and enhance our corporate sustainability program in the area of environmental stewardship. This was the catalyst for undertaking a total reassessment of our imaging assets and their utilization," Lyons said. ■ ■ ■ ■

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