



AUTOMATING ORDER AND JOB PROCESSING TO OPTIMISE ON-DEMAND BOOK PRODUCTION

Company Name: Otava Book Printing Ltd
Industry: Publishing
Founded: 1906
Location: Helsinki, Finland
Services: Book printing
Relationship with Canon: Over 10 years,
but customer since 2018

Objective

To automate upstream order and prepress processes for more efficient book production and improved book life cycle management

Challenges

- Increase in titles with short runs
- Information transfer was dependent on manual interventions
- Manual order and pre-press workflow was prone to errors
- Lack of communication between workflow software applications

Approach

Implement a three-stage automation plan, developed with Canon as part of a digital transformation strategy

Benefits

- Digital and offset applications linked for faster, streamlined production
- Web interface for easier job ordering and faster processing for external customers
- All assets in archive now error-free and print-ready
- Handling more jobs error-free and more efficiently with the same number of staff

More efficient book production

Otava Book Printing Ltd is a subsidiary of Otava Group, one of the top three publishing houses in Finland and the country's second largest educational publisher.

Otava book printing serves internal and external publishing houses. Annually they produce more than 1,000 new titles of which around 600 titles are for Otava Publishing. This includes soft and hard cover books and fictional, non-fictional and educational materials which are distributed to retailers across Finland.

In total, the company prints approximately 3,000 jobs annually that include new titles and reprints.

After seeing a significant increase in the number of requests for shorter book production runs, the company moved to exploit the trend. Its first action was to digitise part of its traditionally offset production by investing in two Canon high-speed, web fed inkjet presses, a ColorStream 6000 Chroma and a ProStream 1000, both managed by the workflow and output management platform PRISMAproduction. Both digital presses were seamlessly integrated with a high-performance, book block finishing solution from technology partner Hunkeler.

Once the inkjet solutions were up and running, Otava embarked on the next step of the digital transformation plan it had developed with Canon's support – the automation of order and job processing. In the past, an automated workflow had not been a priority for the company as annual production had been limited only to offset print jobs with long runs, which were easily manageable for the staff. However, to be able to efficiently manage with the same number of staff the substantial increase in short runs to date, as well as the further increase expected, a fully automated workflow would be crucial to operational performance.



Speaking about the plan for automation Marko Silventoinen, Managing Director, Otava Book Printing Ltd, explains: "After the installation of the new Canon inkjet presses, we were able to move around 25% of book production to digital. It was then time to implement the next step in our plan and to automate our upstream order and prepress processes. In doing so, we expected to unlock the full potential of the digital presses and make our production workflow as efficient as possible, enabling us to handle the increase in demand for more jobs with shorter runs, reduce turnaround time, improve book life cycle management and also free up staff time for other tasks."

Automation is key

The automation project was split into three entirely separate phases to minimise risk and was rolled out over 24 months. The first phase involved automating internal reprints, a process that had previously required finding the necessary order information and files in the MIS (Management Information System), downloading them from the assets archive and then forwarding them either to the digital or offset presses. In the new process, MIS information and files are automatically extracted from the asset archive and, based on business criteria, then forwarded to digital or offset print production by uniFLOW sysHUB, a powerful software solution that automates, monitors and manages business-critical document processes and information flows from a single platform. Automating the internal reprints process has resulted

in a reduction from five minutes to one to two minutes for the time taken to put a reprint PDF into production, so that, in the past four years, production time has been accelerated by 50%.

In the second phase – automating quality assurance checks – a PDF-Quality Assurance block was integrated into uniFLOW sysHUB to automatically check the PDF trim and bleed box values against the values listed in the MIS. This was previously a potentially time-consuming, manual task, which, if not carried out correctly, could have resulted in a considerable waste of paper, time and labour. Now, if an error is detected, uniFLOW sysHUB immediately informs the operators and the necessary remedial actions can be taken, minimising downtime and waste.

The third and final stage was to automate the uploading of the assets for new titles from external publishers. Historically, for a new order, customers either uploaded the asset information to the Otava system and sent an email to Otava to trigger a new order placement, or they sent an order email to Otava with the asset information attached. To automate the process, Otava set up uniFLOW sysHUB-controlled, automated trigger flows between the connected systems so that communication flows and system changes no longer need to be triggered manually.

Customers can now upload all their PDF assets via a web browser at whatever time of day suits them and the files are automatically checked for quality assurance via the Quality Assurance block. If any prepress issues are identified, the system triggers an email requesting corrections and another quality assurance test will be carried out on the resubmitted data. When all values from the PDF match the values from the MIS system, the file is considered 100% print ready and will be automatically uploaded to the Otava asset archive.



"Not only have we been able to increase the number of jobs produced annually from 2,000 to 3,000 with the same number of staff, but we've even been able to free up the time of some staff to work on other tasks. For example, one person whose previous job was to receive orders and manually type them into our MIS is now involved in development work for the system."

Marko Silventoinen
Managing Director

Multiple benefits

According to Marko Silventoinen, Managing Director, Otava Book Printing Ltd, the benefits of automating their order and job processing have certainly justified the investment. “We’ve been very impressed with the improvements achieved through automating our order and job processing. The uniFLOW sysHUB solution in combination with the inkjet book production reduces, in some cases, job turnaround time from two to three weeks down to two or three days.”

Marko Silventoinen continues, “As the process is now automated, the errors that were previously made due to the need for human intervention are now a thing of the past. We then see a benefit for our staff as they no longer have to complete quite lengthy jobs on the press which required a high degree of concentration. Our customers are benefitting too – linked to our MIS, the PDF uploading and proofing process is easier and, because it’s now through a web interface, our customers have the flexibility to submit an order at any time and know that it will be processed immediately and faster than previously. In fact, we can now save up to two days of production time. And customers can also be confident that once their assets have been uploaded to the archive, they will be error free and print ready.”

Next steps

As a next step, Otava is planning to invest in new finishing equipment to be able to produce even shorter run lengths down to a run of one, and also to look to improve its book life cycle management. In collaboration with Canon the company continues to improve the book life cycle management for their publishing clients.



“While the inkjet presses and automation software are excellent products, what has really made the whole project such a success has been the relationship – or rather partnership – we have developed with the team at Canon who have supported us so well. We look forward to their ongoing support on the next stage of our digital transformation journey.”

Marko Silventoinen
Managing Director

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