GUIDANCE

MANAGING YOUR PRINT PRODUCTION

A GUIDE FOR LARGE SHOPS

JUNE 2018
Introduction

The largest print shops, especially those printing diverse type of print products, need more than a print management information system (MIS). They need a complete Management Workflow System (MWS) capable of managing everything from quotes to inventory while providing a clear view into the manufacturing processes for each type of print job. Many shops develop a workflow at a point in time, but as the business grows, print capacity grows with the addition of new devices, and staff grows to support the growth, the workflow infrastructure is patched and augmented, but not rebuilt to the proper scale.

Over time the best practices carefully designed to optimize each activity tend to give way to spreadsheets, whiteboards, sticky notes, and a series of notes in job travelers intended to fill in the gaps left by the original workflow. The new equipment can’t run at capacity because jobs are caught in job on-boarding bottlenecks or make it to the machine only to find that there is not enough stock to complete the work. Also, as new staff are hired, and workflow processes are overlaid with email, phone calls and sticky notes, the work doesn’t flow as smoothly putting the business at risk.

When it’s time to look at something new to manage the process of moving print from the point of sale to the point of delivery it’s time to look for one that is efficient, scales with the business, optimizes print manufacturing and adds new capabilities to differentiate the business. That solution is printIQ. Developed by people who understand print management, this cloud-based solution meets the needs of large shops regardless of the print technology. It opens the door to configuring a true print manufacturing workflow that goes beyond a traditional print MIS. printIQ CORE focuses on efficiency and decreases operational costs while increasing throughput and freeing up employees to work on more productive tasks. Adopting cloud-based solutions provides the widest array of options, which is why printIQ is becoming a leader in flexible print management.

A Powerful Workflow Drives Efficiency

Companies like yours are looking carefully at their end-to-end workflows and comparing their current state to the promises made by traditional print Management Information System (MIS) providers. The conclusion they come to is that a more modern platform that has API capabilities, integrates with the most popular tools, and is scalable, is the growth engine they need. printIQ solutions are based on years of experience in print shops of all sizes, picking the best practices to support all types of workflows that support the manufacturing of commercial, label, packaging, wide format and signage applications. Whatever your print MIS is today, IQCore, IQConnect, IQextend, IQfurther and IQPlus provide a rock-solid infrastructure for your print manufacturing.
Where are the bottlenecks and pain points in your print shop? How easy is it to get files from your customers, capture all of the specifications accurately, and communicate current job status back to all of the stakeholders? What is your view of the production floor or your current raw materials stock? Is your production workflow built around a set of software solutions that track work from the point of quoting to the point of delivery, or are there islands of automation linked by spreadsheets, sticky notes, whiteboards, phone calls, and a sneaker-net of handoffs? If your workflow is not efficient, neither is your shop.

**Figure 1: Top Workflow Bottlenecks of Large PSPs**

<table>
<thead>
<tr>
<th>Bottleneck</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing throughput: shortening production times</td>
<td>45%</td>
</tr>
<tr>
<td>Dealing with a high number of small jobs</td>
<td>40%</td>
</tr>
<tr>
<td>Connecting islands of automation</td>
<td>30%</td>
</tr>
<tr>
<td>Customizing the workflow to our needs</td>
<td>30%</td>
</tr>
<tr>
<td>Managing multiple workflows</td>
<td>25%</td>
</tr>
</tbody>
</table>

N=40, Respondents with more than 50 employees
Source: U.S. Production Software Investment Outlook, InfoTrends 2018

Workflow automation and efficiency are a priority. Even efficient shops are looking for ways to support the capacity that faster equipment brings, and that requires more automation.
Workflow automation paired with better on-boarding processes and solutions that provide deeper insights into the end-to-end print manufacturing workflow process is what printIQ delivers. A cloud-based solution like printIQ makes it easy to adopt best practices with reasonable investments. The public or private cloud-based solution looks at your business the way you look at it, instead of trying to shoehorn it into traditional print Management Information System concepts developed for a different generation.

Large shops often need to integrate their quoting and estimating with their business systems. printIQ is a complete workflow that provides the infrastructure to allow everyone in the shop to monitor job progress via a desktop, tablet or even a smartphone. When everyone is informed the problems of scheduling and communication errors disappear. Inventory outages become a thing of the past with inventory management that is integrated into the IQCore, which is completely aware of both quotes and job onboarding to ensure that orders are launched as needed, minimizing inventory hold time. The printIQ CORE modules provides a common approach to ensure that pricing is consistent, and margins are respected.

When jobs are onboarded, are the same specifications captured for every job? How many require follow-up phone calls or emails? How easy is it for a customer to re-order standard jobs? Keeping more efficient presses and finishing equipment active requires attention to these processes, including file submission and prepress, the management of the production floor and the inventory that feeds it. The IQCore modules make it easy to set up the quotes for faster turnarounds and more consistency. You can even offer your customers simplified quoting sessions, via the included web portal, so they can quote their own jobs. With the IQ Payment Gateway you have a real-time secure payment processing interface that comes standard with IQCore.

Print is a manufacturing process, with materials handling, inventory, and fabrication functions. The IQCore Workflow Manager and Factory Manger work together to move work efficiently through your production floor.

Additional features give you job tracking to give everyone a transparent view of all work in process. No more calls to the production floor or customer service person because every job has its status updated as it moves through the production process notifying the appropriate stakeholders at each production step.

**Adopting a Management Workflow System**

Smart Print Manufacturing (SPM) starts with streamlining inputs (customers, job onboarding, and production resources) to optimize every stage of production, eliminating or minimizing manufacturing inefficiencies and errors while maximizing uptime and execution.
For large shops the future is Smart Print Manufacturing, streamlining inputs and production to eliminate manufacturing efficiencies, and leveraging cloud-based solutions. The requirements are beyond most print MIS systems, which is why printIQ is built as a Management Workflow System (MWS). Based in the cloud and developed with experience in real print shops, printIQ is easy-to-integrate and scalable, allowing for a fast start. printIQ’s cloud-based tools embrace integration with a wide array of tools to create exactly the workflow needed and opens the door to expanding capabilities over time. For example, printIQ is already integrated with popular tools like Enfocus Switch, Esko, Ultimate Impostrip, XMPie and Chili Publish, but the most powerful feature for might be the ability to get online with a customer-facing digital storefront with very little internal effort. The portal is built to make it easy for customers to engage over the web, on their phone, or on a tablet, and comes without the baggage of many standalone digital storefront applications. All of this plus a Software as a Service (SaaS) model that means you can reduce your initial outlay.

Platforms and Tools

For print shops to change their workflow it takes a full understanding of the current state of manufacturing. It takes reviews of current productivity and deep dives into local competitive markets. Rethinking the strategy often leads to new initiatives that require revisiting workflow initiatives. From controlling costs to integrated automation, the use of modern print and workflow management tools become table stakes on the road to success.

Figure 2: Top Workflow Initiatives for Large PSPs

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-training of staff</td>
<td>40%</td>
</tr>
<tr>
<td>Integration of workflow components</td>
<td>35%</td>
</tr>
<tr>
<td>Reduce manual labor through software investments</td>
<td>30%</td>
</tr>
<tr>
<td>Improve business automation within the print shop (e.g., customer communication, purchase orders, inventory management, and invoicing/billing)</td>
<td>30%</td>
</tr>
<tr>
<td>Expand workflow features to offer new services</td>
<td>23%</td>
</tr>
</tbody>
</table>

N=40, Respondents with more than 50 employees
Source: U.S. Production Software Investment Outlook, InfoTrends 2018

When InfoTrends asked PSPs about their workflow strategies and initiatives, it became clear that workflow automation is among many current plans. Remediating problems in job estimating and quoting, eliminating the bottleneck of phone calls required to verify and correct job specifications, and solving the confusion about what jobs are due out the door first, or concerns...
about profit margins, are all reasons for a new approach to print workflow management. If you are not sure who your largest customers are and if those customers are still profitable for you, this is the time you should be considering a new approach to your workflow. If you are experiencing inconsistent use of your printing capacity, you are a candidate for change.

A move to a cloud-based print management ecosystem opens the door to transforming your print shop into a well-oiled machine. The workflow becomes the reliable single source of truth about every job accepted for production. And, with a cloud-based infrastructure paired with a rapid implementation model, the cost to bring the solution in-house and operate it effectively brings modern tools without severely impacting capital.

Where printIQ Fits in Your Plan

printIQ is the innovative newcomer to the North American print market. Bringing years of experience in Australia and New Zealand to the United States, the printIQ team uses the tagline, “far more than just an MIS.” They characterize their unique approach to managing the print operation as a Management Workflow Solution, with a framework that includes eight core modules that can be extended with the IQPlus module that brings approval management and pick ‘n’ pack options that might be out of reach on a licensed platform basis. IQConnect is the door to APIs, more automation, and connectivity to prepress tools to guide print work to the prepress system. printIQ has also partnered with Zapier to link to more than 1000 applications to create a truly unified business and production workflow, perfect for the shop that is using a variety of apps to manage the business.

Another feature of the printIQ solution is how they enable capturing accurate, timely shop floor data. InfoTrends knows from our 2016 North American software investment survey that two of the top reasons for not capturing shop floor data are because of resistance by staff and the amount of time it takes. With this in mind printIQ decided to offer a couple of flavors: firstly, there’s the desktop terminal with start and stop timers, or a tablet using touch screen functionality. Then there’s the traditional barcode scanner that can be utilized by barcoded operators. However, the Bring Your Own Device (BYOD) approach to the problem, that printIQ have developed, saw them creating an app that staff can download to their phones and capture the information with a device and interface that are already familiar. The phone’s camera can also be used to scan barcodes to speed up the process.
Large PSPs typically have multiple workflows paired to processes and people to meet customer job requirements. That approach is less optimized and can lead to limiting growth. Expanding through acquisition and expansion of sites can break a manual approach to workflow, leaving sites disconnected and limiting options for business intelligence. The IQextend module enables multi-site environments bringing stability and security to growth by enabling satellite site licenses or additional business site licenses as you grow the business. You can use different branding and
set up separate web-based frontends under the same agreement, but still link to different accounting and payment systems, a common need in large PSPs.

IQextend allows you to add another internal site, a second factory, or even a full satellite location. With options for single and multiple merchant facilities and accounting systems, the choice is really over to you.

IQ further is a bundle of additional features available for adding on to a core printIQ environment that empower any print company to behave in the market as an organization that is much larger.

IQ Analytics is a web-based interface that turns data into usable intelligence that can populate a variety of dashboards across the company. With better business intelligence owners and managers make better decisions about the type of work to go after, they have a better understanding of how well the Sales team is doing, or how specific customers rank in value to the company. It opens the door to more than just data. It populates the printIQ dashboards with real-time intelligence that leads to the best decisions.

IQ Automated-Freight Direct module links to your preferred freight providers, builds the required labels, and books the shipment in a consistent and automated process that saves touchpoints and costs.

IQ Capacity-Planner is a drag-and-drop approach to scheduling and planning that provides both a high-level overview of resources and the ability to move jobs around to resolve conflicts and optimize throughput. Then there’s IQgang module that can be used to build gang or batch runs with optimal sheet utilization.

IQ data-capture is an app that enables smart management of jobs at the operational level through a smartphone or tablet. It includes an instant feedback feature so that mistakes are identified in real time so that mistakes can be immediately corrected.
Print shops looking for a new or different solution for managing the many aspects of their operation should give printIQ a close look. If you operate a large PSP or in-plant print operation, this is a solution to review. It is scalable as you grow and extensible if you grow into other print formats like wide-format work or packaging.

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