




XEIKON

**SHORT TO
MEDIUM-RUN
LABEL PRINTING**



A division of **Flint**Group

the rise of the **SHORT TO MEDIUM-RUN PRINT JOB**



In recent years, short to medium-run print jobs have become more prevalent in the label printing business. Just last year Drupa's Global Trends Report confirmed that print volumes per job are in fact decreasing, while the number of jobs are growing. Brand owners not only demand shorter turnaround times, they require on-demand printing in which elements such as text and graphics are adapted for smaller audience or even from one label to the other.

The growing demand for short to medium-run jobs signals a change in attitude. Where the big corporate brands used to coerce consumers into using their product or service, they now apply a different strategy – namely diversification. Instead of creating one product for the masses, they come up with as many variations as manageable, to better serve the needs of their target audience. Take the Coca-Cola company, for example. There used to be only two types of Coke in the late 90's, Regular and Diet; today, there are as many as 20 different bottles available in store.

THE EMERGENCE OF LOCAL ECONOMIES

Local economies are growing too as they serve their local market more personal. Facilitated by the widespread popularity of social media, a large number of smaller brands are rising into the market – check out your local micro brewery, for example. They aren't so much concerned with global dominance but rather focus on a very specific demographic (a village or region) of people who value authenticity and quality.

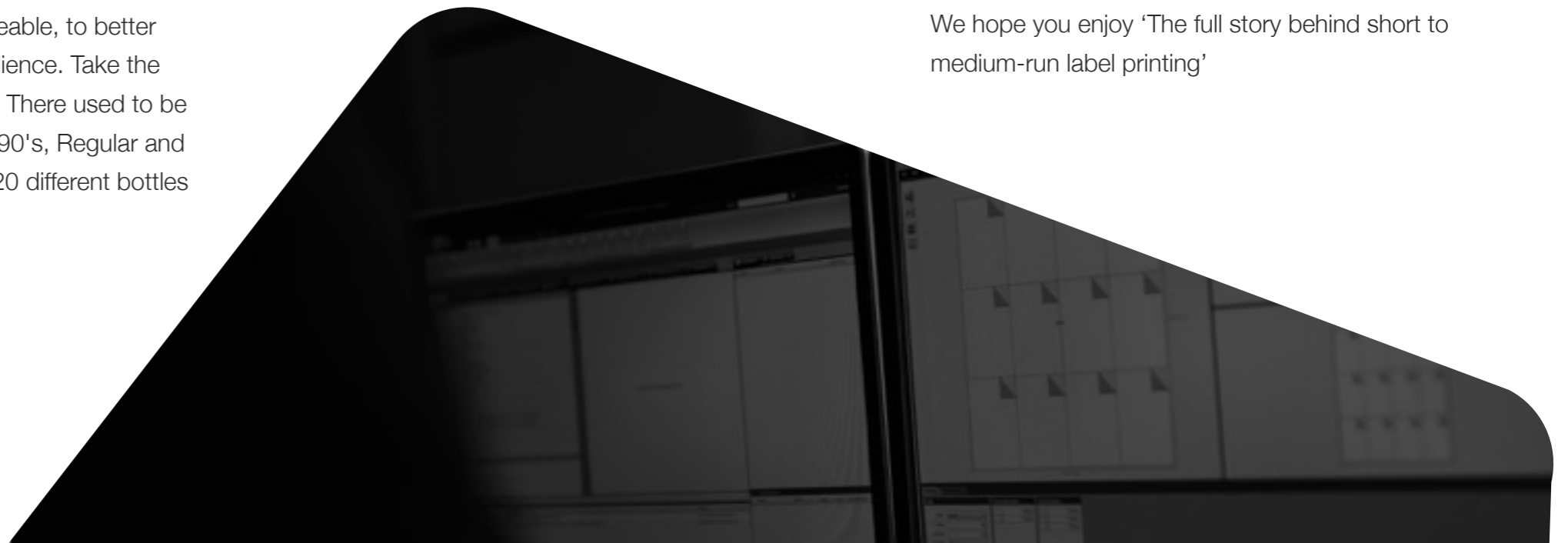
With product variation comes print variation. Making products stand apart on the shelf requires careful packaging and labeling. And that's where the label converter comes into play.

WHAT TO EXPECT FROM THIS EBOOK?

Over the past years, short to medium-run label printing has grown synonymous with digital printing. In this eBook we will focus on how digital printing helps label converters to further answer the needs of the short to medium-run market. We will take into account what it is exactly that is making digital printing and short to medium-run such a perfect match, comparing the new with the old technology and we will also explore some cases taken from real-life.

At the end of this publication, you should have a pretty thorough insight into the challenges and peculiarities of short run label printing.

We hope you enjoy 'The full story behind short to medium-run label printing'



conventional versus digital **SHORT TO MEDIUM-RUN PRINTING**

Digital or conventional printing technology – when it comes to short to medium-run print jobs you don't have much of a choice. Digital machines are much more suited to dealing with smaller volumes and print variation as they print faster, more cost-efficiently and with great-looking results. In this blog article, we present some of the most important benefits of digital technology for small-run label printers.

We roughly distinguish five major benefits of digital technology when it comes to short to medium-run printing.

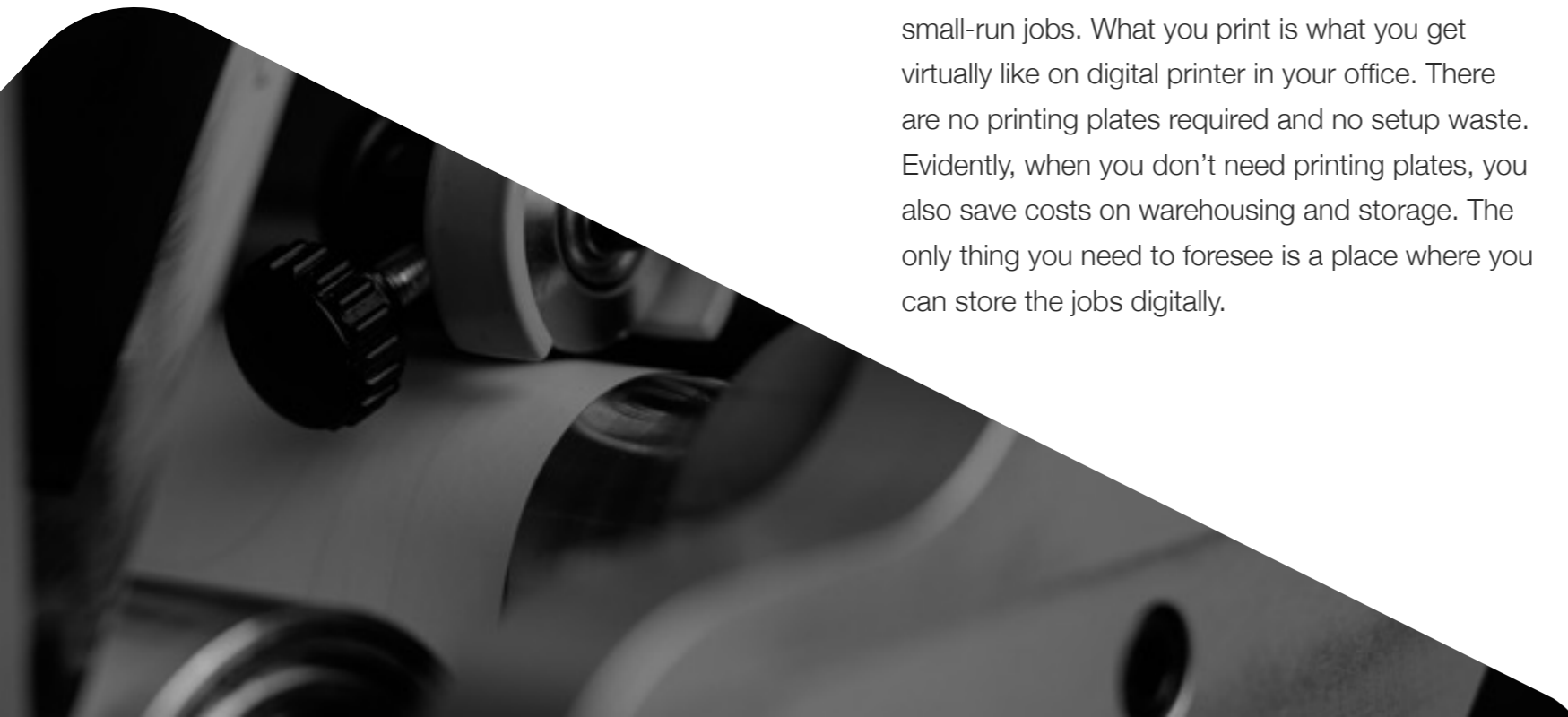
- 1. Cost efficiency**
- 2. Faster turnaround times**
- 3. No room for errors**
- 4. Printing flexibility**
- 5. Press customization options**

1 DIGITAL PRINTING IS MORE COST EFFICIENT

To begin with the strongest argument in favor of digital label printing: it's more cost efficient for small-run jobs. What you print is what you get virtually like on digital printer in your office. There are no printing plates required and no setup waste. Evidently, when you don't need printing plates, you also save costs on warehousing and storage. The only thing you need to foresee is a place where you can store the jobs digitally.

2 DIGITAL PRINTING IS FASTER FOR SHORT TO MEDIUM-RUN JOBS

No printing plates means that label printers can work much faster. In short, whenever a new job comes in, all the print operator has to do is locate the corresponding file and hit print. Flexographic printers not only require printing plates that need to be produced, they also require careful ink management and need to be reconfigured for every new printing job. The setup time before each job is much longer, resulting in higher turnaround times. Furthermore, the consistency between reprints is better for digital technology since there are less parameters outside the digital press. You can achieve the same on a conventional press but, again, this would take more time. A much better strategy is to reserve your flexo presses for long-run jobs.



conventional versus digital **SHORT TO MEDIUM-RUN PRINTING**

3 NO ROOM FOR HUMAN ERROR

A digital workflow leaves little to no room for error. As computer software takes over most of the repetitive and labor-intensive jobs, the print operator can focus on further optimizing the print process. Furthermore, computers don't make mistakes unless humans told them to. So when the input information is correct the end result will be as expected. With the proper color management strategy in place you always hit the predicted color on the spot. With digital technology you can rest assured that the number of errors and shortcomings will drop spectacularly.

4 DIGITAL TECHNOLOGY IS MORE FLEXIBLE

Digital presses provide label converters with greater flexibility, especially when it comes to variable data printing. Does the nature of the job require you to change text, graphics or images from one printed label to the other? Digital technology doesn't require the operator to stop the printing process. Instead, all the changes are made on-the-fly, without losing valuable time. When a customer walks in with an urgent job, you can have it on the press in no time. You can even print 10 or more different variations so he can pick his favorite.

5 CUSTOMIZABLE DIGITAL PRESSES

Digital presses nowadays come with a ton of plugins and options so printers can customize their machines according to their business needs and personal preference giving them almost unlimited creative freedom. Full integration into the workflow via digital front-end, limitless printing on nearly any substrate and a number of add-on finishing options make digital printing a great feat for any small-run label printer.



the evolution of digital **HIGH RESOLUTION PRINTING**



It is undeniably so that digital printing has some very strong benefits over flexo when it comes to short to medium-run jobs. A shorter turnaround time and a higher level of flexibility or on the top of the wishlist for every label converter. However, those strong suits are nothing if the quality isn't up to scratch.

In this part of the eBook we focus on digital print quality. To begin, it is a grand misconception that digital print quality is inferior to conventional printing technologies, such as offset and flexo. Admittedly, in the early days of digital printing, quality consistency was an issue. The limitations of the technology meant that what was won in printing speed and setup cost was actually lost in quality. That's the reason why digital label production was long used exclusively for items where inferior quality wasn't much of an issue.

DIGITAL PRESSES HAVE CAUGHT UP WITH CONVENTIONAL TECHNOLOGY

Fortunately, those days are long gone. Today, we are happy to say, that digital presses have caught up with conventional technology in terms of consistency standards and in some respects have even overtaken them. The overall quality of the [Xeikon 3300](#), for example, with its 1200 dpi resolution and automatic quality control, is as good as gravure machines that most customers don't even notice the difference. The quality can be altered by adjusting the tone curve and different screen rulings to meet offset or flexo. In some markets, such as food and cosmetics, digital output is actually preferable because of the non-toxicity of the dry toner.

the evolution of digital **HIGH RESOLUTION PRINTING**

QUALITY AND LIGHTFASTNESS

However, there is more to print quality than resolution. Equally important for high quality labels is lightfastness. It is a measure of how well a printed image resists discoloration or fading as a result of exposure to light over time. Products sitting on a store shelf or in a warehouse are often exposed to direct sunlight for hours on end. The UV affects the color pigments, causing the image to lose its color strength over time. It is a natural process which can be slowed down by adding protective UV layers on top of the label (varnish or laminate).

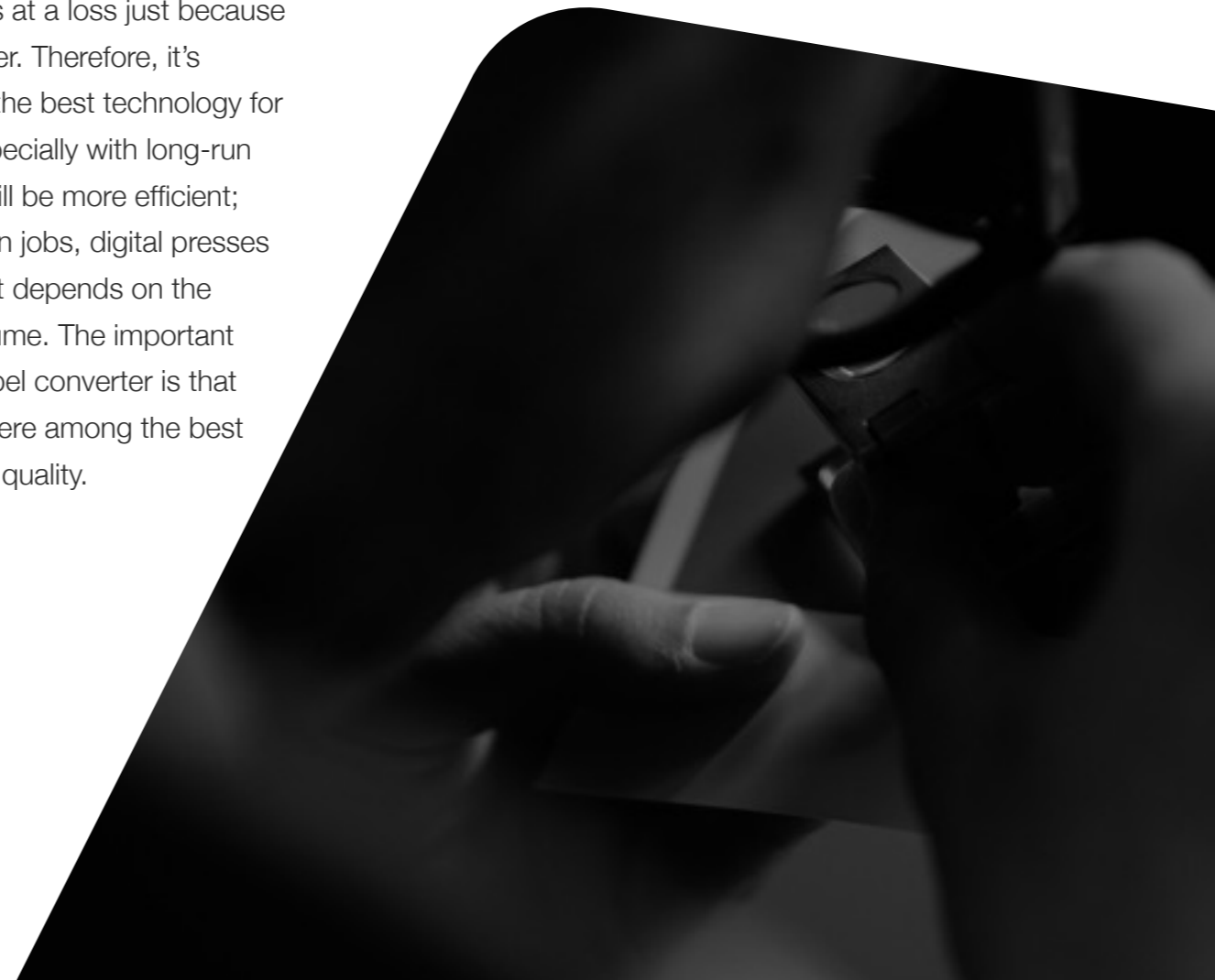
Here, too, Xeikon's digital technology shines. From the start, Xeikon invested in high quality toners with great lightfastness scores without any additional protective finishing. The goal was to achieve this for all available colors, CMYK and spot colors (with the exception of spot color blue which is generally known to be very receptive to UV). Several independent tests have shown that all current Xeikon process colors meet or exceed rating 6 on the [Blue Wool Scale](#).

DIGITAL AND FLEXPRESSES – A PERFECT MATCH

Looking at the label printing industry today, we see a clear trend towards digital machines. However, that is not to say that conventional technology has lost its merits – far from it. At Xeikon, we see flexographic and digital as complementary technologies, rather than excluding one another. In today's world there is no room for mistake and we should not accept to run jobs at a loss just because we want to keep the customer. Therefore, it's important for printers to use the best technology for each job. In some cases, especially with long-run jobs, conventional presses will be more efficient; in other cases, the shorter-run jobs, digital presses will be better equipped. It just depends on the nature of the job and the volume. The important thing to remember for any label converter is that digital presses are right up there among the best when it comes down to print quality.

THE FUTURE OF DIGITAL PRINT QUALITY

In the next chapter 5 we take another look at digital print quality, trying to assess what the future will bring. For the moment, a lot of innovations are in the pipeline ready to change the short to medium-run printing business for good. We believe print quality will increase spectacularly in the years to come.



CS Labels' success story: **THE XEIKON/COLOR-LOGIC COMBO**

UK based CS Labels is one of the largest European digital label printer to use the Xeikon technology. As a small family-owned business, CS Labels was one of the first to adopt digital technology, ultimately abandoning the flexo process altogether in 2011. They were also one of the first to embrace **Color Logic technology**, enabling them to produce metallic special effects on the Xeikon presses. "The Xeikon/Color-Logic combination provides any number of opportunities to sell labels to brands both large and small," says CS Labels Simon Smith.

Situated in the West Midlands area of the United Kingdom, CS Labels began as a small family-owned screen printer in 1976. Today, it still is family-owned but the company has expanded to become **the largest European digital label printer to use the Xeikon technology**. CS experienced a major growth spurt when it adopted the idea of digitally printing labels rather than using flexo presses back in 2011.

"BRANDS WANT TO DIFFERENTIATE THEIR PRODUCTS"

"**Understanding what brands require** is critical in our business," says Simon Smith. "We find that brands wish to differentiate their products from their competition, and make their products stand out on the shelf."

For many customers, CS Labels prints labels on metallic substrate using the **Color-Logic Process Metallic Color System**. Color-Logic technology automatically produces a white ink mask, permitting the Xeikon presses to not only print process color images, but create as many as 250 different metallic hues prepared for a number of brands.



CS Labels' success story: **THE XEIKON/COLOR-LOGIC COMBO**

WHITE INK MASKS

Dubai-based manufacturer of nutraceuticals and vitamin supplements, **Quest Excellence**, for example, depends on CS Labels to print their labels on metallic substrate. "White ink masks were a pain until we became a Color-Logic licensee," Smith says. "Now we can cut even complex masks in just minutes." The Quest Excellence products are seeing 20 percent sales growth year-on-year with their colorful labels.

As brands require many more SKUs to address worldwide markets, the Xeikon digital printing solution and Color-Logic enable them to stand out from their competition on the shelf. True 1200 dpi addressability and quality, dedicated dry label toners, one-pass opaque white and full rotary printing independent of the number of colors or the repeat length of the job means Xeikon presses, together with the Color-Logic process, offer printers a **virtually unlimited combination of high-quality decorative effects**.

CREATING STRIKING METALLIC LABELS WITH COLOR-LOGIC

"Color-Logic permits us to work with graphic designers developing brand concepts to create striking metallic labels. Moreover, our ability to **produce short runs economically** using the Xeikon digital presses means that designers can see precisely how their labels will look, before committing to actual production. We prepare color charts showing designers the many metallic colors we can produce. By simply calling out the desired hue, designers eliminate the need for the trial and error formerly associated with metallic printing."


COLOR-LOGIC AS AN ALTERNATIVE FOR FOIL STAMPING

CS Labels also applies Color-Logic as an **alternative for foil stamping**, which can be expensive for short runs. "Color-Logic often presents the opportunity to get much the same effect at a significantly lower cost," Smith explains. "But even more important, small type and complex designs tend to fill in when foil stamping is used. With Color-Logic and our Xeikon presses, we can confidently hold virtually any kind of detail the designer wants."

Staffordshire Brewery, for example, a brewer that also produces its own brands and sells brewing supplies to home brewers and the trade, depends on Xeikon and CS Labels' expertise for its beer labels. They are printed on **a silver-backed paper** that resists the dampness that goes with beer, while the logo has a rope which Color-Logic produces exactly. With foil stamping, the rope effect was lost.

CS Labels is proof of how digital label converters can specialize in short runs and still be profitable. **Embracing new technology** has allowed the company to make the most of new business opportunities.

the future of **SHORT TO MEDIUM-RUN PRINTING**



In the first chapter, we talked about the emergence of short to medium-run printing and took it as a sign of the times we live in. What does the future have in store? Will the demand for short to medium-run continue to rise in the years to come? More importantly, what should you, the label converter, do with all these new technologies that are about to enter the industry? Should you jump the bandwagon, or is it, maybe, better to wait and see what happens?

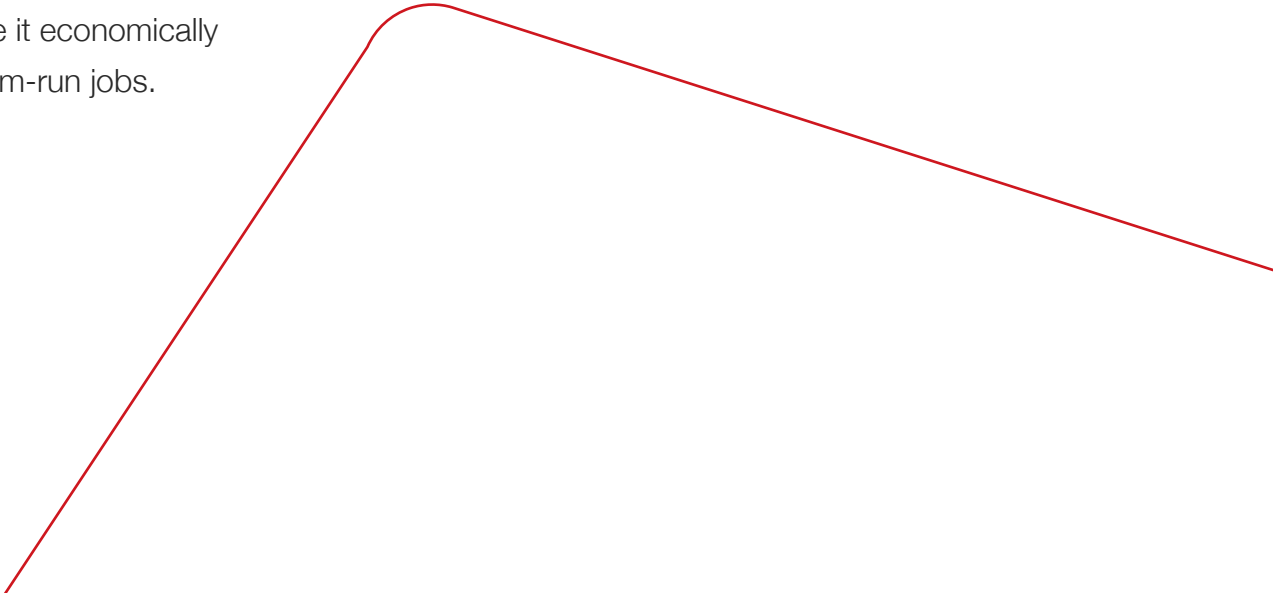
DIGITAL INNOVATIONS ARE COMING FAST

Digital printing has not been around nearly as long as conventional methods. However, the changes it has brought forth in this limited time are nothing short of impressive. The speed with which digital short to medium-run innovations are finding their way to label converters everywhere might make you wonder when it is the right time to invest. What other innovations are there to come and will these be worthwhile? In this article we glimpse into the future and try to predict the most important digital innovations yet to come.

Before exploring the future though, let's first take a look at the present. The major technical achievement of digital printing is that it allows converters to take on short to medium-run jobs and do so profitably. Having no print plates and thus virtually no setup costs has made it economically viable to focus on short to medium-run jobs.

CHOOSE YOUR TECHNOLOGY WISELY

However, with new technology the question always remains if there is something better at the horizon. Spending a lot of money on innovations that, one year later, seem to be outdated, is a risk no sensible businessman is willing to take. Therefore, label printers should pick their battles wisely. Always choose technology in function of your business needs. If a press goes 10 m/min or 10 ft/min faster or slower, it does not mean it is better. At the end, what counts is that the press is productive, serving your market right and if your staff can work efficiently with the technology. Also, make sure you have a stable and reliable platform backed by a long-term supplier.



the future of **SHORT TO MEDIUM-RUN PRINTING**

OPTIMIZING THE DIGITAL WORKFLOW

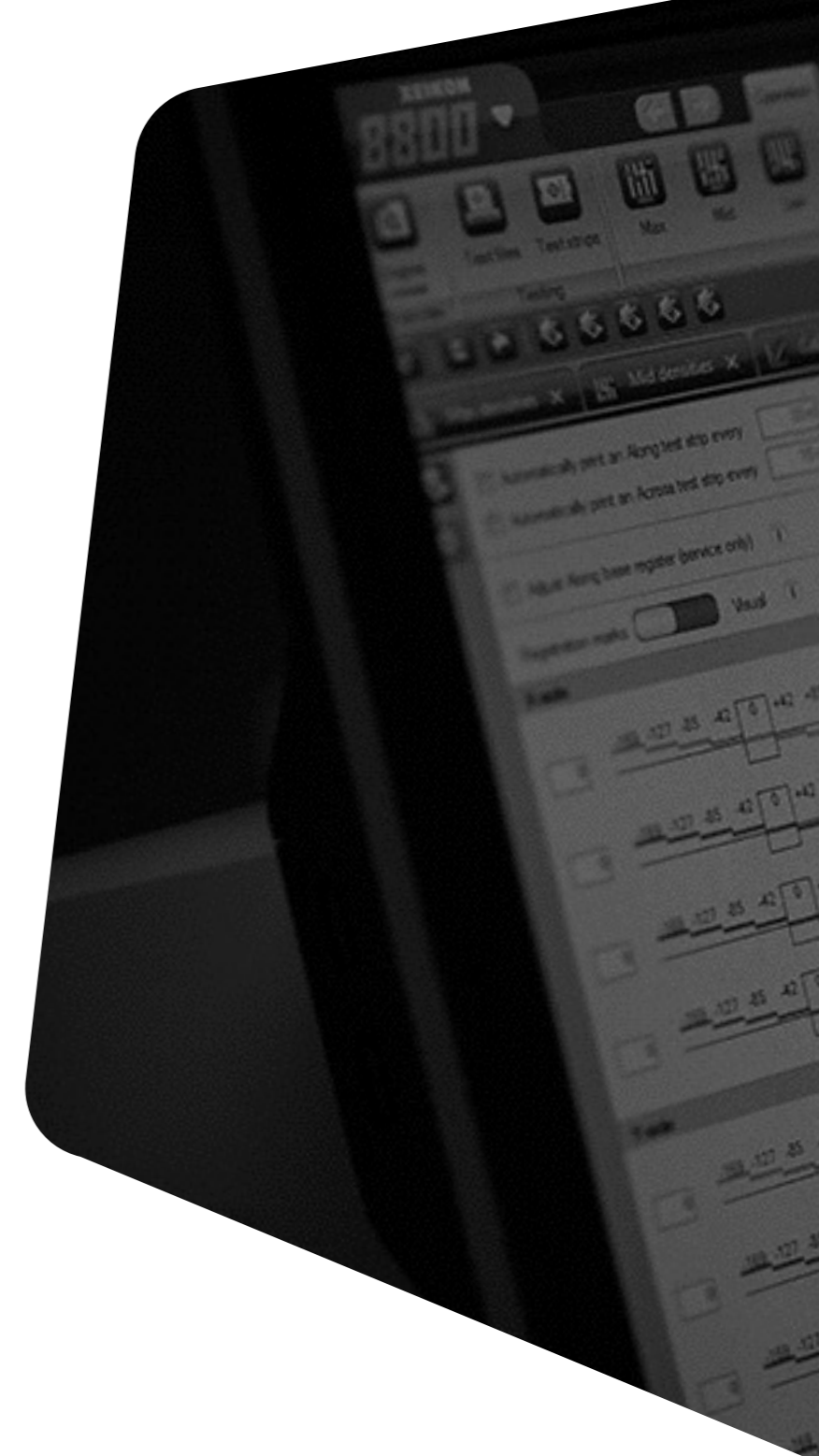
At Xeikon we are also very excited about innovations in the digital front-end and workflow area. The workflow of a digital label printing business consists of two parts: the job order workflow (administration) and the job design workflow (artwork). The first consists of processes that have to do with job orders and specifications which affect the entire company; the second one involves the actual design of what is to be printed. Optimizing the digital label printing workflow is an ever ongoing process. Reducing turnaround times while maintaining the same quality standard is an essential part of the success of your label printing business.

ALL-IN DIGITAL SOLUTION FOR HIGH-END LABELS

We are convinced that our Fusion technology – currently in beta testing – will allow true digital combination printing. It includes embellishment modules, based on digital printing processes that are positioned before and/or after Xeikon's five-color press. The resulting configuration produces a digitally printed and embellished label or packaging in one go driven by one digital front-end taking care of the prepress, data processing, color management, press operation and operation of all embellishment modules and digital press.

Fusion technology eliminates costs of conventional tooling equipment, while at the same time setting the stage for variability and personalization. As a result, label printers are presented with a whole bunch of opportunities for new applications. They can produce virtually any high-end label or packaging on demand. Fusion technology makes it possible to do instant reruns of previous jobs because all the necessary parameters are in one digital file. And because converters no longer need to invest in expensive embellishment tools, they will be able to produce short runs with high added-value cost-effectively.

It is clear that the innovations in digital printing are far from over. We will continue to see improvements in many areas that will make it even more interesting for label converters to invest in short to medium-run print technology.



CONCLUSION



Digital print technology gives converters the freedom to create beautiful labels at high speed without sacrificing quality. As such, the digital press is the perfect solution for any short to medium-run job. No need for printing plates, no human errors and little to no time lost in between jobs, mean converters can produce short to medium-run labels profitably without too much problems.

However, at Xeikon we don't expect any converter to ditch conventional printing methods. Rather, we see digital and conventional as complementary technologies. In reality most, if not all, short to medium-run jobs are best handled digitally, while all long-run jobs benefit most from the flexo process. The difficulty, however, lies in the gray area – the so-called medium-run jobs. For these, each job will have to be analyzed in terms of cost efficiency after which an informed decision can be made.

Businesses such as British CS Labels illustrate how converters can really make a difference if they dare to innovate. Investing in new technology that serves your customer base will not only make you a better printer, it will also allow you to differentiate and offer more services in time. Finding and specializing in your own niche is an important key to success.

As for the future, we are convinced it looks bright for digital short to medium-run printing. New innovations will push the technology, such as digital combination printing, which will further automate the print finishing process, making it even more cost efficient. Print quality is another area where innovations are about to happen. Surely, these are exciting times for (short to medium-run) label converters.

Are you up for it?



XEIKON

Would you like to know more about our products and how digital printing technology can help your company move forward?

Contact our sales team

www.xeikon.com

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