The seven leaps forward of new print production technology
How adopting advanced print technology can help your bottom line
At this point there can be little doubt: the most successful print shops will be the ones who deliver a broader range of services without pushing up their costs, especially in a market with falling prices, shrinking deadlines and rising customer expectations.

That’s a tall order. The good news is that print production technology has made major advances to cut costs, improve efficiency and make high-end features available to print shops of all sizes.

We’re not talking here about incremental improvements in technology. This is about making a strategic leap forward.

If you haven’t upgraded your print technology in the last five years, you’re likely paying a big price with serious consequences for your bottom line:

- Your costs are inevitably higher, eating into your profit margins.
- You can’t raise your game to deliver new services, and match or beat the competition.
Building a better engine for your company

Like every print shop, you’re probably under price pressure, with people expecting low cost and high quality. But more of the same – print at 2 cents a page, for example – simply isn’t a sustainable business model.

If you’re offering what everybody else is offering, then the only differentiator is price. In a commoditized market, that’s always a race to the bottom. And it’s one you don’t want to win.

Adding value and taking on more complex, lucrative jobs means overcoming some of the problems of old print technology, while setting yourself up to take advantage of new opportunities.

You’re probably already familiar with some of these issues and opportunities, but may not realize just how much they’re costing you.
The labor costs and inefficiencies of old technology

One of the biggest problems with older printing presses is setup: it takes too long and it’s often complicated. Time is money, and if you’re a print shop owner, you know how quickly delays and complications eat into your bottom line.

More important, you know how issues like color consistency and poor image quality can quickly turn into lost business – or even worse, lost business where the client didn’t even bother to explain what went wrong.

The thing is, too many print shops struggle to deal with the same old issues, including:

- **Front-to-back registration**: if you’re doing a print run of 2,000 on paper that’s 15 cents a sheet and the front-to-back registration isn’t right, you’re looking at a $300 loss right there. If it’s metallic paper or a window cling, the costs could be even higher.

- **Color inconsistency**: you print 1,000 business cards, and as you thumb through them you see the color start to change. Sound familiar? If so, you’ll also know it represents a $10 loss when you factor in the cost of labor. Multiply that by dozens of jobs a month, and it all adds up.

- **Unpredictability**: when paper expands on humid summer days, it can affect front-to-back registration, cause skew, magnification or perpendicular issues, or even jam the press. Old technology simply can’t cope with unpredictable events like this.

- **Manual processes**: if your guillotine isn’t cutting paper straight, it can take a lot of time to fix. And it may mean you have to throw out the entire job and start again, resulting in more cost.

Small issues can very soon turn into major problems. And in a world where overage may be your only profit margin, every mistake comes with a big price tag.

Let’s look at how advances in print technology can address these age-old problems.
How automation impacts quality

Your print operator’s role is to work the technology to meet your customer deadlines. His whole job is about ‘getting it all out’ by 5pm – but he can’t if the press isn’t calibrated right.

If he has to spend half an hour every day just re-calibrating, he’s going to have to cut corners to still make those deadlines. And when he’s under pressure to get those jobs out in time, quality inevitably suffers.

The solution is to make things so easy they’re impossible not to do. So next generation presses come with push-button simplicity, letting you automate manual processes that were previously complicated and time-consuming.

The takeaway is simple: the more you automate, the more your people can get done.

New print technology lets your operator push a button and calibrate instantly. It makes image-to-media alignment simple, quick and reliable. And it makes quality control easier than ever.

What does automation mean for your people?

Good things.

Does automation mean people will lose their jobs? Far from it.

They’ll be moving to higher-level activities that are more profitable. They’ll be working smarter and doing more with less.

Remember that automation also simplifies their lives: when you’ve got to stamp ‘approved’ on a print job, that’s a lot of pressure. Knowing it’s always right every time gives them peace of mind.
Fixing problems faster

In a print shop, things can always go wrong. What really matters is how you deal with them, and how quickly and easily you get up and running again with minimal disruption.

It’s 4pm and you’ve got a job that needs to go out tomorrow. But then something breaks or you discover a blemish on a print job. So you make a service call, and they tell you they’ll be there tomorrow at 8am.

Too late for you and more important, too late for your customer.

If your print technology isn’t set up to expect things going wrong, it just isn’t ready for the real world. New technology gets more things right and gives you what you need to fix things when they go wrong:

- Customer-replaceable units mean there’s no need for a service call.
- If you see an image defect, spot or blemish on your print, you can clean or replace imaging modules in less time than it takes to change paper.
- You can fine-tune the press for best image quality, speed, and throughput, even adjusting the temperature of air blown on the paper for trouble-free feeding.
- Auto paper-purge clears jams fast, clearing the pages from the press so you don’t have to.

All of this is about enabling you to do more of what you do best.
The seven leaps forward of new print production technology

As you’re probably already beginning to see, new print technology can radically change the way you work. But it’s not technology for its own sake – instead, it’s a practical solution designed around the very real day-to-day challenges you face as a print shop owner.
1. Front-to-back registration

Front-to-back registration is one of the biggest challenges for print shops. It’s complicated, time consuming and expensive when you factor in labor costs.

Even the most skilled operator, who has it down to a fine art, can’t get around the fact that they have to do it every time they load up paper. And even then, they’re only adjusting X and Y coordinates – not correcting for skew or magnification.

All of this pushes up costs and pushes down productivity.

But now, advanced presses perform front-to-back registration in an automatic or semi automatic way. This is a quantum leap over old technology, and will save you time, effort and cost.
Automatic color technology checks for density and stability. And new generation toner no longer uses ground-up bits of plastic. Instead it uses emulsion aggregation (EA) delivering:

- Greater consistency, thanks to molecules that are all the same shape.
- Sharper image quality and improved fine lines and text.
- Higher reliability and lower service costs.
- Reduced energy costs, as the fuser doesn’t have to warm up and cool down.
- Faster operation, with toner taking less time to fuse.

Many of the advances in new print technology are not so obvious, but can make a big difference to the finished product and your bottom line.
Cutting-edge electronics in new print technology means you get the job done faster and hugely increase throughput.

You can achieve speeds of up to 100ppm, and consistent performance across every kind of stock – even 350gsm or coated paper. And new low-melt toner doesn’t have to spend as much time on the fuser.

As a print shop owner, you know that printing fast is invaluable. Faster presses mean more jobs, which means more money.
4. Automation

One key thing that separates print shops that make money from those that don’t is automation.

Printing is essentially a manufacturing process, and anything you can do to make that more streamlined and efficient will have a direct impact on your throughput and profit margin.

Humans make errors, especially when they’re handling high-volume, detail-focused repetitive tasks under time pressure. Automation helps you take errors and the resulting expenses out of the picture.

So for example when a customer submits a job to the digital storefront, automation can quickly and easily handle soft proof/hard proof signoff, and prepare the job for the pressman. That’s a huge efficiency gain.
5. Workflows: simple, repeatable, profitable processes

Hitting a meaningfully higher number of pages-per-minute means having the ability to automate enough workflows.

New print technology simplifies complex jobs and makes them fast and automated. So if you’re printing a booklet with tabs, scanned pages, inserts and A3 foldouts or Z folds, you simply program all the variables into the press, and the job is printed flawlessly.

This entire workflow can then be saved, so that a repeat print run is just the push of a button away. The same goes for any print job – even routine jobs such as a business-card reprint, which can sometimes take more setup than you realize.

You shouldn’t have to reinvent the wheel every time you get a repeat job. So if you need more time for new jobs, reducing the amount of time you spend on jobs you’ve already done is a great place to start.
6. Powerful tools for high-quality output

With older technology, small problems can often cause big delays. Powerful tools mean you get the job done faster. So you can create alignment profiles by stock and tray, and complete accurate registration adjustment in less than 25% of the time you’d spend with less precise manual processes.

Maybe it’s a newsletter with low-resolution smartphone photos that just don’t make the grade. Traditionally, that meant going back to the customer or designer to source a high resolution alternative. But now, new presses have built-in tools that can automatically enhance images by sharpening them, increasing brightness and adjusting colors. New technology allows you to automatically adjust density uniformity across the page to correct variations inboard to outboard. And image transfer adjustment increases media latitude, including texture and specialty stocks, so you can produce consistent, high-quality prints on more types of media.

The result is higher quality, in less time – every time.
The last leap is the big one. Because it’s not about what new presses can do. It’s about what they enable you to do.

- **Expand your offering**, taking on more jobs and more variety e.g. window signs, menus and different substrates such as heavy polyester or even promotional magnets.

- **Accept any challenge**, whether it’s boutique/high-end work or low-end/manual jobs and get it out fast and efficiently.

- **Gain a competitive edge** by investing in new technology that cuts down errors, increases automation and improves throughput.

We’re looking at a ‘click to clunk’ solution here: press a button and out comes exactly what you need, whether it’s booklets, full bleed, head to foot, flat spine, bound book, hole punch or wire bind. You can combine cover, tabs, folds and images with ease on state-of-the-art presses.

**The hidden cost of old print technology**

If you want to see the size of the problem, just look at the size of the waste bin and calculate the cost of all those errors.

Productivity also takes a hit, and customer satisfaction drops. Even worse, jobs down the line get delayed, so there’s an exponential effect.

Factor in all those costs and you’ll soon see just how much old, inefficient technology is costing you. And how much new technology could save you.
The future of your print shop

While it’s tempting to think that you’re saving money with the old, reliable print technology that you’ve used for years, it’s important to realize how much it’s actually costing you – in rework, labor, service delays, unhappy customers, lost business, and jobs you can’t handle.

If your competitors have already made the move, they’ve cut cost, labor, errors and gained a competitive edge.

**Upgrading to the latest technology will give your business an immediate boost:** you’ll do more and do it better, faster and more cheaply. You can become more productive and add more value, winning new clients, and new business from existing clients – business you couldn’t have otherwise delivered on.

The future of print technology is already here. Take advantage of the opportunities it brings and the issues it eliminates and it can help you write the future of your print shop.
About Xerox

Xerox is helping change the way the world works. By applying our expertise in imaging, business process, analytics, automation and user-centric insights, we engineer the flow of work to provide greater productivity, efficiency and personalization.

We conduct business in 180 countries, create meaningful innovations and provide business process services, printing equipment, software and solutions that make a real difference for our clients – and their customers.

Learn more at www.xerox.com