Total Print Management

Cannon IV
Environmental Impact Statement

January 28, 2009

Brief History of Business

Stepping into Cannon IV headquarters in Indianapolis, Indiana, with locations in Ohio and Texas one notices there is an unmistakable allegiance to family. Old family photographs adorn the walls of the 40,000-square-foot facility located at 950 Dorman Street. The images reflect Cannon IV's heritage, dating back to 1974. Since that start, Cannon IV has developed into a leading provider of computer printing and imaging solutions to commercial and public enterprises nationwide.

Founded by Jerry Jones and his father, Richard, the printer service and supplies company was first operated from the family's garage. While much has changed since that time – including location – the company's mission is unwavering: To deliver the finest printers, copiers, service and supplies to its customers.

This philosophy has resulted in Cannon IV's extraordinary success in the rapidly growing imaging and printing industry. What was once a grassroots office supply business, Cannon IV has emerged into a company with over 100 employees and 3500 customers nationwide.

Joined today by his three brothers, Jerry Jones serves as Cannon IV President and CEO. He continues to practice the business philosophies set forth by his late father. To fulfill the overarching objective of better serving customers, Cannon IV has developed specialized areas of services including total print management, desktop delivery, inventory solutions, detailed monthly reports, as well as customized service and printer maintenance programs.

Cannon IV continues to look for ways to give back to the community. One such program is its recycling and "Green Strategies" that started in the early 1990's. Such actions are a part of the responsibility that the Founders want the company to meet for its employees, its customers and its community. "Our definition of a family business is one where an employee's last name does not define the 'family business,'" says Jerry Jones.

Internal Recycling Practices

The printing and imaging industry is a paper and plastic intensive business segment. Without formal recycling practices, the amount of waste generated would be immense. That's why in the nearly 35 years since Cannon IV's inception, respecting the environment through recycling has been of the utmost importance.

Strategically planted throughout the Cannon IV facility, there are large plastic recycling bins for employees to put their used paper. Once a week, this is collected and shredded. This shredded paper is then used as packaging material for outgoing customer orders.

However, paper isn't the only resource recycled. All corrugated material used by Cannon IV is sold to Waste Management for the proper disposal. It is oftentimes given to paper mills for the manufacture of recycled paper and packaging, thus eliminating the need to cut down more trees.

Cannon IV does not buy new pallets, but instead acquires and uses those involved in any incoming shipments. In fact, Cannon IV does not purchase any shipping materials. Instead, all materials that come through the warehouse are used in future outgoing shipments. This includes bubble wrap, cardboard boxes, and peanuts. Toner cartridges used internally by Cannon IV are also recycled.

With that being said, Cannon IV is pleased to say that 100% of all waste generated at the facility avoids going to a landfill.

In summary Cannon IV internal recycling efforts has resulted in following kept out of landfills:
- Corrugated material – 800 pounds per week or 41,600 pounds per year
- Paper – 662 pounds per month or 7,940 pounds per year

Everyday Practices Supporting the Environment

Aside from recycling, Cannon IV prides itself in having everyday best practices that show concern for the environment. Thanks to the many advances in printing and imaging technology, there are ways to prevent the overuse of paper around the office.

Cannon IV standardizes on scan-to-email which allows employees to scan documents and email them to themselves or another destination. This prevents the use of physical mail delivery, fax, or printing an additional copy to place in someone's mailbox (not to mention it's a great way to build a digital archive and recycle unneeded paper files).

Changes to print drivers can force two-sided (duplex) printing and private print jobs. Private print jobs can only be released at the printer with a PIN code created by the user. Therefore, employees don't print jobs and forget about them, or pick up the wrong document. The employees of Cannon IV use both of these practices on a daily basis.

Increase in Electronic Communication

Electronic communication is another utility Cannon IV takes full advantage of in order to reduce wasted recourses and increase efficiency. Email marketing has replaced 30,000 paper mailers this year alone, and Cannon IV expects this number to increase dramatically over the course of the next several years. Instead of incurring travel expense for physical meetings with remote employees or clients, Cannon IV uses a third party webinar application to facilitate online meetings and demonstrations. Also, Cannon IV asks each client for a preference in invoicing delivery. Clients have the choice of receiving an invoice through physical mail delivery, or via email. Many clients have made the switch to electronic invoicing which has saved valuable time and resources.

Hardware Infrastructure Upgrade

In 2005, Cannon IV was in need of an IT hardware infrastructure upgrade to accommodate for the company's growth. This change provided a ten-fold increase in operating capacity while only doubling the electrical requirements. This yielded an approximate net 80% reduction in power usage over the alternative technology.

Therefore, even though energy consumption has increased due to growth, Cannon IV chose the most energy efficient technology to make the upgrade. The same applies to Cannon IV's print and imaging hardware acquisitions. All newly attained devices are ENERGY STAR qualified, which means the device meets specified kWh/week output and has standard duplex printing.

Increased Efficiency Through Software Solutions

In the spring of 2008, Cannon IV implemented a software solution, Remote Tech, in order to generate greater efficiency around the service side of the business. As an add-on to Cannon IV's back office system, Remote Tech has empowered Cannon IV service engineers with the ability to get information, manage service activities, and input data while out in the field using their laptop or mobile devices.

Prior to the use of this technology, Cannon IV service engineers would report to the Cannon IV office each morning to receive their service call assignments in paper form for the day. Now they are able to drive directly to their first client site from home. Engineers are also able to carry an inventory of parts needed for their service calls. These two benefits combined save travel time, gas and paper usage, while allowing Cannon IV to better service clients.

Cannon IV also utilizes a print management tool called HP Web Jetadmin to gather page counts from cost-per-page (CPP) clients. The use of this application assists with the monthly billing process, prevents

technicians from going to each CPP client site, and also allows for proactive maintenance. These benefits collectively stimulate client satisfaction while simultaneously increasing Cannon IV's efficiency.

Not only does Cannon IV set an example for other businesses in terms of recycling and environmental practice, but Cannon IV has also established a robust recycling program for its clients.

Customer Green Strategies

Cannon IV has designed, developed and taken to the market a wide range of environmental and 'eco friendly' products and services for public and commercial organizations nationwide.

Recycling Programs

A general 'green initiative' has been an effort undertaken at Cannon IV for nearly twenty years. In the late 1980's Cannon IV recognized that our business could have a great impact on our world environmentally by recycling many of the inkjet and toner cartridges that we were shipping to our clients. A partnership was formed in 1991 with Noble of Indiana. Noble is an organization whose mission is to help developmentally disabled adults achieve more meaningful lives often times through Noble's employment services.

Throughout the first half of the 90's cartridge returns were sent to Noble where they were unpackaged, sorted, cleaned and then sent to Cannon IV for an environmentally-friendly distribution. For those that could be reused they would be refilled with ink or toner and cartridges that were damaged were sent to a materials recycler to be fully broken down and reused in other ways.

In the mid 90's the recycling grew substantially. At that time Cannon IV's largest client, State Farm, was consuming 12,000 to 14,000 ink and toner cartridges per month. The potential damage to our environment was very visible and together Cannon IV and State Farm created a distribution and pickup plan for all the cartridges the company was consuming. Cannon IV and State Farm both share the knowledge that our communities create our support and it is our responsibility to give back to those communities in meaningful ways.

The Occupational Development Center of Bloomington, Illinois is an organization with a similar goal and mission as Noble of Indiana: help developmentally disabled adults achieve independence and more meaningful lives. Once the distribution and recycling program was put in place, all inkjet cartridges were sent to ODC in Bloomington and toner cartridges were sent to Noble. Again, all items were sent to Cannon IV for environmentally-friendly distribution.

The primary focus of Cannon IV's recycling program does not focus on plastic. While we have saved upwards of 4,000,000 pounds of plastic from landfills in the area of cartridge recycling alone, the primary benefit, we feel, of the recycling program is in its focus on people. Through Cannon IV cartridge recycling adults with special needs in two states have been given an opportunity to attain a more meaningful life through work and independence.

The cartridge recycling program at Cannon IV is not established as a profit-generating area of the company and in fact due to the pickup and distribution system is actually an expense for the company. But it is viewed in Cannon IV's corporate culture as a small price to pay to see so many people who might otherwise receive a glancing look from a business community lead much more enriching lives by achieving increased self-worth through hard work and independence.

Since 1994 Cannon IV has collected and recycled:
- 1,975,286 printer toner cartridges
- 4,623,010 pounds of printer toner cartridges
- 697,395 printer inkjet cartridges

- 1,486,975 pounds of printer inkjet cartridges

Total Print Management

In 2004 Cannon IV introduced its Total Print Management program to assist customers to optimize their imaging and printing assets and workflow. Every company has a fleet of printers, copiers, and fax machines that handle document production and distribution (printing, copying and faxing), but most companies have no idea how much is spent annually to operate and maintain this equipment. When it comes to the costs associated with document production, most companies only see hard costs like hardware acquisition, maintenance and consumables. The true cost of document production lies beneath the surface. Hidden costs like network management, workflow inefficiencies, employee productivity, IT support, energy consumption and recycling all affect the bottom line.
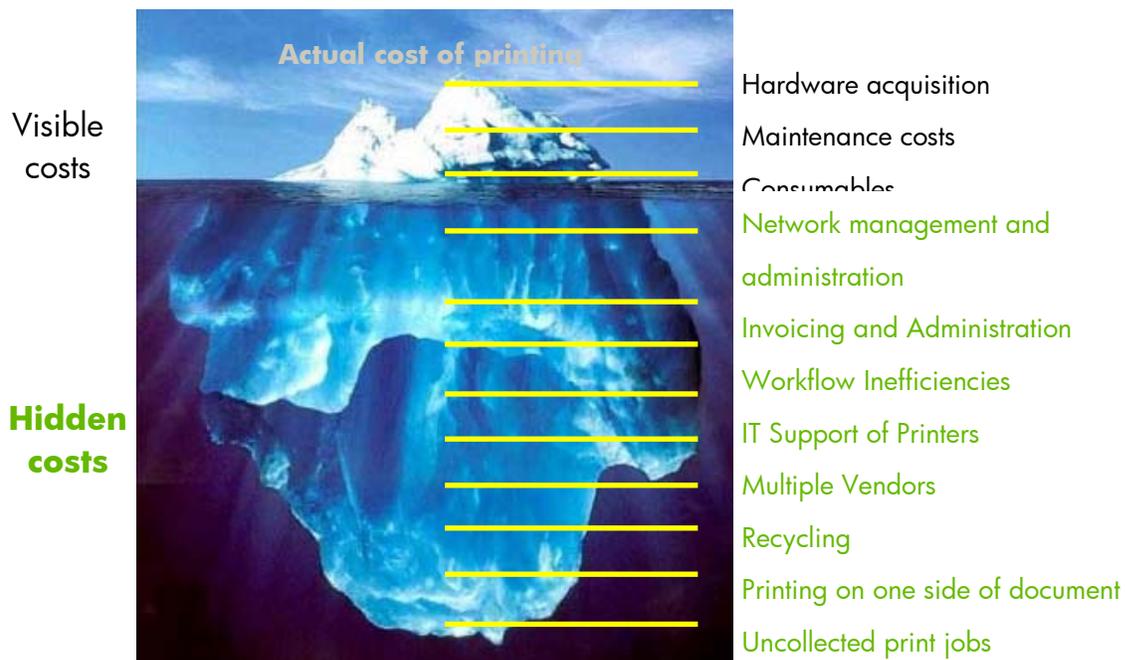
In 2008 Cannon IV added an ECO Printing Assessment to evaluate the environmental impact and energy usage of the fleet of devices at the customer site. By taking a holistic approach to the imaging and printing environment, Cannon IV can help organizations reduce their Carbon Foot Print, Energy Usage and Paper Usage; while reducing their cost of creating, distributing and printing documents.

Cannon IV uses a number of products, process improvement strategies and common sense approaches to help an organization implement a "Green Printing" strategy. Some of the approaches include:
- Balance deployment of imaging and printing devices – make sure the right device is in the right location to support the needs of the user.
- Right-sizing – make sure the user has the correct size of device and capability available to them.
- Energy Star® Devices – upgrade old printers and multifunction devices to more energy efficient devices.
- Duplex Printing – set the default printing mode on devices to be duplex printing. On average this will reduce paper usage by 25% in an organization. When the average office working uses 10,000 sheets of paper per year and the average student uses 4,000 sheets of paper per year, a 25% savings can be significant.
- Pull Printing – user release the print job at the device. This reduces the waste of forgotten or lost printed documents.

- Preventive Maintenance Programs – implement a predictive preventive maintenance program. Just like your automobile, if you do regular maintenance and keep the tire pressure at the right level you will get better gas mileage.

Cannon IV has implemented a structured and repeatable process of providing in a Total Print Management strategy. This includes:

- Assessment - Assessment begins with the imaging and printing device discovery and inventory, in which your existing printing and imaging assets are identified and usefulness evaluated. Once the inventory of your printers, copiers, and faxes has been completed, the total direct and indirect costs of imaging, printing and copying can be quantified.

  In the assessment Cannon IV uses a tool called the **Carbon Calculator**. This tool is used to evaluate the customer's current Carbon Footprint and energy usage for their existing fleet of imaging and printing devices.

- Design - Organizations can now develop a master blueprint for improving and working toward the ideal printing and imaging technology mix to reduce costs and improve workflow productivity. The assessment provides the detailed data to make technology and workflow decisions in the development of the plan.

  In the design phase, Cannon IV will input the new imaging and printing device configuration into the Carbon Calculator. With the customer, we can do a what-if analysis of the new configuration on the Carbon Footprint and energy consumption.

- Implement - During the assessment process occurrences of redundancy, waste and high cost become painfully obvious. While each case is unique, cost containment and productivity are the foremost priorities. Implementation strategies will often encompass time-phased initiatives, targeting low-hanging fruit for immediate action and the development of change-management strategies for long-term, continuous improvement.

- Measure Results - Managing the ongoing implementation process includes measuring the effectiveness of each phase of implementation. Assessing and documenting productivity increases and cost reductions verify ROI. Post implementation assessments allow organizations to leverage successful internal case studies to scale the document technology strategy enterprise wide. Or, if the objectives are not being achieved, action plans can be identified to get the program back on track.

This program and approach was implemented at an Indianapolis area school system resulting in an estimated annual cost savings of over $150,000 per year. And, the school's Carbon Footprint was reduced by over 40%.

Education

In order to increase the knowledge level of organizations in Indiana of the opportunity and benefits of implementing a Green Printing Strategy, Cannon IV has conducted free seminars throughout Indiana in 2008. The locations included: Merrillville, Ft. Wayne, Muncie, Indianapolis, and Evansville. Schools, government agencies and commercial enterprises were in attendance.

On a regular basis, Cannon IV writes articles and publishes news letters promoting the benefits of recycling and Green Printing Strategies.

Printer Upgrade and Replacement Programs

Over the last 20 years there has been an explosion in the number of imaging and printing devices that had been acquired by organizations in Indiana – public and commercial. All organizations are challenged by the need to upgrade technology versus available budget. In 2007, Cannon IV worked with Hewlett-

Packard to develop and take to market a program to collect old, obsolete and inefficient printers to be recycled. Over an 18 month period Cannon IV collected and recycled over 2600 printers from public and commercial organization.

In January 2009, Cannon IV will be re-launching this program with Hewlett-Packards assistance. In a year in which schools, government agencies and commercial enterprises are challenged to reduce costs, the Printer Upgrade program will help them achieve their objectives.

Document Management Software Solutions and the Environment

In 2003 Cannon IV began evaluating and building partnerships with software vendors across the country (and, in fact, across the world). The goal was three-fold: bring to our clients qualified, reliable software solutions, expand our business offerings to differentiate ourselves as a true document management solution provider, and help our clients minimize their environmental impact. Our partnerships with these vendors have resulted in the addition of a number of solutions now available to our clients, including job tracking, workflow improvement, electronic forms, digital document archival, digital sending and scanning options, and print fleet management.

Oftentimes, one or more of these software solutions will be included in an implementation for an express management-related purpose – typically cost reduction or process improvement. But an important byproduct that comes of introducing software solutions is the very measurable reduction of environmental impact in an organization's printing and imaging infrastructure.

Job Tracking

One of the most common software solutions Cannon IV offers to its clients is the ability to track and analyze the printed and copied documents that are produced in their environment. Office managers and IT professionals use the electronic reports to make decisions in their offices, as they can analyze the "who, what, when, and where" of the creation of documents.

How does a job tracking solution benefit the environment and fit into the Cannon IV strategy of helping our clients become greener? Take, for example, a typical laser printer in the office. The acquisition cost of that device – both in terms of environmental impact and dollars – is only about twenty percent of what an end user will expend over the course of that printer's life. The other eighty percent is comprised of such things as:

- Paper waste and abuse by users
- Power consumption
- Device efficiency in producing documents
- Productivity losses (when the device requires service)
- Maintenance costs and additional parts
- Time and energy wrapped up in help desk support calls
- Depreciation
- …and more

By implementing a job tracking solution, not only can an office manager prevent wasted paper by monitoring and stopping inappropriate activity of its users, but he or she can also gain valuable information about their printing operation that may not be as apparent.

One example of this is ensuring that appropriate devices are placed in appropriate locations in the organization. For example, if the office manager notices in their electronic report that a printer designed for low volume is being utilized more heavily than a high volume printer somewhere else in the organization, they might consider switching the location of these two devices. This will increase efficiency by allowing users to take advantage of the speed of a higher volume device while minimizing maintenance, replacement parts and help desk costs on a device that was not meant to produce at the levels at which it was being used.

The more efficiently a device works in the office, the smallest impact it will have on the environment, and Cannon IV helps our customers manage their devices through job tracking solutions to achieve just that.

Workflow Improvement and Electronic Forms

Carbon impact forms. We are all familiar with them - the white, pink, and yellow forms that are a mainstay of document production in countries worldwide. We are all also familiar with pre-printed forms, such as invoice forms, purchase order forms, and other internal documents.

Costly both in terms of dollars and environmental impact, such pre-printed forms are produced by the thousands and are stored in warehouses and storage rooms across the globe. What if an address or phone number changes? Throw away all the unused forms and place a new order for thousands more. What if only two people in the organization really need the information on the carbon forms but there's still that third, yellow sheet that is attached to every set? You might as well throw it away – either immediately or during the clean-up of a drawer that hasn't been opened in a while.

When you multiply examples like these – and certainly there are many more – across the number of organizations in our country still using pre-printed forms and carbon impact forms, it really starts to add up, and not in favor of preserving our natural resources.

That's why Cannon IV is taking strides to educate our customers on ways to migrate away from pre-printed forms and into what is called electronic forms. Electronic forms are forms produced on plain paper already loaded into the printer – no special pre-printed forms necessary. In most scenarios, the users do not even have to change the way they operate, as the forms are applied (printed) at the time the document is printed. It's a sort of "on demand" method of form creation that eliminates the need to buy – and waste – in bulk. And, since the form is electronic, if an address, phone number, or any other piece of information changes on the form, it's simply a matter of changing the information on the electronic template and introducing this new form into the workflow.

This same methodology also applies when considering the replacement of carbon impact forms. Automated workflows can be set up to print only the exact number of copies needed for any given electronic form. And, instead of even printing the documents, another option we often encourage is setting up workflows where documents are created and distributed as PDFs and only printed by the end user when needed.

Digital Sending and Scanning Solutions

Some of the most directly environmentally beneficial and oftentimes easiest to implement software solutions are digital sending and scanning solutions. Such solutions can offer a direct one-to-one replacement of printed documents with electronic documents delivered in a way that best fits the end user application.

Modern HP multifunction printers (MFPs) come standard with a host of digital sending features built into the device, but also act as a platform for additional programs to run for more advanced applications. Cannon IV has been very successful in moving many clients into a more digital sending-centric environment, where users utilize scan-to-email, scan-to-folder, scan-to-workflow, and scan-to-OCR (optical character recognition) to distribute documents. In the past, these clients would have traditionally printed a copy of the document, made as many copies as necessary, and delivered to each recipient. Now, when users need a copy of the document, they have the option to read it on their screen or print on demand.

Print Fleet Management

As described above in reference to job tracking, there are many environmental costs associated with each device in an organization. Therefore, the ability to effectively manage devices, address problems efficiently, and set environmental standards on a company-wide basis becomes very important.

One such software solution called HP Web Jetadmin allows IT professionals or office managers to do just that. Even though paper is the number one waste item in companies today, the vast majority of users still have single-sided (simplex) printing set as their default. With Web Jetadmin, no matter if your fleet is two devices or two thousand, you can set two-sided (duplex) printing as the default. You can also control specific times for devices to go into sleep mode and when to awaken– saving energy.

Cannon IV has introduced print fleet management software solutions such as Web Jetadmin to a growing number of clients to help them harness their organization and manage in the most efficient manner. In situations where Cannon IV manages a company's print fleet, we are even able to utilize electronic reporting sent to us directly from their software so as to minimize the need for faxed or mailed documents relating to billing, device, and supply management.

Another technology introduced by HP is called the Universal Print Driver. In 2008, Cannon IV has been working to help our clients utilize this new technology to improve their printing environment. Using the Universal Print Driver in conjunction with HP Web Jetadmin gives a company's IT professional excellent control over the distribution and management of their printing and imaging technology organization-wide to help meet their company's environmental objectives when it comes to printing.

Cannon IV + Hewlett-Packard: A Green Team

Since the first partnership agreement papers were drawn up in 1987, Cannon IV's strong relationship with Hewlett-Packard has built upon the foundation of similar company values, traditions, and a common sense of commitment to our clients. Part of this client commitment is the genuine interest in improving our communities and protecting our environment.

Even though the environment has become an especially hot-button item for media outlets and companies in the past year, both Cannon IV and HP have a strong legacy devoted to green initiatives.

As far back as the 1930's, HP launched a formal Commitment to the Community, and followed up in the 1950's with a Global Citizenship objective. In 1970, HP hired their first Environmental Control Coordinator, and three years later, instituted company-wide environmental policies to reduce pollution.

In 1987, the same year as the partnership with Cannon IV was forged, HP became the first IT company to offer recycling of hardware and computer products.

Looking to be more proactive about the environmental impact of its products, HP introduced Instant-On Technology, which allowed devices to awaken from sleep mode much faster. This minimized the need for devices to constantly run at full power. This technology is still built into HP products today.

In HP's printing and imaging product lines, standards have been put into place to minimize waste and provide maximum recyclability of products. Just as one example, the HP series of aqueous large format printing devices – printers that can produce prints from 18- to 60-inches across – the hardware is designed to be 85% recyclable by weight with published disassembly and responsible disposal instructions. The water-based inks are free of harmful emissions, and in cartridges are integrated into the HP Planet Partners recycling program.

Having a partner such as HP whose green initiatives are not simply marketing bullet-points but are an ingrained part of the company philosophy makes the Cannon IV and HP relationship an easy fit - and a very fulfilling one.

Today, HP is not only a global leader of technology solutions, but also a global leader in environmental responsibility. In 2007 HP crossed the threshold of recycling over 1 billion pounds of hardware and technology products that would have otherwise been dropped into landfills, and they are not stopping

there. Even though Cannon IV is still a few pounds shy of HP's billion, we are committed to staying the course as a responsible member of our communities and the planet.