

drupa Essentials of Print



The print & packaging industry is a living world and once every four years, it is important for all its stakeholders to meet and share for a better future. At drupa, we promise you inspiration, innovation, knowledge sharing and networking. Each visitor will have his own places to go and must-see hotspots. On the way to this event, we release the “drupa essentials”, a series of articles from designers, brands owners, printers, converters, journalists and influencers. These articles will offer visitors an understanding of the print & packaging world that is transforming rapidly under the umbrella of digitalization, automation and sustainability. So, enjoy the reading and give free rein to your instinct and curiosity under the adage “to each his own drupa”.

We are happy to provide you with this expert article and we would be pleased if you publish it.

Be inspired!

Your drupa Team

Pat McGrew: Workflow Automation Drives the Future of Print



VITA
Pat McGrew

Pat McGrew helps companies perform better. As Managing Director for McGrewGroup, Inc., she promotes Best Practices for your Business using her 30+ years of experience as a software company owner, marketer, analyst, industry evangelist, writer, and consultant to enable business growth. With decades of experience in inkjet, toner, and traditional print as well as CCM and workflow, she assesses workflow effectiveness, develops strategies, and triages products, services, and businesses.

Pat covers print and customer communication channels for data-driven and static marketing, transaction, packaging, label, and commercial print. An experienced professional speaker, moderator, and facilitator, she is the author of 8 books, the editor of the Xplor EDBOK, a regular industry content contributor, host of #PrintSampleTV, and co-host of #ThePrintReport. She is co-proprietor of ThePrintUniversity.com, a new education initiative. Pat is certified as a Lifetime Master Electronic Document Professional by Xplor and holds certifications from PCPI and IDEAlliance.

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Pat McGrew: Workflow Automation Drives the Future of Print

For more than 60 years, we have talked about workflow automation, driven by data, to add efficiency, reduce costs, manage labor challenges, and increase margins. In this century, we stepped up the volume, embracing the Fourth Industrial Revolution, branding it Industry 4.0, and demonstrating the value workflow automation brings to print manufacturing. With an efficient, scalable, automated workflow that begins before you sell the job, every printer can survive the pressures of increasing paper and consumables costs, demands for faster turnaround, labor challenges, and the requirements to support very long and very short print runs.

Automating workflows is the core of the future of all manufacturing, but the results can be dramatic for print manufacturing. In the print industry, we look at workflow as the rules, protocols, and processes that are defined, documented, repeatable, and auditable. Your print business has many workflows that guide work through your front office, back office, and production to delivery. Each time you sell a product or service, one or more workflow routines manage the sales pitch, estimating, contracts, job onboarding, preparation, production, delivery, and payment.

Beginning when a customer agrees to buy print and delivers the job to the shop to when the work is handed over for delivery, and the job tickets are closed in production and sent to accounting, every step is at risk. Bottlenecks that add time and complexity to the job can happen at any and every step. Those bottlenecks cost time and money that eliminate expected profits. Tuning and tightening print manufacturing workflows using automation tools adds efficiency and scalability and keeps more revenue in the business.

10 Steps to plan for automation

The current marketplace for workflow automation is vast. There are tools available for every size printer in every print segment. Spend the time to look at the software available for the market segments you serve. Many tools are built to serve the needs of multiple print technologies and products. However, before you go shopping, you need a clear understanding of your current workflow state.

Begin with an honest self-assessment, looking at all of your workflows.

1. Make a list of your production workflows and the workflows that touch them. If you produce a variety of print

products, identify the workflows used for each one. If you have automated some or all of your workflows, note that on your list.

2. Who is responsible for the architecture of each workflow?
3. Who is responsible for solving bottlenecks in each workflow?
4. Where do workflows intersect?
5. What are the rules for Sales interacting with Production?
6. What are the rules for Customer Service Representatives to interact with Production?
7. Who is responsible for interacting with customers when there are problems with inbound files?
8. How are Change Requests managed?
9. How are Proofs and Approvals managed, and who monitors customer approvals?
10. How is accounting notified of additional charges and the final job costs?

You may want to add more items to your assessment list. Consider the areas that rarely experience bottlenecks and those that are more susceptible. Think about the people in the processes as well as the technologies. Look at any existing automation to determine if it is still providing the expected results.

Automate to eliminate friction

There are three fundamental reasons to spend the time and money to implement and tune automation:

1. **Reduce the time to onboard work:** There are dozens of whitepapers that pop up in searches related to job onboarding in print manufacturing, even where there are web-to-production and digital portals available. Walk your workflow and watch a range of jobs as they arrive and move through the processes that get them into production. Record the time and the number of steps. How many loops do you see? Is everyone working by the same set of rules, or is everyone writing their own rules?
2. **Reduce the time to make the job ready:** How much time and effort is expended to move work into production? How many loops, delays, and reworks? Mistakes and misunderstandings reduce the margin on the job, so look at your averages. There

may be a pot of gold waiting for you in an automated workflow.

3. **Reduce production time:** Your recipe for production has time elements, but also people and tasks. Count the manual steps and the loops in those tasks that extend the time to completion. How many tools are in use officially and covertly?

These three reductions open the door to less waste, fewer missed deadlines, more efficient production, and higher profit margins.

People Cause Friction

The print industry is actively working to bring back apprenticeships and find more efficient ways to train newcomers and those transitioning to new roles. While that is happening, people performing tasks create workflow friction. Tasks performed inconsistently may lead to job rework and reruns, missed specification changes, and mispriced work that erodes profit margins through a long series of minor incidents during production.

People are inconsistent. They may be wonderful teammates and enthusiastic workers, but that is not the same as repeating the same tasks daily with reliable precision. They are not robots, but that is what you need – software robots that execute repeatable and auditable tasks in a manner that is predictable and auditable.

Use your data to understand where staff members spend their time, how long tasks take, and how many loops they make. Most shops don't track their teams by the minute, so consider a quick survey to see what they think takes the most time in their day and the sources of frustration. Look at the number of touchpoints from when a file arrives in Production. How much time do they spend verifying inventory, resolving preflight errors, chasing missing assets, and handling color management or finishing questions by trading emails, text messages, phone calls, and chats? Automation can get much of that time back, freeing the team to handle more significant challenges.

Paper and consumables cause friction

Paper, film, vinyl, and the vast range of specialty substrates a shop may need to stock, along with the consumables that are part of the print process, like ink, toner, solvents, and cleaning tools, are a source of friction, but automation can be a lubricant.

Take stock of everything you keep in inventory and your replenishment rates. You may have a dedicated inventory management system for tracking, but you might be doing it manually using spreadsheets. Look at what has been sitting in stock for longer than average and what you regularly expedite. If you automate your orders

based on agreed replenishment quantities and update received goods in your internal inventory management system, you should find that material management becomes easier.

Take it a step further and integrate order and received goods management into the systems that feed your estimating and quoting to ensure that you have the raw materials you need to complete the work. Over time you should find that your stockholding becomes more efficient.

Deploy automation as the lubricant

Preparing for the future demand's efficiency and optimization of every process. Islands of automation linked by manual processes is not a best practice. End-to-End workflow automation is the path to follow. Follow the *Crawl-Walk-Run* rule!

If you have islands of automation, begin by reviewing those automation tools and the manual processes that link them. Review your installed software solutions. What are your options for expanding your adoption and deployment of adopting tools you own to achieve end-to-end automation?

Look at Job Onboarding, Prepress, Production, and Delivery. Anthony Thirlby at Venn Holding in Belgium shares his productivity numbers on LinkedIn. He says that 55% of the life of a job is spent in Estimating, Job Administration, and Scheduling. Focusing on these areas in your *Crawl* phase builds repeatable results that may save minutes to hours in bringing the job on board, adding money to the bottom line.

Even if you have a web-to-production portal or digital storefront, take a few steps back and review if they are still working for you or need a tune-up. If jobs arrive and seamlessly flow to prepress and production, great! But if there are still loops and bottlenecks, it is time to look at how your tools are set up and solve the bottlenecks.

If you are in a manual job onboarding environment, using hot folders and email, this is the time to stop. Your *Crawl* phase should be the development of a requirements and specification protocol to inform acquisition and implementation of automated job onboarding. Automated job onboarding will save time, create consistency and efficiency, and free team members to spend time on more valuable tasks.

After job onboarding, walk into automating customer approval management, change request and resolution, and then close the loop. Verify that every job is invoiced, including change requests—

set policies for discounts. And use your production data to keep pricing up to date. When all processes are connected and sharing data, you are ready to run. It may take two years to build the end-to-end process, but new automated step lifts your level of efficiency.

What happens when you embrace automation?

Automation is not magic. Automation takes a well-defined plan that is transparent. It takes executive sponsorship and team leadership. It is part art and part science. Automation requires calming the fears of employees that their jobs may be eliminated. It requires a different type of conversation with the current array of software vendors. But if you do your assessment and have those conversations, the waste reduction, production efficiencies, and customer satisfaction that result can change the trajectory of the company.

If you need talking points for your team, here are the top reasons to embrace automation:

Eliminate manual and repetitive tasks:

Automation eliminates repetitive tasks and errors, allowing faster processing, reducing turnaround times and increasing overall efficiency.

Integration enabling data sharing across

applications: Integrating digital technologies with traditional print methods is the bridge to the future. It allows seamless integration between design software, content management systems, and data-driven workflow processes.

Easier to collaborate: Work rules are different in every country, but the global economy lets us sell print around the world. Automation paired with cloud-based workflow solutions fosters more efficient communication, faster approvals, and reduced lead times.

Enables waste reduction: By identifying workflow inefficiencies and eliminating them, reprints due to production mistakes become a thing of the past. Leveraging vendor data and integrating business

workflows with production workflows minimizes waste through better inventory management. The ability to print on-demand and in smaller quantities reduces excess inventory and waste associated with outdated or unused materials.

Print manufacturing workflow automation brings increased efficiency, improved production quality, and more flexibility in scheduling. The business result is increased capacity through efficiency and higher available profit margin on each job.

Automation and management of the automation rules allow the print shop to adapt to changing customer demands, integrate with digital processes, improve efficiency, reduce costs, and deliver a better overall experience. The resulting optimized print workflows are essential to staying competitive in a digital age while still leveraging the unique benefits and tangible qualities of print.

Quotes

“To deploy a proper workflow, begin with an honest self-assessment”

“People cause friction and frustrations but it can be managed”

“Automation is not magic. It is part art and part science”