Transcontinental O'Keefe Montreal

Background

Transcontinental O'Keefe Montreal is part of Transcontinental Printing, the largest printer in Canada and the sixth largest in North America. Transcontinental is also Canada’s leading publisher of consumer magazines and its second largest community newspaper publisher. It is also active in several key markets including books, magazines, catalogs, newspapers and retail flyers, and serves a variety of specialty packaging and commercial printing needs.

Transcontinental has grown steadily since its inception in 1976 and has 14,500 employees at more than 60 locations in Canada, the US and Mexico. In 2007, they reported C$2.3 billion in revenue.

Transcontinental O'Keefe Montreal is a general commercial printer and produces 500 jobs per month, ranging from magazines and posters to hang tags for clothing. The facility was known for its high-quality work although its business and production workflow was mostly manual:

1. A client confirmed an order manually to a sales representative via phone, e-mail, or fax.
2. A sales representative either requested a new docket or job ticket (or asked a CSR to request one).
3. The sales department then filled out the basic docket information.
4. The sales department then gave the docket to the estimator.
5. The estimator manually planned the job, created layouts (with paper, pencil and calculator) and then completed the docket (ordered paper, created purchase orders for outside processes such as finishing).
6. The estimator then brought the docket and materials to prepress department (manager, manager’s desk or directly to the operator).
7. The prepress operator created a new PRINERGY job and copied material onto a server and manually created a new entry in FILEMAKER.
8. The prepress operator then printed, refined and imposed the job.
9. The prepress operator printed the contract and content proofs and returned them to the estimator.
10. The estimator either gave the proofs to a sales representative or shipped proofs directly to client using a courier or delivery service.
11. The estimator then waited for the proofs to arrive at the customer and to receive their feedback (“approved” or “needs corrections”).
12. If corrections were needed, corrections would be made and the cycle would restart. If the proofs were approved, the estimator would return the docket to the prepress department with the signed proofs.
13. The prepress operator would then produce the printing plates and send the plates and the docket to the press department.
14. The prepress department would send the CIP3 ink-key file to press.
15. The press operator printed the job and transferred it to the finishing department (or to a subcontractor).
16. The job was finished and shipped to client.
17. The job was closed and manually archived on PRINERGY when an operator had free time.

Manually planned jobs before automation.

Objectives
Transcontinental O’Keefe wanted to use automation tools for their prepress and production workflow in order to increase its efficiency, productivity and effectiveness.

Methodology
KODAK PRINERGY Workflow System and KODAK PREPS Imposition Software formed the backbone of Transcontinental’s prepress and production workflow. They were able to complete about 25% of their job planning using KODAK PREPS Imposition Software but needed paper, pencil, and a calculator for making the calculations of the layout. The process was time-consuming and required precision and concentration as the click of a wrong key could spell the difference between profit and loss on a job.

Since Transcontinental was very pleased with both the performance of the KODAK products and the product support that they were receiving from the vendor, they decided to purchase additional software and enhancements from Kodak that would automate many of their manual tasks.
Their investment in additional products included:

- KODAK UPFRONT Production Planning Software for more accurate, digitized job planning and automating the setup of POLAR cutters using JDF/CIP3
- KODAK PRINERGY Automated Imposition Add-On to automate job and imposition creation using JDF information from UPFRONT Software
- KODAK PRINERGY Automated Page Assignment (APA) Add-On to automatically trim pages and assigns them to correct runlist order
- KODAK PRINERGY Connect Rules Based Automation (RBA) Add-On to update the job status automatically, archive jobs after 30 days, and perform other tasks.
- KODAK PRINERGY Custom Database Reporting (CDBR) Add-On for exporting PRINERGY information to a VB.NET database and to CRYSTAL Reports.
- KODAK INSITE Prepress Portal System for using the Job Assistant to digitize and automate the customer proofing process.

Implementation Story

The project proceeded in five phases that would enable the project managers and key stakeholders (prepress, estimators, sales representatives, IT and the pre-media group) to focus on specific areas of the business as they were being automated.

Phase 1: Production Planning and Impositioning

1. Created layout templates that serve as the building blocks for building the job plans with UPFRONT Software.
2. Configured the UPFRONT Software JDF/CIP4 Finishing Export Option to automate the setup of the POLAR cutters.
3. Setup the PRINERGY Automated Imposition Software Add-On so that UPFRONT Software could create impositions without an operator opening PREPS Imposition Software.
4. Configured the PRINERGY Automated Page Assignment Add-On to automatically trim pages and assign them the correct runlist order.
5. Trained the estimators and prepress operators to use the new software.

Phase 2: Remote Proofing and Internet Services

1. Opened customer accounts in the INSITE Job Assistant and create users for each customer of Transcontinental O’Keefe.
2. Modified the standard INSITE information sheet so that it contains the information needed for the company’s docket.
3. Created SmartHotFolders for each customer so that files go into the proper job.
4. Train sales personnel, customers, estimators and prepress to use the new software.
Phase 3: Rules Based Automation

1. Completed setup of rules-based automation for job status (printed, in bindery, finished, shipped and archived); for sending VPS files to ink department for preparing spot colors; and for sending CIP4 files to press consoles.
2. Tested the rules-based automation on sample jobs.
3. Activated rules-based automation and monitored system-wide progress.

Phase 4: Database Integration and Automation

1. Integrated PRINERGY Custom Database Reporting with VB.NET and CRYSTAL Reports.

Phase 5: Evaluated the Electronic Docket (Job Ticket)

Resulting Workflow/Processes

1. The customer electronically uploads a job via INSITE Job Assistant. (Alternatively they manually confirm their order by submitting their job via FTP and confirm their order by email to the sales representative. The sales representative then creates the job in INSITE Job Assistant.)
2. Basic information from the INSITE information sheet is used by the estimator to plan the job.
3. The estimator moves the job to production in INSITE Job Assistant and creates layouts in UPFRONT Software and exports JDF and PREPS templates to PRINERGY. UPFRONT also sends CIP3 cutting information to the POLAR cutter.
4. The imposition is automatically imported to the corresponding job using PRINERGY Automated Imposition Add-On Software.
5. PRINERGY Rules Based Automation (RBA) automatically notifies the prepress department, prepress manager, plant manager, and shipping department by email that a new job has been moved to production. The email includes the customer name, job number, quantity, and deadline.
6. PRINERGY RBA changes the job status to “In Prepress” and opens a new VB.NET database. PRINERGY Custom Database Reporting (CDBR) Add-On is automatically populated with the corresponding PRINERGY fields.
7. The prepress operator prints and refines the PDF of the job (or just refines if PDFs are supplied) and PRINERGY Automated Page Assignment Add-On assigns the pages automatically to the imposition.
8. The prepress operator sends the job for contract and content proofs (if required).
9. The prepress operator emails customer, requesting approval of the job pages with INSITE Job Assistant (or informing the client that hard proofs are on the way).
10. The customer approves pages using INSITE Job Assistant.
11. Once all pages have been marked as “Approved”, PRINERGY RBA will automatically change job status to “Ready for Final Output” and notify the plate department, prepress manager and plant manager by email of the new job state. PRINERGY Custom Database Reporting (CDBR) Add-On will update the VB.NET database. (If corrections are needed the cycle restarts.)

12. The prepress operator outputs the plates and the CIP3 ink-key preset file is sent to the press interface for automatically setting up the color.

13. The job is printed and then is cut on a POLAR cutter that was preset with CIP3 data exported by UPFRONT Software. The job is then folded and/or stitched on finishing equipment (or is sent out to a finishing subcontractor).

14. After the finishing has been completed, PRINERGY RBA automatically changes the job status to “Completed Final Output” and notifies the plant manager and the shipping department by email. PRINERGY Custom Database Reporting (CDBR) Add-On updates the VB.NET database and the job is shipped to the client.

15. Thirty days after the status has been changed to “Completed Final Output,” PRINERGY RBA will then automatically archive, purge and change the job status to “Completed.” PRINERGY Custom Database Reporting (CDBR) Add-On will update the VB.NET database.

Additional Detail

Costs of Automation Project:
- KODAK UPFRONT Production Planning Software
- KODAK PRINERGY Automated Imposition Add-On
- KODAK PRINERGY Automated Page Assignment (APA) Add-On
- KODAK PRINERGY Connect Rules Based Automation (RBA) Add-On
- KODAK PRINERGY Custom Database Reporting (CDBR) Add-On
- Training and integration

Total: $41,950

1. Daily Time-Savings Related to Automation
(Based on an average of 10 jobs per day)
- Estimators 30 minutes
- Prepress operators 200 minutes
- Searching for information 30 minutes
- Reduced data entry with UPFRONT, PRINERGY CDBR 10 minutes
- Automated archiving with RBA 60 minutes
- Cutter setup due to UPFRONT JDF export 50 minutes
- Press setup using CIP3 ink-key data 180 minutes

Total: 660 minutes = 11 hours per day

2. Payback Estimate (Hard Factors)
- 11 hrs/ day x $40/hr = $440/day
• $440/day x 5 days/week = $2200/week  
• $2200/week x 52 weeks/year = $114,400/year

3. ROI (Hard Factors Only)  
• $41,950 investment / $114,400/yr savings = 0.37 years = 4.4 months

4. Payback Estimate (Soft Factors where data not fully available)  
• Improved customer service (more satisfied customers)  
• Reduced errors (and rework) due to reduced manual data entry  
• Reduced planning errors and plate spoilage due to automatic conformance of job plans to machine specifications and eliminating the manual creation of layouts  
• Faster turnaround time for customer proofing  
• Reduced use of delivery/courier services  
• Less overtime in prepress and CSR departments due to automation  
• Savings due to meeting additional workload without increased labor  
• New press time opportunity

Testimonial Evidence

According to Rob Lisi, Prepress Manager at Transcontinental O’Keefe Montreal, before UPFRONT Software, CSRs were doing about 25% of their job planning using KODAK PREPS Imposition Software. “We were doing great imposition work with PREPS Software, but we were still relying on paper, pencil, and a calculator for making the calculations of the layout. The click of a wrong key could spell the difference between profit and loss on a job.”

“UPFRONT Software has boosted our accuracy and doubled our productivity. If we happen to have a new layout, I’ll plan a job myself using the UPFRONT Planner application,” he explains, “but if a job uses a layout in our library, a customer service representative (CSR) can pull the layout from the database and quickly create the job plan using the UPFRONT Job Builder client. I am confident in the quality of the layout since UPFRONT Software checks all job plans against a database of our equipment. Any planning errors are caught long before plans can be finalized.”

UPFRONT Software increases efficiencies beyond the creation of job plans. “After planning a job, we use UPFRONT Software to output CIP3 information to our POLAR cutter,” says Lisi. “This has decreased setup time from 15-20 minutes to about 15-20 seconds. We hope to extend JDF to our folders and stitchers in the future and receive similar time savings.”

Lisi concludes, “Implementing UPFRONT Software required people to change the way they work, but within two months we were using UPFRONT Software and our productivity skyrocketed. We are looking to replicate the success of this workflow automation at other Transcontinental facilities.”
A digitally planned job using KODAK UPFRONT Software.