

CTP - It costs a lot, but it pays off

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During the last decade, thousands of printers have successfully and profitably adopted computer-to-plate. Initially viewed as an “unproven”, expensive, and confusing technology, requiring both substantial investment and infrastructure, CTP has not only matured but has almost become a requirement for most printers to remain competitive. We all have experienced more colour jobs, shorter runs, work increasingly submitted in digital form, and competition with other printing technologies. Printers must continue to improve their workflow and processes to take advantage of and utilize changes in their customers’ knowledge and expectations, as well as continuing improvements in technology.

The advantages and benefits of CTP are clear. Except for a few special cases, the arguments for CTP are compelling; there is very little reason not to adopt. For most printers, the principal driver was to save money from the elimination of film and labour. Most found that the ROI from that was enough. But they quickly discovered that the true economic benefits go well beyond that simple initial analysis. CTP provided significant improvements in print quality, faster turnaround, and increased capacity. The digital workflow provides improved control over the entire prepress process. With the shorter production process, there are fewer steps; fewer steps means less chance of error. Printers with CTP also have better on-press performance. Digital plates have sharper dots, offer better control of dot gain, and give the ability to incorporate CIP3/4 and preset the ink fountains. Printers find they get better registration, which leads to faster make-ready and less waste. Simply put, the press prints better. Indeed, perhaps the biggest surprise for the early adopters was the savings achieved in the pressroom, which were substantial. CTP offers faster turnaround, higher productivity, and better throughput.

One thing that can be said today is that computer-to-plate is a mainstream technology. It works, is stable, and is no longer a risk. Both an indication and consequence of that maturity is the decrease in number of manufacturers of systems and of plates. Nevertheless, there are still a large enough number from which to choose that printers can find a platesetter and a plate to fit both budget and printing requirements. Companies that sell both computer-to-plate equipment and their own branded plates include Agfa; FujiFilm; Heidelberg; Kodak; and Presstek. Platesetter manufacturers such as ECRM and Screen partner with various plate suppliers, typically FujiFilm or Southern Litho Plate. There are also more specialized equipment vendors, such as Krause, Basys, and Highwater, now part of Printware.

While the majority of larger and increasingly mid-sized printers have installed CTP, many printers have still delayed and not yet implemented computer-to-plate. The main obstacle for purchase, particularly for smaller printers, is cost, not only the initial capital cost of the platesetter itself but also the associated digital infrastructure and required prepress. But that has changed dramatically over the last few years.

Herb Wittig, President of DPI Graphics Group, a 25-year old Mississauga prepress service bureau, faced the same challenges of many film providers. Serving graphic artists;

agencies; printers; brokers; and end users, they realized they needed to diversify. He first looked at CTP in 2000, but it was far too expensive at the time for him to justify. By 2005, however, Wittig says the prices had fallen dramatically to the point where it was now affordable, and DPI bought an ECRM system. With the installation, Wittig notes “We are one of the few plate-providing service bureau in the country, because everything has shifted to the printer and the one-stop shop approach. For printers who still don’t have in-house prepress, we fulfill their needs.”

“Without CTP, we’d be in trouble,” Wittig says. “It’s raised the quality of the print work we offer our clients. The benefits were immediate. “We wish we had bought the Mako a longtime ago. We were concerned about supporting CTP and determining what was right for us in terms of needs. But now that we’ve had CTP in-house, we see the opportunities we were missing and the value it offers.”

Kwik Kopy of Prince Edward Island moved from digitally made polyester plates to metal. With the installation of a 5-colour Heidelberg Printmaster 52 in 2005, they were able to do longer runs and work that is more complex. Still, most of the work of the 21-employee firm is short runs; with lots of plate changes, managing make-ready is critical. Co-owner and production manager Troy Mackenzie notes that polyester plates use more water and take longer to get up to color. Once Mackenzie and his brother Shawn decided to move to metal, they focused on thermal and chemistry-free plates to eliminate the time and cost of cleaning processors and disposing of chemistry. They settled on an Agfa :Acento thermal platesetter and :Azura plate. Although getting a good product was important, service and support issues were important to them. They were already running an Agfa front-end and felt if there were an issue with performance, the entire system came from one supplier so the solution would come from one organization. Service was also an issue, one common to many smaller printers in rural Canada. They already purchased paper and other pressroom supplies from the local Agfa dealer and felt they would be able to get good service.

Weller Publishing, a newspaper, magazine and book printer based in Etobicoke, recently added an :Advantage DL platesetter from Agfa to its production room floor. Weller was founded more than 35 years ago as a Hungarian-language newspaper publisher. While it no longer publishes, it does print more than a hundred local community newspapers and magazines, college newspapers, publications for not-for-profit groups, churches and healthcare organizations. The company also prints, in a variety of languages, books and telephone directories that are distributed in Canada and the U.S. Weller’s print projects range in circulation from 2,000 to more than 250,000 distributed copies.

With deadlines and short-lead times typical of newspapers, productivity was a key issue for Les Weller, company president and the grandson of its founder. “Agfa is a brand I have trusted for many years. I chose the :Advantage because it is not a complicated machine yet gives us all the functionality we need,” says Weller. “We save about a minute per plate, which is as much as two hours per shift. The elimination of most of our manual plate production has enabled us to free up manpower for other important tasks... The machine is set it and forget it. The installation has enabled me to spend more time

with customers discussing plans and ideas designed to continue to grow their businesses through high-quality publications.”

Weller says he hadn't planned on installing a platesetter, as their film workflow was “working fine.” However, the film workflow was getting expensive to maintain, he increasingly was having trouble finding analog plates, and digital “plate prices have dramatically decreased. Weller says “now we've been spoiled. I wouldn't go back.”

It's not only new accounts that are installing CTP. As a mainstream technology for more than a decade, some plants are putting in their second and third replacement systems. The benefits of CTP can be seen in the growth of Thistle Printing Limited, of Toronto. One of the first of the smaller printers to adopt computer-to-plate, Thistle installed their first system, a Cymbolic Sciences Platejet, in 1998. Thistle's Director of Operations Sean Roseland-Barnes notes it “made huge changes to the way we did business. The first job we did saved approximately 40 man-hours in stripping and the press alone.” In a few years, however, they were 100% CTP and had outgrown their first purchase. The Platejet was a manual machine. With no stacker, manual loading and unloading, and a manual processor, it essentially needed a dedicated operator. So in 2002, Thistle replaced it with a fully automated Fuji Saber. The automation gave the flexibility to have people working on other functions rather than loading and processing plates. The Saber, like the Platejet, was a visible light system; Roseland-Barnes notes that the thermal systems available at the time were still too slow for their needs. “We're a quick-turn company... financial work comes in every night and we print and deliver them by 8.a.m. the next morning. We make 35,000 plates a year; we need lots of plates quickly... The technology in the Saber at the time gave us more than adequate quality, but at 32 plates per hour, it was the fastest on the market then.”

Since they first installed CTP, Thistle has more than doubled in sales, and with their recent purchase of the Printing Division of University of Toronto Press, they will need even more capacity. So they recently purchased a new violet Luxel system from Fuji, not only to handle the additional volume but also as a back up. Roseland-Barnes expects to upgrade the older Saber to a violet laser within the next month. With the upgrade, he notes, “We will effectively have two machines running the same technology, the same chemistry, etc. For all intents and purposes, we will have two twin machines... That makes things much easier from a scheduling perspective.”

Without CTP, it's unlikely that Thistle could have achieved its rapid growth and have some of the highest productivity in the industry (measured by sales per employee). “We've been doing [CTP for] nine years. It's paid off in full.”

Bowne of Canada has been using computer-to-plate since 1999. In late 2005, they acquired a Heidelberg Suprasetter to augment their original Heidelberg Topsetter. Charlie Patane, prepress supervisor in the Don Mills plant, says they needed a second device as their business was expanding. Moreover, as they no longer do any film work, they felt they needed a second system as a back-up.

Bowne is, of course, one of the largest printers in North America, and 400 Canadian employees in two plants, they felt they needed a highly automated system. The Suprasetter has a multi-bay cassette, which automatically feeds plates into the system.

With the Suprasetter's swivel table and moveable transport unit, "everything is internal," Patane notes. This method separates loading and unloading procedures, which has a positive effect on plate throughput. "There is no handling of plates." Moreover, "if there is a plate jam, some kind of error, or the plates go out of alignment, the machine fixes itself. You don't have to get into the machine at all." The Suprasetter also has an internal punching system that, according to Heidelberg, ensures that punching is performed with maximum register accuracy.

Bowne initially went with the Kodak Thermal Gold plate because of the run lengths, high resolution and ability to stochastic screening. Their platesetting line includes an online processor, pre-bake and post-bake ovens. While allowing for long runs, baking has other important advantages. Bowne has five 40 inch presses, in a variety of configurations, from four different manufacturers, and each uses different fountain solutions. And though known as a financial printer, 80% of Bowne Canada's work is commercial, so they print on a variety of substrates. The baking gives the plate the flexibility to hold up in different conditions, providing greater process stability. Patane says "nothing happens to the plate on press; it gives me a lot of security." Rick Mazur, Vice President Commercial Segment Marketing at Kodak's Graphics Communication Group, notes the "demand is very strong for preheat; it provides flexibility and holds up in different conditions. You run one process and can print with various fountain solutions and a variety of substrates.... It's durable in those environments, you don't have to worry. You control the process in prepress, and it's not an issue in the pressroom."

An important issue to keep in mind when buying a platesetter, says Nicky Milner, Vice President PreMedia, Marketing Products and Services Sector at Transcontinental, is having to make a decision on what technology to choose. Milner, who has been involved with CTP for more than a decade, points out that vendors are always pushing "the next great thing" and it is often difficult for printers to decide which technology will carry them through. Even if they make a decision based on current conditions, business requirements could very well change over the life of the machine. She feels that it is therefore important to select a technology that will carry one forward and meet unexpected changes in business.

Changes in work flow are probably most significant. Going CTP means the prepress process must be all digital, with digital proofing, imposition, and trapping. But even once CTP has been installed for years and all processes in place, there can be issues with upgrading or changing. For example, Forest City Graphics of London Ontario has been CTP since the late 1990s, using a Prinergy workflow. They've recently upgraded to a Screen Ultima 16000S VLF machine, which is faster and has more throughput than their eight-year old system. They did not change their Prinergy workflow, however, and they now send 1 bit TIFFs to the platesetter, which adds network traffic. As prepress manager David Revesz comments, "With a propriety system, once the file starts rendering, it starts plating. Now, once the TIFFs are done, it goes through the Screen RIP and [it's] then plotted. It's not just adding one step. But with the sheer speed of the output device, "once it goes, it outperforms what we had. But if you're sending just one plate, the older machine could be faster."

But Revesz, like others, has nothing but praise for the devices on the market. “They all work; they’re fast and accurate. Everything about them has improved. The technology has grown so fast and it’s so incredibly accurate, that we’re almost to the stage where you don’t have to look at the plates.”

John Zarwan lives on PEI. He has been involved with CTP for nearly 15 years and has consulted with many of the manufacturers mentioned in this article. His white paper on CTP Plate Making: Understanding the Real Costs is available at no charge on his website www.johnzarwan.com.