

In-Plant Printer  
Edition

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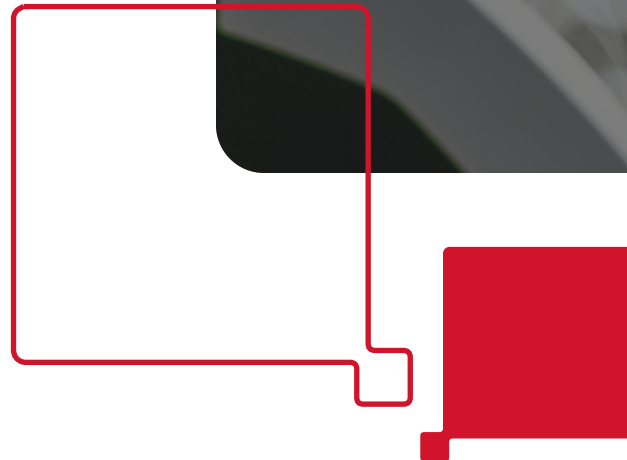
 **Produce:** Winning The Production Race

## Winning The Production Race

Print production is more than getting a job to the printer in the same way that a race is not the starting point for a runner. To be successful, the work and the training, goes in ahead of the event. For the runner, there is strength and endurance training, stretching, and selecting the appropriate shoes for the type of track and distance. For the printer, there is the input process that automates the job onboarding and normalizes files, the management process that captures data to be analyzed to eliminate bottlenecks, and the preparation steps guided by a production map so that everyone understands how jobs move through production. That brings us here.

Using the relay analogy, the goals for the runner begin with an understanding of their current physical state: controlling their heart rate throughout the race is critical because that is how they optimize their energy output to get to the finish, sprints require different energy management than marathons. Each participant needs to understand how they will expend energy no matter what type of race they run with every race requiring a plan to manage their energy usage and replenishment for success.

Similarly, in-plant printers must set up their shops for successful print production by building input, management, and preparation elements into the print workflow that promotes efficient use of resources – the energy in the system. Their challenge is that they generally produce more than one type of work. Winning the production race requires a flexible production environment, with as much automation as possible, to support the growing workloads, shorter delivery timeframes, and increasing requirements for cost control.





## The Modern In-Plant Printer

Every in-plant juggles a diverse set of print jobs. For some, the standard print work may be cut-sheet pages with some binding, while others may focus on print and mail that requires inserting and sorting. Others use a range of wide-format devices for sign and label applications in addition to their production cut-sheet and continuous feed presses. The print production channels are often augmented by edelivery channels and requirements for archiving, which may have specific file structure requirements.

File optimization becomes essential so that the output arrives at its destination ready for use. With effective queue management and load balancing, optimized files can move from one process to another without manual handling. Here are some considerations for your production map:

### Online Delivery Files

Your files have options: print, e-delivery and archived. Files that are not printed but instead targeted to e-delivery platforms and archiving systems have different requirements from print files.

Each comes with some potential challenges:

- Some may carry images at a higher resolution than required for print, making them larger than needed and more complex to process.
- Others may contain indexing records and tracking information to alert the sending system when they are viewed or if they are not viewed within a set time.
- Still, others may also have expiration dates for archiving. They may originate in and carry information from enterprise systems or network programs that produce a print stream not intended for online delivery, but even some PDF files can be troublesome.

All are important considerations because the file size may not have been a consideration when the system was designed, but it is when files are being transmitted across networks, to mobile phones, and into cloud and on-premise archives.

Optimization for these files should focus on removing or streamlining the characteristics that add to their size. The size of images and graphics is a place to begin, followed by a review of the files for other non-essential elements that can be eliminated.

**Pro Tip:** Look for fonts with similar names and older font formats that are not as streamlined. Preflighting and file optimization tools are the place to begin creating better production files, but it will be critical to review all upstream processes to set options fitting the intended output channels.

## Print Delivery Files

### The challenge.

Production print files can originate in programs as diverse as enterprise applications and graphic design programs which can create a multitude of issues.

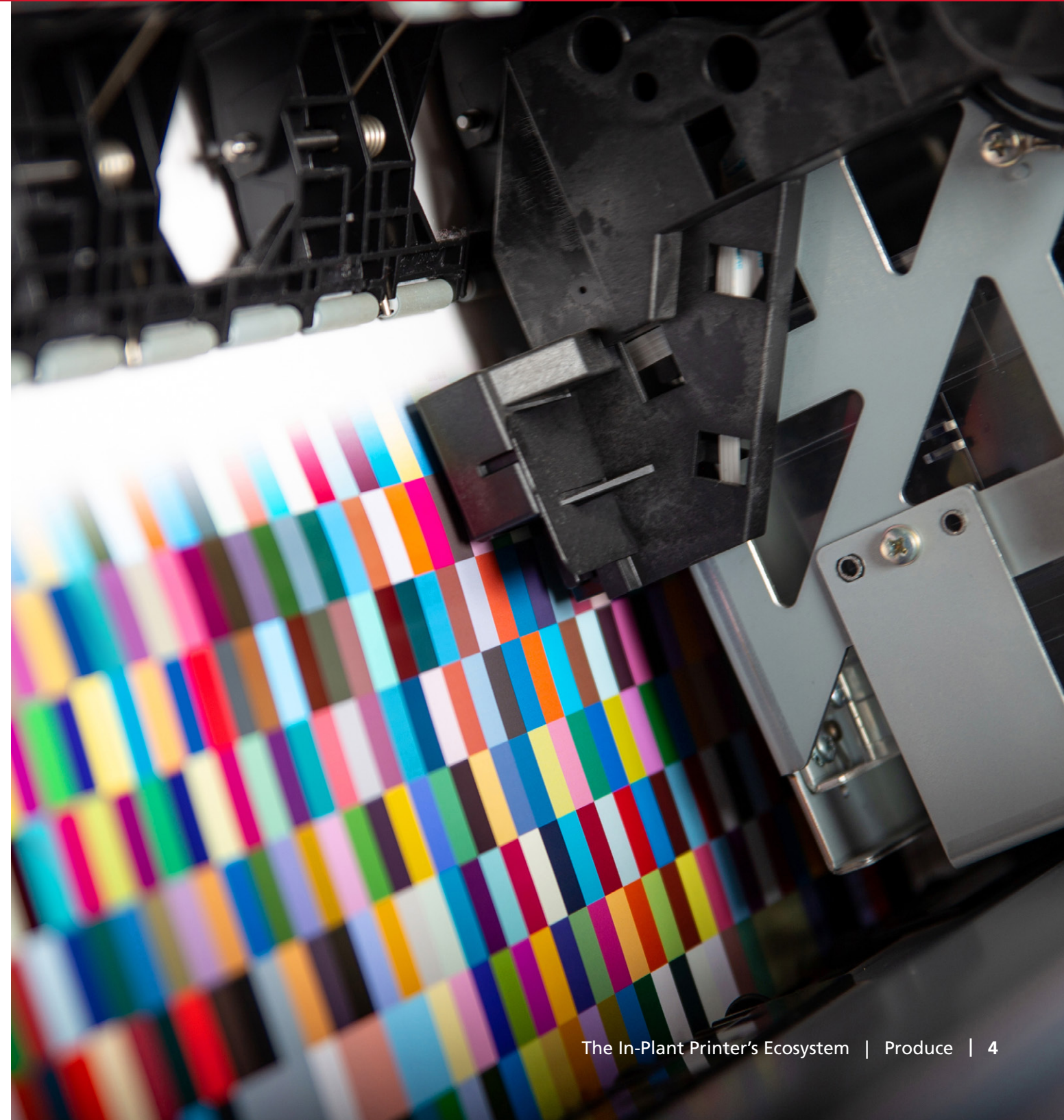
Many print files begin in a design program and are passed through other processes when there are variable data or image elements. That path to becoming a print file can add redundant features that add complexity to downstream processing (e.g., the digital front end) or, at worst, cause processing errors or artifacts when printed.

In-plants commonly find that they have many smaller files in addition to larger production runs. Multiple small print jobs add a processing and management burden, as well as cost. In addition to the preflighting and optimization that should be part of every workflow, a great approach is to look at options for batching similar types of files to combine many small runs into more efficient longer runs.

Batching, sometimes called concatenation, brings together jobs that share characteristics. For continuous feed environments, a common paper can be the driver. For sheet-fed environments, it might be the finishing. But there is more to consider. The goal is to look at the type of file to group graphically rich work separately from work that is mainly text. Training manuals with limited graphic elements can pair with runs of letters and invoices, but not with image-rich brochures. A best practice is to group files based on the color profiles they use in addition to the paper type.

### The solution.

Using batching techniques creates a relay for your print by automatically moving from job to job through the file until the work is complete. It is an excellent path to faster throughput, reducing costs, and increasing capacity. The cost reductions come from reducing the waste generated by starting and ending smaller jobs as well as the faster production time, bringing more capacity to the production floor.





## The Bottom Line

Mapping the workflow elements into a solid automated workflow enables production from multiple input channels to multiple output channels without creating bottlenecks that cost time and money. The key to successful production is a deep understanding of the print produced in the plant, along with any additional production channels like edelivery and archive systems, and the differences in the requirements for each file type.

Automatically routing each optimized job through an appropriate channel should be the goal of every in-plant operation. It brings value to the internal clients by averting issues during preflight and optimization so that deadlines will be met and also takes the tension out of the production process by staging work in the most efficient manner possible.

If you're ready to start producing quality output that ensures peak production performance, [contact us](#) for more information and how a workflow assessment may help determine your workflow needs.

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Headquartered in Tokyo, Ricoh Group operates in approximately 200 countries and regions. In the financial year ended March 2019, Ricoh Group had worldwide sales of 2,013 billion yen (approx. 18.1 billion USD).

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