IS CTP READY FOR PRIME TIME? MAYBE NOT.

Steve Johnson
Manager of Information Systems and Computer to Plate Integration
Commercial Lithographing Company

Keywords: Computer, Plate, Electronic, Management

Abstract: Computer to plate technology holds much promise, but also has significant challenges. This paper explores many of the potential problems users of CTP technology may encounter, in order to help them better prepare for it.

Introduction

When asked to present the negative aspects of CTP, I was at first not excited by the task. My employer, Commercial Lithographing Company, has pursed state of the art technology for every aspect of their business for close to seventy-five years. There is a strong commitment to taking advantage of the appropriate new technologies to work smarter, better, and be more cost competitive. CTP has been very successful for us, and we are enjoying many of the benefits that it promises to provide. In spite of these benefits, new technology and early adoption of new technology means new challenges. What I intend to present is a breakdown of the challenges that we have faced at Commercial, how we overcame many of them, and how we are dealing with the ones we cannot yet overcome.

The Challenges

Vendor and Product Selection

The first major challenge anyone will face when taking the step toward computer to plate is in selecting the vendors you will use. Although this may seem trite, how well the individual product vendors work together towards the mutual goal of your success will play a significant part in how quickly you become productive. One vendor may seem to offer everything in one big package. If that package utilizes a proprietary workflow, it may not be compatible with your customer's digital files. On the other hand, an "open" system vendor utilizing industry standard RIPS, OPI processors, and other postscript processing tools may not have the expertise or desire to customize these resources for optimal productivity in your environment. You must make sure that the CTP vendor you select is willing to work with the scanner that you have chosen, the RIPs that you are using, and the kind of front end that you desire - even if they make competing

products. Your initial success with CTP will rely heavily on the partnership you can develop with your primary vendor, and their experience in the market segment you serve.

Technology Selection

At Commercial, we chose the Creo 3244 automatic Thermal Platesetter and the Kodak 2919 plate processed via a Kodak automated thermal processing line. We purchased an Eskofot flatbed scanner, because at the time, it was the ideal unit for our copydot scanning needs, and Creo appeared tentative about their scanner development plans. There was, at least on my part, a significant amount of agonizing over what the right technology was. At Commercial, we did not have any experience with electronic prepress. All of our work was done with customer supplied film. I wondered if the correct step was to first purchase an imagesetter and do fully imposed flats prior to making the full step to CTP in order to get a better understanding about the electronic prepress process, or just dive in head first, (which is what we did). I'm not sure I can answer which approach is easier, but I am glad we made the decision to leapfrog the film recorder and go straight to plate. It was just one less thing to learn. The challenge of selecting the best technology for your environment goes hand in hand with your vendor selection. These products must work together, and you will want each product vendor to understand the other vendor's products intimately – or you will find a difficult road ahead.

Installation

Once you have selected a vendor, and your technology, you will be planning an installation date. This should be scheduled to allow plenty of time for you to remodel your plate department so that it can accommodate the new sixty foot long automated thermal processing line, if that is the technology you have chosen. Depending on the manufacturer and the technology involved, be prepared for a call the week prior to the installation to hear that it will be another three to six weeks before your product arrives. In our case, the delay was due to availability of a laser part that was manufactured in China. This will, of course, improve as more and more CTP units are shipped. At the completion of the installation, several test plates will be generated and run through the processor showing that the entire process is working perfectly. I would advise having a test job of your own ready so that you can find out if the system works with your workflow, not just the test pages printed by the installers.

Training

Your CTP vendor will undoubtedly want to provide you and your staff with a lot of valuable training. Unless you work for one of the dozen or so large publishers who consume a significant portion of the computer to plate products created today, the training may not be as valuable as you would hope. Certainly, you will learn about how to operate the machine, load plates, clean the filters, and

most importantly, how to dial the 1-800 support number. However, specifics about your workflow, handling unusual digital file applications from your customers, and other "prepress" issues, will probably be skillfully avoided and left for you to figure out yourself.

Proofing

The battle rages on. Dots or no dots? Digital proofing with dots is currently an expensive or tedious proposition. At the time of this writing, we do not posses a digital proofing system and are simply relying on customer provided proofs. Whether a technological improvement will solve this issue, or a change in customer demands, it is a big issue. It is keeping many people from going to CTP, since they feel they have to make film anyway to provide an acceptable proof.

Copydot Scanning

One of the tools that made our transition to CTP easier, is an Eskofot copydot scanner. This allows us to move our conventional film based work to the CTP platform saving a lot of time on the step-and-repeat machines. Copydot however, is not without it's own set of challenges. The first of these is the gigantic size of the file that is created. These files can be compressed using G4 compression, but then you have a problem touching them up in Photoshop, a necessary step when you are dealing with a large number of solids in your work. An additional challenge is created when you try to use Intersep's OPI on copydot scans that have been retouched with Photoshop. Not the fault of Intersep per se, when Photoshop writes the touched up postscript bitmap file out, it changes the color to black. The newer version of OPI capable of handling DCS 2.0, reads these changes and moves all of the images to the black plate. It appears that no one wants to budge on this issue. The OPI vendor, who could probably fix the problem the easiest does not appear responsive. Adobe, at last word, still does the same thing in the latest version of Photoshop. Finally, the scanner manufacturer has not provided an upstream editor to eliminate the need for off line editing of the files they create.

Service & Support

Your CTP vendor will offer you a service contract. Because the technology is new, the parts highly proprietary and expensive, and the expertise to maintain the systems is not yet common knowledge, you will purchase the contract. This will cost in the neighborhood of ten percent or more of your purchase price. In the case of a thermal imaging platesetter, the laser-imaging head itself may cost up to $100,000. The MTBF of these units is of little statistical relevance because of the small data set, and because the failure rates are all over the board. We were told that a thermal laser typically lasts somewhere between six months and three years. In this case, the cost of the service contract becomes analogous to laser insurance.

When your CTP device fails, you will want to get service as quickly as possible. A centralized support center that can help you over the telephone is very nice, but they may or may not have the same sense of urgency about your failure. If you are on the East Coast, and they are on the West, this has ramifications of its own. Read the fine print carefully, as services provided outside of the eight to five local time might be billed to you in addition to the contract price. It is also important to know from where your on site service person is dispatched. It may take this person more than a day just to reach your site. Also, is the company large enough to have a sufficient number of field service technicians? This will become more important as you become dependent on your new CTP system.

Postscript Workflow

The catch phrase for CTP in 1997 has been "It's the workflow, stupid" - and in some folk's opinion, the postscript workflow is stupid. As a virtual neophyte to postscript, and a person who is not willing to accept "because that is the way it is" as a legitimate answer, I think something needs to change here. Adobe's PDF appears to hold a lot of promise in standardizing file exchange. This is the biggest headache you encounter with a film-based workflow, and it is also the biggest headache you will encounter with a CTP based workflow. Since all of the exciting challenges of a film-based workflow are present, it would seem that there is no sense in revisiting them all here. However, if you are a large commercial printer who has always used a film house in the past, and wants to make the CTP leap without ever having in house electronic pre-press, you will need to learn about all of these challenges, or hire someone who knows them already.

Billing & ROI

If you already have in house pre-press, CTP file prep and workflow does not offer any special billing challenge. However, if you are a commercial printer who is accustomed to billing step-and-repeat time in a linear fashion, the rules change a bit. You now have the ability to work on several jobs at one time, and with the right platesetter and processing line, you can output the plates in an unattended fashion – much like a laser printer. So do you charge for machine time? Who knows!

Return on investment is a different matter. How quickly you can recapture your investment depends on how quickly you can move a significant portion of your work to CTP. You must also consider why the customer would even want their work moved to CTP. If you are still going to have to make film for the proof, does it make sense for it to cost more for them? Will they see the quality improvement? These are all questions you must ask yourself, preferably before making the investment.

Conclusion

Each week that passes, more and more printers and pre-press shops are investing in CTP. Whether that investment is merited is up to the individual company to decide. Certainly, the technology is capable of producing excellent results, but at what cost? New proofing materials offer the promise that we will no longer need film-based proofs, but they too are not quite perfected. While the technology will become more capable and less expensive as time passes, an investment now does give you the benefit of learning how to deal with this exciting new technology. Is it ready for prime time? You will have to decide.