



In-Plant Printer  
Edition

**RICOH**  
imagine. change.

Ricoh Software & Services | Ecosystem eBook Series

 **Output:** Post-Performance Improvements

## Post-Performance Improvements

Congratulations! We've crossed the finish line. At the end of the race, the runner knows how they did and, just as importantly, the time taken to finish the race. The completion time becomes the benchmark to compare past races and prepare for future ones:

- Was the most recent experience better or worse than the previous runs?
- What contributed to the difference? Perhaps the new training regime (equivalent to processes in print production)? Maybe the time was slower due to inclement weather (like printing equipment downtime)?

The point is to mark and use the information available while it is still fresh and assess whether any of the factors that impacted the result were controllable versus uncontrollable, predictable versus random, or due to internal or external causes.

Like most print operations, in-plants move onto the next job in the queue as quickly as possible without giving much thought to the ones just completed. As a result, continuous improvement becomes aspirational without any follow-through. Once the job is finished and delivered, critical next steps for success are easy to overlook or pass over if thorough processes, accountability, and oversight are not in place.

As a best practice, implement a quick, straightforward 5-step checklist after completing every print job.



# The 5-Step Checklist for Completed Jobs

## Step 1: SLA performance

Meeting or exceeding delivery dates, often specified in SLAs, is one of the most critical production metrics. Delivering work at or ahead of schedule ensures a happy customer and avoids any contractual penalties that might be part of the service agreement. SLA performance can be tracked per job but is also a helpful metric measured daily, weekly, and monthly for all work completed. An average-to-high SLA ratio means print production is humming along, whereas the inverse means production issues related to staffing, capacity, equipment uptime, or similar disruption points.

## Step 2: Time outliers

Many discrete processes and cost centers, from prepress to finishing are required for any print job. One botched process can be the difference between timely and late delivery, not to mention potential cost overruns. Review the shop floor data, ideally collected using a print management information system (MIS), to identify departments or specific processes that took longer than expected.

Be sure to answer the following questions:

- How did delays compare to past averages?
- Does the delay appear to be a one-time event, or is there a systemic pattern?

Systemic delays require investigation to locate and correct the root cause. Spot the time outliers using an estimate versus actual report from the print MIS, specific MIS queries, or business intelligence dashboards fed by shop floor data.

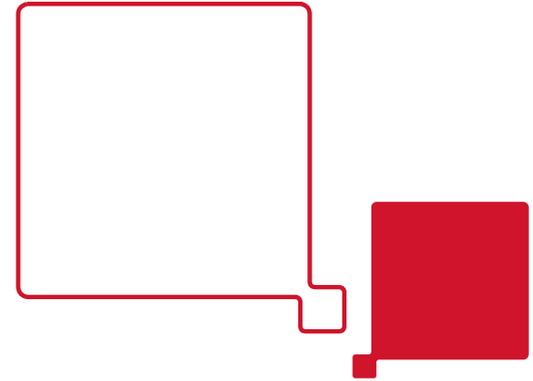
## Step 3: Utilization benchmarks

In recent years, maximizing in-plant resources has been critical as the volatility in orders, print volumes, and staffing has increased. Wider acceptance of virtual work arrangements have shifted some print from office to at-home, but higher print volumes still belong in the in-plant production center. The order and onboarding workflows required adjustment for online ordering, file uploads, and soft proofing and approvals. The responsibilities of the in-plant may have also changed to include additional print applications or adjacent services like creative design. To be productive, regardless of where they work, in-plant staff not dedicated to running equipment need the right tools whether they are at home or in the office. The key is for the in-plant to be flexible as the organizational needs evolve to the new reality of work while keeping aware of options to improve labor and equipment utilization. This is the path to a nimble in-plant ready to take on more varied work.

Measure equipment utilization using uptime or the time the equipment is available for production. Another typical performance measurement is Overall Equipment Effectiveness (OEE), which measures production efficiency. In this case, the quality measurement refers to the defect rate instead of print image quality. OEE compares the actual time, speed, and quality of printed products versus the theoretical maximum available based on the production conditions. An OEE score of 100% indicates that the in-plant produces defect-free print as fast as possible and that your systems have 100% uptime. Research in the manufacturing industries shows that improving any of these production elements results in more efficiency.

Capturing the data required for these metrics is best done using a print MIS solution or a data analytics tool with customizable, visual dashboards.

**Pro Tip:** Spot the time outliers using an estimate versus actual report from the print MIS, specific queries, or business intelligence dashboards fed by shop floor data. It will save you time and money.



# The 5-Step Checklist for Completed Jobs

## Step 4: Cost outliers

There are four basic operating models for in-plant operations: fully funded, partially funded with chargebacks, cost recovery, and revenue-generating. Cost control is essential to all operational models. Increased operating costs can negatively impact the line of business requestors, the enterprise, and the in-plant.

In-plant Operating Model	Organizational Impact
Fully funded	Enterprise
Partially funded with chargebacks	Line of Business
Full cost recovery	Enterprise and line of business
Revenue generating	In-plant (profitability)

Take a deeper dive to understand if the cost increase was due to materials, labor, equipment, or an inefficient process. Using reports or dashboards based on shop floor data, identify areas where costs exceeded the estimated and budgeted amounts. If the cost overruns were due to a customer alteration or request, how the cost would be passed on to the invoice or chargeback to the requestor's department needs to be determined and approved.

## Step 5: Accounting reconciliation

After identifying any cost adjustments, it is vital to create the chargebacks or invoices for the work depending on your operating model. The chargebacks should include any user-requested changes, including simple edits requested after proofing or a complete reprint. Chargebacks and invoicing should happen immediately upon job delivery with regular, ideally monthly, reconciliation to ensure all jobs have been billed. For larger enterprises, integration with the corporate enterprise resource planning (ERP) or accounting system streamlines approvals and budget transfers and improves accuracy.





## The Bottom Line

When the print job is complete and delivered, there are a few critical last steps to check off, both to ensure customer satisfaction and ensure any issues are corrected.

Verify that the job was delivered on time, ran efficiently through the shop floor without bottlenecks or delay, and that it is accounted for financially. If you consider these 5 steps as the mandatory checklist, other jobs that follow can quickly and more efficiently add to your bottom line.

If you're ready to optimize your production output, [contact us](#) for more information and how a workflow assessment may help determine your workflow needs.

# About Ricoh

Ricoh is empowering digital workplaces using innovative technologies and services enabling individuals to work smarter. For more than 80 years, Ricoh has been driving innovation and is a leading provider of document management solutions, IT services, communication services, commercial and industrial printing, digital cameras, and industrial systems.

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).

For further information visit [www.ricohsoftware.com](http://www.ricohsoftware.com)

**RICOH**  
imagine. change.