

Enhancing Label Production with Smart Workflow Automation

A White Paper by: Cary Sherburne

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Introduction

In a recent study by the CMO Council,¹ 94% of senior marketing decisionmakers identified presenting a connected and personalized omnichannel experience as important—if not critical—to achieving their organizations' business goals through an engaging customer experience. And 60% of respondents identified product packaging as a critical touchpoint in their omni-channel engagement strategy. In fact, the study suggests that physical touchpoints like product packaging and in-store displays are seen as more important to the success of the overall customer experience than channels like email, direct mail and mobile apps.

At the same time, consumers expect brands to be responsive to trends, suggestions, complaints and more, including rapid adjustments to labels and packaging. And they are not being particularly realistic about expected timeframes since, with the report stating, "the speed of digital has established unreasonable expectations for instant gratification ... [and] speed is key as 52 percent of end consumers in a recent CMO Council survey said the most important attribute of a brand experience is fast response times to issues, needs, requests and suggestions. If brands fail to meet these expectations or persist in delivering frustrating

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CMO Council

experiences, consumers will walk away, even from brands they love. In fact, 47 percent say they will stop doing business with the brand."²

This presents a challenge for marketers, with only 6% of marketers reporting they have achieved integration and alignment between key touchpoints of their customers' journey. The report states, "Most often, it is the physical points of engagement that are being left in the cold as nearly half (49 percent) of marketers admit that alignment across touchpoints is selective, at best, and really only across digital channels." Fifty-three percent of marketers believe they should be able to implement the necessary changes to labels and packaging in 14 days or less in order to meet these consumer expectations, but 78% report being unable to do so.

¹ *The Responsiveness Requirement: How Agile Marketers Act on Consumer Feedback to Drive Growth,* August 2017, produced by the CMO Council in partnership with Pantone, MediaBeacon, Esko, X-Rite and AVT, five of Danaher's Product Identification Platform companies.

² *The Customer in Context,* CMO Council 2017.

^{9/3/2017 |} Prepared for Esko | www.whattheythink.com

For label and packaging converters, who have already been facing demand for faster turn times, costeffective production of shorter runs, a growing number of SKUs and a requirement for strict regulatory compliance, these dynamics add even more complexity to an already complex and demanding production process. Label and packaging converters can expect to see even more pressure on cycle times from their brand owner customers. That being said, they play a critical role in enabling brands to achieve the level of responsiveness their end customers expect. To effectively serve in that role, an increased focus must be placed on operational efficiency and smart workflow automation.

Most label and packaging converters have made significant strides toward reducing cycle times while still being able to remain profitable. But as new tools, techniques and technologies emerge, there is still more that can be done. In this white paper, you will find tips, hints and real customer stories that will encourage and inspire you, whether your company is large or small, as you work to streamline your labels and packaging workflow even more to address the growing demand for speed to market sought by most, if not all, brand owners.

Automation Spurs Dramatic Growth

One of the most important benefits of smart automation is the ability of companies to increase throughput and grow their businesses with minimal increases in staff. The key to smart automation is to remove all unnecessary manual steps and touches, especially those that add no value, leaving your talented staff to address more complex tasks rather than spending the bulk of their time performing repetitive tasks. The good news is there are solutions available that make this easier than ever before. And with the integration of multiple solutions into a single automated workflow, even better results can be achieved. While a label or packaging converter may never reach a total lights-out operation, the amount of time and money that can be saved by automating as much as possible is startling, and investments in technology quickly achieve a return.

A great example of this in action is Blue Label Digital Printing, based in Lancaster, Ohio. The company specializes in custom label manufacturing for beer, wine, specialty foods, spirits, health and beauty, juice and more. Its 50 employees and HP Indigo digital presses enable running small and large batches with three to five business day turnaround times. "We are an all-digital label and packaging printer that specializes in short to medium run high quality labels. We offer the best commercial quality labels with unmatched service, whether the product is to be sold in a farmer's market or for a large brand on the shelf. We scale to our customers' needs," notes Phil Herington, Blue Label Digital Systems Manager.

Before implementing an automated workflow, Blue Label had one prepress operator that did everything, from receiving and preparing one-up artwork to sending out proofs for approval and manually imposing every job for the firm's digital presses. Herington reports that the company had an MIS system in place that it had outgrown. "We chose to replace that system with CERM," he states. "It offered us more flexibility, including the ability to create reports on the fly. With our previous system, reporting was difficult and we had to pay for each one. You never quite know what information you are going to need to make business and production decisions, so the ability to generate custom reports on the fly was huge for us."

Implementing CERM helped smooth production to some extent, but Herington and the Blue Label team realized there was much more that could be done. "Our CERM representative introduced us to Esko," he says. "Once we learned about Automation Engine and its already-existing integration with CERM, taking that next step was a no-brainer. We knew that anything we could do to reduce cycle time, potential for error and our cost structure was critical to our future growth, and adding Automation Engine promised to deliver just that. As an all-digital printer, the majority of jobs are small and may only deliver a couple hundred dollars in margin. By deploying the integrated CERM/Automation Engine solution, our prepress

department was able to focus on creating value for our customers rather than spending most of its time with repetitive procedural tasks."

Today, Blue Label Printing has added more prepress staff – with a total of five now in place – but has increased job throughput by a factor of ten. "Previously, we could process about 20 pieces of artwork per day," Herington reports. "Now we are processing an average of 200. That would have been impossible without automation in place. Without our current system, we would need an entire room of people manually just doing step-and-repeat work all day!"

Herington explains that once artwork has been properly prepared and is press ready, it is simply dropped into CERM. Automation Engine then processes the file and sends it to the RIP for printing. "Once loaded into CERM," Herington says, "the file status changes as it progresses through each step with seamless bi-directional communication between CERM and Automation Engine. That way everyone can see where the job is and what needs to be done."

CERM sends JDF messaging to Automation Engine with all required production information as to which labels go where and how they are stepped for printing. Blue Label has created two workflows here: one for one-up printing and another for "Previously, we could process about 20 pieces of artwork per day. Now we are processing an average of 200. That would have been impossible without automation in place. Without our current system, we would need an entire room of people manually just doing step-and-repeat work all day!"

Phil Herington

multiple up printing. CERM tracks every production state up to shipping. "Once the production job is created, we press a single button in CERM," Herington explains. "A couple minutes later, we have jobs RIP'ped and ready to print on our HP Indigo presses." He adds that these can be quite complicated jobs that would have taken hours to process manually. "Some jobs have 60 different labels, and if we can fit six streams of labels across the web, we have 10 run orders, each a different job," Herington states. "One customer had 196 versions! A surprising number of customers have more than 100 versions, and it is simply not manageable to process these manually."

Blue Label also uses Automation Engine to automate the proofing process, generating PDFs for customer review. "Once the customer approves the proof," Herington says, "the job flows into the step-and-repeat workflow. It's hard to imagine we ever operated without this. Had we not implemented CERM and Automation Engine, our company would not have been able to reach the heights it has today. The

turnaround time and service levels we are able to offer to customers, which is our clear market differentiation, is made possible by the integration of these two systems."

While Blue Label has made amazing strides in streamlining its operations, there is still more to do. Herington concludes, "We are always looking for ways to gain more efficiency and effectiveness. With the huge product portfolio Esko offers, we are looking forward to seeing what additional products we can add to the mix."

Blue Label is just one example of a company that has leveraged smart automation to improve throughput, growing its business significantly with minimal staffing increases. While Blue Label is a digital-only shop, conventional label and packaging converters can benefit from smart automation as well.

Automating Complex Hybrid Press Operations

Automating digital label operations can be a challenge, but one that is fairly easily overcome as the Blue Label story demonstrates. But what about hybrid flexo presses? Can file processing for presses that include a wide range of capabilities in a single pass be successfully automated? To find out, we spoke with Myrpress Consulting, and its client, VIVA, a Hong Kong based company with operations in Canada.

Myrpress Consulting is an Esko reseller located in Toronto. Its principal, Mircea Petrescu, has been working with Esko solutions since 2005 and is an expert in building customized workflows using Esko platforms.

Petrescu point out that while many companies have documented standard operating procedures (SOPs), these can often amount to hundreds of pages of information that becomes unwieldy and actually can slow the production process down. "To overcome this," he explains, "we actually program their SOPs into the workflow and let the system choose the right SOP for each operation. Esko Automation Engine is an ideal platform for this kind of approach due to its extreme flexibility. This relieves staff from performing repetitive tasks. Most of the time, their skills are used to verify the results of the work, but they do need to know how to do things manually in case something goes wrong – a situation usually caused by a faulty file."

One Myrpress Consulting client that has benefited from this approach is VIVA, a privately-owned company established in Hong Kong in 1973, and the global leader in media packaging for the home entertainment industry. Other strong business areas include injection-molded tubes, unbreakable glassware and SYNLIME[™], a lime-free admixture that is mixed with Portland Cement for a greener building material. VIVA serves the healthcare, restaurant & bar and construction materials industries.

In its early years, VIVA locally manufactured media products such as cassette tapes and media accessories. The company later expanded its product lines to media packaging products and specialized in fully automatic and mass volume injection-molded products, with production plants in China, Canada and Poland. We spoke with Brian Jaworski, the Production Manager for VIVA's Canadian printing operation.

Jaworski stated that his printing operation was established about five years ago. "From Day One, we had Esko workflows," he said. The company operates two Gallus RCS 430 hybrid flexo presses, a modular inline press that can be configured and extended at will. In the case of VIVA, its presses feature flexographic printing, lithography, silk screen, hot stamping and cold foil in a single-pass hybrid operation.

"This configuration makes for very complex production files," Jaworski said. "From the get-go, we wanted to be as intelligently automated as possible, from proofing through final preparation of press-ready files."

He reported that some of VIVA's workflows using Automation Engine are automated for creating PDF proofs, and the company has completely automated the stepping process. This leaves prepress operators with the ability to focus on preparing artwork files. "We also use Automation engine to choose the proper halftone screening and to do the silk screen layer, the distortions, and everything else once we have a good piece of artwork."

At VIVA, jobs are initially preflighted by an operator, with some assistance from Esko templates in Automation Engine. "The templates help us minimize the chances of making mistakes in type, sizes, die lines, etc.," Jaworski explained. "Once the proof has been approved and we have a production file, we simply push a button and everything else is automatic."

Automating the stepping process has been an area of exceptional time savings for VIVA. Jaworski said, "Imagine that a prepress operator has to do stepping layout manually. One layout could take as much as two to three hours to finalize, and VIVA HAS THREE PREPRESS OPERATORS, EACH OF WHOM PROCESS ABOUT 10 JOBS PER DAY, FOR A TOTAL OF 30 JOBS PER DAY. TIME SAVINGS FOR LAYOUTS ALONE ADD UP TO NEARLY 160 HOURS PER WEEK, OR ABOUT FOUR FULL-TIME EQUIVALENTS (FTE).

sometimes we have as many as 15 different layouts. Now, when we launch the workflow, stepping is done in two to three minutes. We are looking to update our server, which will make it even faster."

According to Jaworski, the company has three prepress operators, each of whom process about 10 jobs per day, for a total of 30 jobs per day. Time savings for layouts alone add up to nearly 160 hours per week, or about four full-time equivalents (FTE).

Proofing is another area of time savings. Jaworski recalls, "I used to work in a printing house where we did proofs manually. After you finalize the art, you need at least a half hour to bring the art into the template and manually enter all of the information. With the Esko workflow, once you launch it, all of the necessary information is retrieved from our MIS. That saves almost two FTE's right there." Jaworski and his team also use Esko PackEdge, a packaging preproduction editor, to create, update and manage workflows. Jaworski plans to continue to enhance the company's prepress and production operations by adding Esko Connect to link with databases in order to eliminate some of the manual typing required in the prepress operation, automatically publishing job information to the Esko workflows.

The work being done by Myrpress Consulting and VIVA is an example of taking smart automation to the extreme by removing manual touches and opportunity for error. In the case of VIVA, three operators are performing a volume of work that would require nearly 10 prepress operators if everything were

performed manually. "Clearly," Jaworski concluded, "our investment in Esko smart automation was a smart decision that has more than paid for itself."

So far, we have seen the impact of smart automation on an all-digital operation, and a complex flexo hybrid operation. Both of these operations are working within a single site. Smart automation is also valuable for large, multi-site operations, as we will see next.

Smart Automation on a Global Scale

Smart automation is effective for businesses of all size, even those that operate on a global scale. A great example is Bemis, a global supplier of flexible and rigid plastic packaging used by leading food, consumer products, healthcare and other companies. The company's manufacturing operations are supported by Bemis Graphics, located in New London, Wisconsin.

As one might expect from a large company such as Bemis, a smart automated workflow is a key part of its strategy. Bemis Graphics prepares supplied graphics, including separations, and coordinates with third-party suppliers such as SGS or Schawk. The organization also makes flexo plates on its two Esko Spark CDI platesetters, acting as one of the company's platemaking hubs.

"With the volume and variety of work we handle, we have to automate," said Jeff Hochhausen, Production Graphics Manager. "We chose an Esko workflow, not only because of the robustness of its product portfolio, but also the company's willingness to integrate with third-party solutions for an even broader automation scheme. We use the entire state-of-the-art prepress software suite from Esko, including PackEdge, ArtPro +, Plato, DeskPack, Studio, Automation Engine, Imaging Engine, Equinox, and Color Engine. Plus, we have integrated some third-party tools, most importantly, Global Vision for quality control."

Once a file is received, it is preflighted and made ready for production, adding traps or making any other necessary changes. "Once we have done that," Hochhausen stated, "we like to compare the prepared file with what was originally sent to us to make sure nothing dropped out and that we made the changes they required. We also do a quality check with Global Vision once the file has been stepped. That's not usually a problem, but better safe than sorry because something might inadvertently be changed. We also spell check all of our customer files."

As simple as it sounds, spell checking centrally can be a big timesaver, as Hochhausen points out, "Many of the words used in customer files are not in the standard Illustrator dictionary, and every single operator out there would have to add those terms to their Illustrator instance. With Global Vision, we can now use one central library rather than each operator maintaining his or her own, and that makes spell checking faster and more reliable."

For files sent to the group's HP Indigo digital press, the automated workflow sends files directly to the DFE for printing; otherwise, files are set to platemakers, either locally or at another Bemis platemaking hub.

Another important aspect of the company's smart automated workflow is barcode inspection. "In the past," Hochhausen stated, "we would scan the barcode on the proof to verify it is a good code. The disadvantage to that is that there was only one scanner, and people would have to get up, scan the code,

and sit back down. Now thanks to Automation Engine integration with Global Vision, we use an automated ticket that scans the file and determines whether or not it is a good code."

Another advantage of Global Vision is that it provides a thumbnail image so operators in prepress and in the pressroom can see an image of the actual file. Before all we had was x/y coordinates which makes it more difficult to locate any issues."

Hochhausen is pleased with the level of cooperation between Esko and Global Vision. "In fact," he says, "at EskoWorld in 2015, I asked the Automation Engine product manager to take a look at Global Vision because I believed there was significant benefit to integration. By EskoWorld 2016, they had the first beta release available!" BY INTEGRATING AUTOMATION ENGINE AND GLOBAL VISION, THE GROUP SAVES ABOUT 15 MINUTES OF MANUAL EFFORT PER FILE. HOCHHAUSEN SAYS, "WE PROCESS THOUSANDS OF FILES PER YEAR. WE DO ABOUT 5,500 GLOBAL VISION COMPARES PER MONTH, SO THE TIME SAVINGS REALLY ADD UP." OUR CALCULATIONS REFLECT THAT TRANSLATES TO ALMOST 1,500 HOURS PER MONTH.

Hochhausen reports that by integrating Automation Engine and Global Vision, his group saves about 15 minutes of manual effort per file. "We process thousands of files per year," he said. "We do about 5,500 Global Vision compares per month, so the time savings really add up." Our calculations reflect that translates to almost 1,500 hours per month.

"Using the Esko suite combined with Global Vision has made a huge difference to us and to our customers," Hochhausen concluded. "It's not only improved throughput, but it has increased our accuracy, with less rework and fewer errors. If we are going to help our brand owner customers be more responsive to their customers, this is exactly the kind of productivity that is essential – and smart."

What You Can Do

Many converting operations may believe they have reached the limit of their capacity with steps already taken. The purpose of sharing these stories is to inspire the converting community to reach higher, and to make the marketer's responsiveness dream a reality.

By automating the workflow, taking tasks that took hours down to mere minutes, converting operations of all sizes can find even more ways to improve their service levels.

If you've been inspired by the experiences at Blue Label, VIVA and Bemis, we recommend these steps:

- Take the time to fully evaluate the current state of your production workflow, from order entry through production. How long does it take to process an average job? How much manpower is required? Are there manual, non-value-added steps that could be eliminated by smart automation? Considering the number of hours these three companies have saved, we bet you will find hours to save as well!
- Take advantage of industry trade events like Labelexpo, EskoWorld and others to visit key suppliers and see multivendor integrations in action. Esko works hard with partners to make these demonstrations available, as do other exhibitors at these shows. Don't forget to take the opportunity at these events to network with your peers!
- You can also do research online and through your peer networks to narrow down the areas where smart automation will deliver the most value. And keep in mind that you don't need to do everything at once. Connecting workflows step by step can result in less strain on the organization and deliver cumulative results over time.
- Consider using third-party consultants to augment the services your hardware and software partners provide. Often, these experts will see opportunities you may have overlooked that can add incremental value.

Smart workflow automation is easier today than ever. And more critical to the success of your operation. Fourteen days to get a label or packaging change into the supply chain sounds unachievable. But as more converting operations adopt smart workflow automation, and with growing brand owner – and consumer – demand, this is likely to become more of a standard. Be prepared ... start today. We're here to help!

This white paper was sponsored by Esko. To learn more Esko's Smart Workflow Automation Solutions, visit <u>www.esko.com</u>.

About Cary Sherburne

Cary Sherburne is a well-known author, journalist and marketing consultant whose practice is focused on marketing communications strategies for the printing and publishing industries. She was inducted into the Soderstrom Society in 2015, recognized as a 2009 Woman of Distinction by Output Links and was awarded the 2009 Thomas McMillan Award for excellence in journalism. Sherburne has written six books, including Digital Paths to Profit, published by NAPL; and most recently, No-Nonsense Innovation: Practical Strategies for Success, written with the late Bill Lowe, the Father of the IBM PC and available on Amazon. She has also ghost-written several books for busy executives, for whom she makes the process simple and efficient. In addition to her role as Senior Editor at WhatTheyThink.com, the leading online news and analysis resource for the printing and publishing industry, Sherburne occasionally writes for other printing trade magazines, as well as creating by-lined editorial for private clients.

Prior to launching her consulting practice in 2002, Ms. Sherburne was the Vice President of Marketing Communications and Outsourcing Solutions at IKON Office Solutions. In that capacity, she developed and implemented a branding campaign to build brand awareness for IKON in the marketplace as well as enhance employee pride in the organization, and was responsible for all internal and external communications, including trade shows and events, corporate newsletters, and industry and press relations. In the outsourcing role, she set strategic objectives and priorities for IKON's product and services portfolio in its Outsourcing businesses, including development of programs and sales support materials for that environment. Sherburne was a Director at InfoTrends, an internationally known firm specializing in market research and strategic consulting for the digital document and print on demand industry, before joining IKON, where she launched and managed the company's Document Outsourcing Consulting Service.

Her tenure in the printing and publishing industry has also included sales and marketing positions at Xerox Corporation, HP Indigo and PageFlex. Sherburne can be reached at Cary@WhatTheyThink.com. She resides full-time in the Dominican Republic.