



## The Digital Label Retrofit Opportunity



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## OVERVIEW

Color inkjet printing is opening up new opportunities for label printers. In the past, capturing those opportunities required printers to make a significant investment and restructure their operations.

But today, the answer to those challenges may be closer than you think. Your existing flexo press can be used to create a retrofit solution that solves these challenges and captures the advantages of inkjet.

### The Inkjet Opportunity

This is a time of great opportunity for the label industry. As Andy Thomas, editor of Labels & Labeling magazine noted, “The label industry is changing more quickly than probably at any time in the 38 years since Labels & Labeling was founded.”

At the heart of this change is the growth of digital printing solutions, and more recently, color inkjet solutions. These new solutions have the potential to transform the label converter’s operation by enabling them to produce shorter run jobs at a lower cost and improved customer satisfaction.

But with opportunity come challenges, and such is the case for printers who make the move to digital printing. Adopting a digital production press is a very expensive proposition. And, once the press is installed, the printer’s operation and workflow all need to be adapted to accommodate for digital

production. Once all this is accomplished, it is critical to fill the press with business to achieve a faster return on investment.

To meet these challenges, more and more narrow web printers are turning to retrofit solutions. These solutions allow the printer to upgrade their analog production press with a color inkjet module. The combined solution gives narrow web printers the best of both worlds: a way to take advantage of the opportunities color inkjet printing offers, but without the issues that can come with acquiring a completely new stand-alone digital press.

In this white paper, we’ll look at the role inkjet printing can play in label production, and how retrofit solutions are enabling label converters to leverage their existing assets to capture these opportunities without having to sacrifice time, profitability, and capital.

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**Part 1:** The digital opportunity

**Part 2:** The challenges that come with the digital opportunity

**Part 3:** Using your own assets to capture the digital opportunity

**Part 4:** Making digital part of your organization

**Part 5:** New opportunities and enhanced customer relations

**Part 6:** Water-based inks and color consistency

**Part 7:** Customer satisfaction in a time of vendor consolidation

**Part 8:** Retrofit in action – case studies



## PART 1: THE DIGITAL OPPORTUNITY

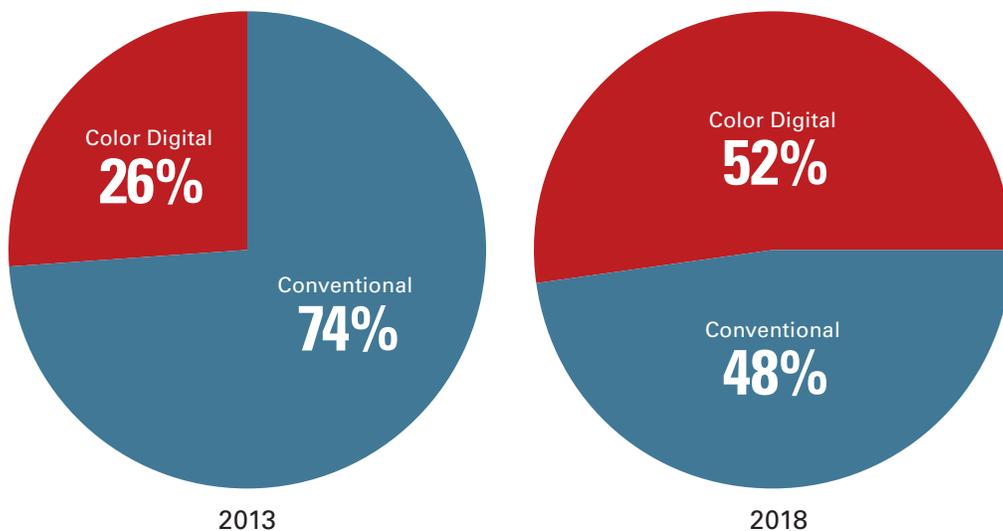
In recent years, the demand for digitally printed labels has increased dramatically. Brand owners who once ordered long runs of the same label are now requesting shorter runs with multiple SKUs and greater variability.

In 2013, nine to ten percent of labels were produced on digital printing presses, as reported in the PRIMIR 2014 study on “Tag and Label Printing Trends” by LPC and AWA. The report also estimates that the percentage of digitally printed labels is expected to increase significantly, rising to 17 to 18 percent CAGR over the next five years. By 2018, the percent

of digital press installations will exceed those of conventional presses.

These statistics tell an important story: if label printers are to keep their customers satisfied and ensure their business is profitable, they must adopt digital solutions.

**NEW NORTH AMERICAN PRESS INSTALLATIONS IN 2013 AND 2018**  
Conventional vs. Digital



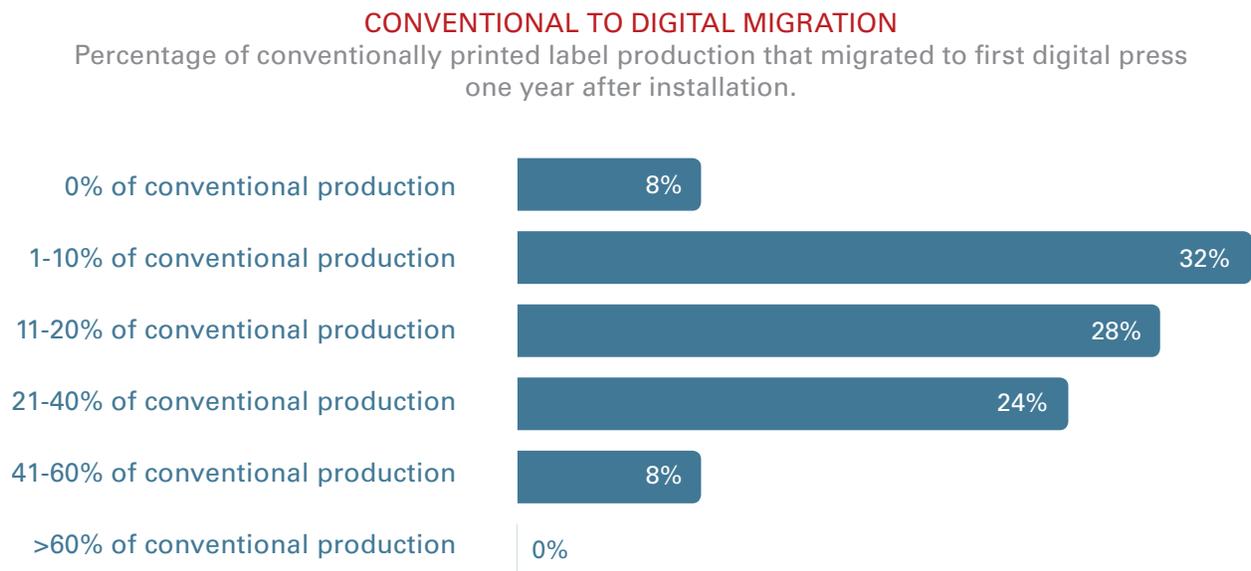
Source: PRIMIR 2014 study “Tag and Label Printing Trends” by LPC and AWA



## PART 2: THE CHALLENGES THAT COME WITH THE DIGITAL OPPORTUNITY

Yet, with all of the opportunity that digital presses represent, challenges remain on how label printers can successfully integrate them into their operations.

The North American Digital Label Study done by LPC shows the average conventional migration rates to digital a year after the installation of companies' adoption of their first digital press:



Source: LPC, Inc./TLMI North American Digital Label Study

As the research shows, the migration to digital is often a slow process. There are several reasons contributing to this challenge.

To start, adopting a digital press means that the converter's workflow needs to also move to a digital workflow, including job tickets, process automation, web-to-print, etc. Moreover, moving to a digital press means workers need to be retrained, transitioning from performing a trade-focused role to operating a digital process. Sales people will also need to be retrained, as the features and benefits of digital printing are significantly

different than flexo, and require very different account management skills.

Adding to these challenges is the fact that digital presses are expensive and require a significant outlay of capital investment – one that may be out of reach for many label converters.

Finally, once the investment is made, the printer needs to fill the press with jobs to realize a positive return on their investment, which, as the research shows, is not an easy undertaking.



### **PART 3: USING YOUR OWN ASSETS TO CAPTURE THE DIGITAL OPPORTUNITY**

Now there is a way for printers to use their own assets to take advantage of the benefits digital inkjet printing offers, without the capital expense, challenges and bottlenecks that come from adopting a stand-alone digital production press. It's called a retrofit inkjet printing platform.

Simply put, a retrofit is a digital print module that gets integrated onto a third party piece of printing or converting equipment. In this case, an analog flexo press has an inkjet digital module incorporated to offer both analog and digital printing in one press.

With its quick set up and fast job change capability, combining flexo and digital lets label converters add full color, high-quality digital inkjet printing to their existing flexographic press to enable fast job production at a low equipment cost.

This powerful combination enables greater production flexibility and cost efficiency because printers can choose the printing method that is right for the job being produced. There is more capacity to produce profitable long-run flexo work, while short run work can be produced digitally to generate more profit.

### **PART 4: MAKING DIGITAL PART OF YOUR ORGANIZATION**

By retrofitting an existing flexo press with a digital inkjet solution, label printers are able to add digital inkjet printing capabilities to their organization – without the challenges that come from adopting an entire digital press.

To start, retrofits are much less expensive than a digital press – often a third of what a traditional press would cost. Retrofit solutions are available at a range of price points that can fit into the budgets of any sized organization.

And, because a retrofit platform uses your existing tooling for die cutting and other finishing, it is easy to integrate digital inkjet into your operation. Staff does not require extensive training; the flexo press operator

can build on their knowledge and utilize their existing workflow no matter what type of printing is being done.

Best of all, label converters don't have to put all of their money and resources into an entirely new solution; they can take digital jobs when and if it makes sense to the business, and grow as demand, capabilities, and client needs evolve.



## PART 5: NEW OPPORTUNITIES AND ENHANCED CUSTOMER RELATIONS

In addition to the operational benefits, retrofit solutions also enable label converters to capture new business opportunities and maximize their relationships with existing clients by offering them the ability to effectively produce their labels regardless of run length.

Using retrofit, a printer can mix high volume and low volume jobs on the same press; running the low volume digitally and the high volume using flexo. Label converters can easily and effectively produce multiple SKUs for the same order – printing static content with flexo and the versioning and variable parts

with digital. Jobs can be ganged together for greater uptime since plate changes are not required.

With greater variability between the run lengths of flexo and digital jobs, this speed and flexibility is a key benefit for the label converter.

### AVERAGE RUN SIZES FOR DIGITAL AND CONVENTIONAL APPLICATIONS

Per end-use category, in linear feet.

| End-Use Sector                        | Average Digital Run Size (Linear Feet) | Average Conventional Run Size (Linear Feet) |
|---------------------------------------|--|---|
| Food                                  | 2,515                                  | 24,071                                      |
| Beverage                              | 1,721                                  | 53,017                                      |
| Pharmaceuticals                       | 2,194                                  | 19,295                                      |
| Health & Beauty / Cosmetics           | 3,328                                  | 22,250                                      |
| Industrial Chemicals                  | 3,350                                  | 34,518                                      |
| Household Chemicals                   | 2,331                                  | 31,600                                      |
| Automotive                            | 750                                    | 12,188                                      |
| Consumer Durables / Electronics       | 1,883                                  | 12,563                                      |
| Retail                                | 2,321                                  | 34,964                                      |
| <b>Average Run Size – All Sectors</b> | <b>2,267</b>                           | <b>27,163</b>                               |

Source: LPC, Inc./TLMI North American Digital Label Study



## PART 6: WATER-BASED INKS AND COLOR CONSISTENCY

To realize the benefits of retrofit solutions, consistency is key. Label converters need to ensure consistency of color, look and feel – no matter which method is used to print the labels. Anything less will be noticed by the client and result in expensive rework or worse, the loss of a client.

Water-based inks like the type used in Memjet-powered inkjet solutions are the best choice in a retrofit environment because of the way they emulate offset or flexo printing on many substrates. The printheads used in Memjet-powered inkjet solutions use a very high resolution. This high-resolution, combined with the small drops and wide color gamut of the inks, best approximates the colors and the “look and feel” of traditional printing.

This type of result can be difficult to achieve using toner or UV cured inkjet. Labels printed using toner or UV inkjet look different than labels printed with conventional flexo inks, so it is noticeable when both processes are viewed together.



## PART 7: CUSTOMER SATISFACTION IN A TIME OF VENDOR CONSOLIDATION

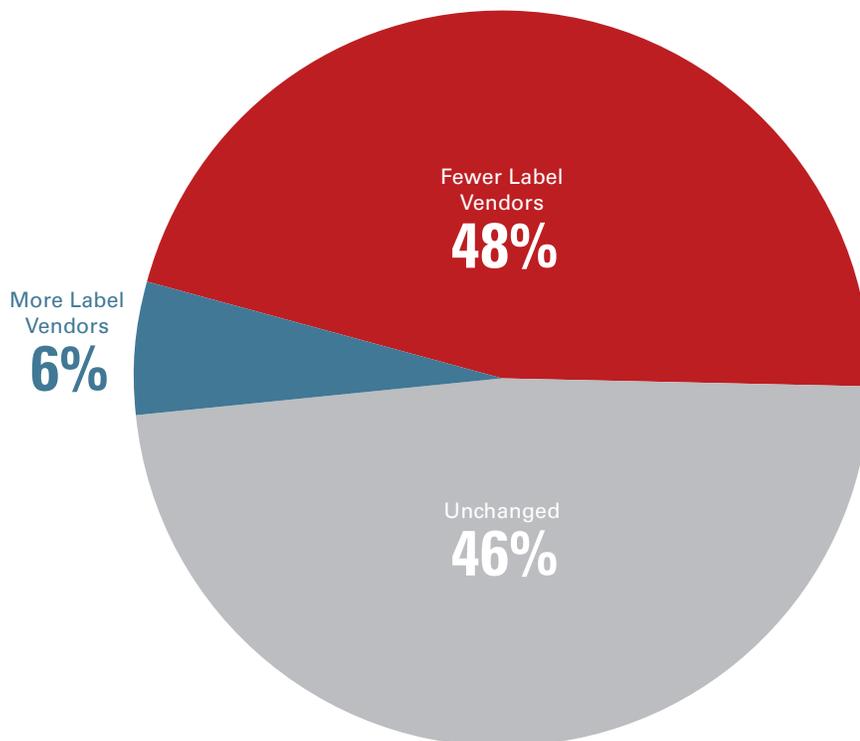
Using water-based inks as part of their retrofit solution means label printers are better able to provide their customers with the full spectrum of applications over the entire product life cycle of a particular label.

For example, a customer comes to the printer with a short run label job. The printer is able to produce that job using the color inkjet capabilities that are part of their retrofit solution. When the client's business grows, and they return to the converter with a much larger order, the order can then be easily moved to the flexo press where the high volume labels can be produced while maintaining the same look and feel of those labels that were produced using inkjet.

With the consistency in production that an inkjet retrofit enables, the label provider is better able to meet growing demands from their clients, and can keep their customers from seeking alternate suppliers.

This type of customer satisfaction is critical in an era where brand owners are increasingly seeking to consolidate the number of vendors they use across packaging printing sectors.

### LABEL VENDOR CONSOLIDATION PROJECTIONS TO 2015



*Since the last TLMI North American Label Study was published more than five years ago, label vendor consolidation has continued to rise*



## PART 8: RETROFIT IN ACTION – CASE STUDIES

Prairie State Group is a full service printer of packaging materials. Their pressure sensitive labeling division produces labels for customers in a range of industries, with a specific focus on food labeling.

Another label producer, Diversified Labeling Solutions (DLS) provides a range of labeling solutions to distributors and value added resellers from its four printing facilities that are located around the country.

While both companies have different business models, each company values the improved flexibility, enhanced client relationship, and costs savings that retrofit enables.

### The time for digital

Both of these companies have a long history of success producing labels for their clients. In recent years, leaders at both companies were able to see the impact digital was having on the market – and on client demands.

As Dan Doherty, executive vice president of operations and principal at Prairie State Group notes, “Almost 40% of our orders were under 5,000 feet, and we had been pushing through 300-400 orders per month. We’d been looking at digital opportunities for while, waiting for the right moment to jump in. But the increased demand for short runs made it very clear – the time is now. You either get in now, or you will not be a player down the road.”

Meanwhile, at DLS, the company had already made the move to digital. For over two years, the company had been using digital printing as a way to better meet the demand for process

work. But recently, the company noticed a new trend: more variability in the quantity of labels that get ordered.

As Bob Hakman, owner of DLS, says, “Jobs will often start off at 500 – 1,000 feet. But as demand for the product grows, orders for the labels keep getting bigger – running 10,000-15,000 and sometimes up to 30,000 feet. So we need to ensure consistency of look and feel – regardless of how a label is printed.”

### The retrofit alternative

To solve these challenges – and help grow their businesses – both companies chose to retrofit an existing press with an inkjet digital printing solution.

For Prairie State Group, adding the Colordyne 3600 retrofit digital printing platform to their eight-color Mark Andy 2200 gave the company a way to move into digital printing at a lower cost of entry than buying a stand-alone digital press.

Dan Doherty notes, “Retrofitting our Mark Andy press with a Colordyne 3600 made it easy for us to integrate digital into our operation. We didn’t have to buy offline finishing equipment or put the press in an environmentally controlled environment. These were key benefits for our operation.”



In addition, he was impressed with the results the retrofit press could produce.

“The speed is impressive and the color gamut is superior to other four-color options we had seen. The retrofit can also produce labels with the same look and feel as flexo.”

DLS chose to add the Colordyne 3600 to retrofit a Mark Andy 2200, extending their range of existing digital and flexo solutions. The company decided that adding this solution would enhance their flexibility by giving them an additional tool in their arsenal of solutions.

Bob Hakman comments, “There is no perfect digital press - each solution has its own strengths and weaknesses. Adding the Colordyne 3600 retrofit to our two UV digital presses and our Colordyne 3600 Series Pro digital press means that we always have the right solution for the job – no matter the run length, color, or price, or deadline.”

### Staying competitive with the retrofit press

Retrofitting their existing press with the Colordyne 3600 Series Retrofit solution has given both companies a way to be more competitive in the markets they serve.

## CONCLUSION

In order to capture opportunities in the new era of label production, printers know they need to move to digital solutions.

But the high capital cost of turnkey digital presses, combined with the workflow and organization transformation needed to make digital successful, is often beyond many label producer’s capabilities.

For Bob Hakman, the retrofit is all about added flexibility. He says, “We work with distributors who are trying hard to close sales, so cost is a primary concern. As a result, we have eliminated the prep costs associated with plates and dies for our short run jobs by using a laser cutter. But the use of a laser also requires us to run at half speed. As quantities increase, that slower speed can be a problem. But with my retrofit, I simply add a hardened or flexible die.”

Moreover, the retrofit lets DLS standardize on top-coat materials – a semi-gloss – which reduces the cost of materials.

Bob Hakman concludes, “It’s all a game of volume to create competitive pricing out in the marketplace. By being better able to make the progression from smaller jobs to larger jobs, we can be more competitive and keep clients from moving to other providers.”

Dan Doherty agrees, “For us, one of the key benefits of the retrofit press is being able to start jobs on the digital press and then move them over to flexo as the volumes increase. That capability has allowed me to grow my overall printing business and ensures I can meet my customer’s needs in the future.”

Retrofitting a flexo press with a color inkjet solution gives printers an affordable, flexible way to capture the opportunities associated with inkjet label production and better service their customers’ needs today – and grow into the future.

