



FUTURE PROOF YOUR PRINT BUSINESS



State of print and innovation 2021

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INTRODUCTION

The year 2020 had a significant impact on the global economy and served as a wakeup call to businesses across sectors. The International Monetary Fund estimates that the global economy [shrank by 4.4%](#) over the course of the year — the worst sudden decline since the Great Depression nearly a century prior.

This sudden economic instability revealed an uncomfortable truth: we should never take it for granted that today's business practices will work tomorrow.

But while a massive, unexpected disaster on the scale of a global pandemic accelerates change and swiftly exposes outdated systems, we shouldn't underestimate its slower, more subtle counterpart: an issue that grows just slow enough to forever be “tomorrow's problem”. These issues foster complacency with the status quo and, unless pre-emptive action is taken, can swell under the radar until they're eventually too big to ignore — at which point addressing the issue is that much more difficult. Think climate change; wealth inequality; ecological conservation.

The need for digital transformation used to fall into this category. It was easy enough to acknowledge the

value of digitalisation and make incremental changes, while deferring significant changes or investment. One novel coronavirus later, and companies the world over are scrambling to [digitally transform as a matter of survival](#).

Given the uncertainty of future events, what can print businesses do to prepare?

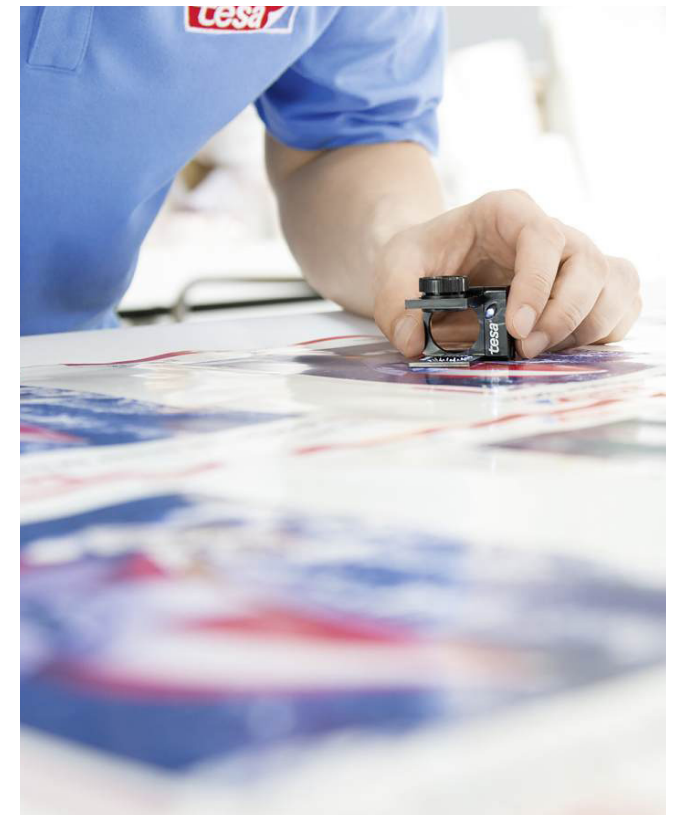
We believe the answer lies in understanding historical context, paying attention to the big picture, identifying trends that are likely to continue into the future, and internalising an attitude of innovation and creative problem solving.

The print and packaging industry, in particular, has been undergoing significant transformation for decades: shifting customer demands, new technologies, drive for sustainability, ever-smaller margins.

To “future proof” a print business in today's climate, means to recognise these industry-wide developments and new demands, and then to start making relevant changes immediately — within the organisation and across the supply chain.

This ebook will explore the evolution of the industry

and offer insight into how you, as a printing industry professional, can best position your business to survive and thrive in the coming years and decades.



CHAPTER 1: PREPRESS EVOLUTION

Prepress refers to all the steps in the printing process that lie between creating the design and the final printing. For lay people outside the industry, prepress is largely invisible; it's the behind-the-scenes activity that you only ever notice when something goes wrong. But for those in the know, prepress is the essential bridge between vision and reality. Understanding how prepress has evolved — and continues to evolve — helps shed light on how best to optimise the printing process as a whole.

Before digital technology was commonplace, prepress was a manual process that looked and ran very differently to the prepress we know today. Scissors, paper, and glue were the primary tools of the trade, with meticulous care, patience, and precision needed to lay out each design in such a way that it carried through to the final, repeatable print.

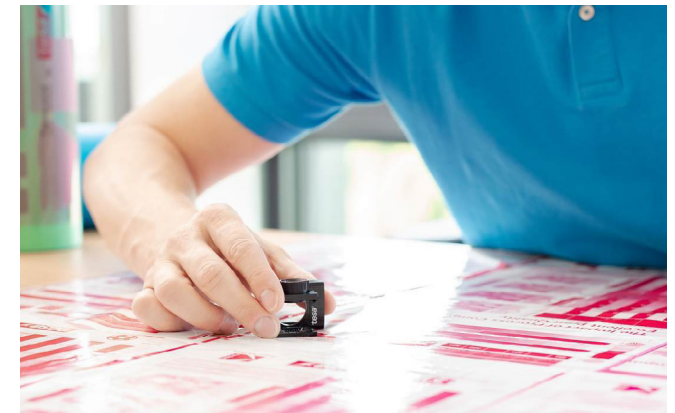
As computers entered the picture and prepress functions could be easily carried out via software, many roles were made redundant and [“absorbed” by the increasingly capable designer](#). For example, dedicated typesetters previously had to physically lay text out in the print designs. These days, graphic designers typically do all typesetting.

The rise of digital communications and electronic file transfer was another key milestone in the prepress

process. Where designs and artwork used to be couriered between key stakeholders, which could take time and introduced a significant amount of risk, the internet allowed artwork to be duplicated and sent quickly and easily.

Developments in prepress hardware have driven progress across the print cycle. For instance, new generations of flexographic printing plates are easier to set up, last longer, and are easier to replace. This offers benefits to cost, usability, print quality, as well as meeting sustainability targets. When looking for areas of your prepress process to innovate, existing components, such as printing plates and other hardware, offer a world of opportunity.

As technology has simplified prepress, it has also resulted in better print outcomes: more environmentally friendly processes, more control in the design process, better accuracy, and higher-quality colours and finishes when printing. Automation of repetitive tasks also allows printing organisations to work far more efficiently, reducing the time needed for each design to be prepared and sent for printing.



CHAPTER 2: DIGITAL VS FLEXP VS HYBRID

To evolve and innovate across the entire print cycle, print businesses may consider updating their entire printing methodology. Is it worth throwing out the flexographic old in favour of the digital new? Let's explore this question in more detail.

In the print and packaging industry, there are generally two types of printing: flexographic printing and digital printing. Let's explore the benefits and drawbacks of each to determine which is better suited for a future proof organisation.

Flexography

The older of the two techniques, flexographic printing involves mounting flexible plates to cylinders that continuously roll ink prints onto the substrate material. These machines can print extremely quickly and for extended periods of time, making this technique ideal for high-volume prints of designs with low variation, such as packaging wrapping.

Another key benefit of flexographic printing is the versatility it offers, in terms of the different types of substrates that can be printed on, as well as finishes such as lamination and foils.

The primary drawback of flexographic printing is that it takes time to change printing plates whenever a

new design is needed. In an industrial operation, whenever a machine is not printing, it's not making money. Any job where a high number of SKUs need labels printed will need a suitably high number of flexographic printing machines in order to avoid costly inefficiencies.

Digital printing

Digital printing involves printing an image directly from a computer system onto a substrate by means of an inkjet or laser. Digital printing is ideal for smaller-scale operations with high variation in the print designs, as the design file can be edited digitally without significant disruptions to the hardware and equipment.

Another key benefit of digital printing is its colour accuracy, as its able to produce 97% of Pantone colours. This makes it well-suited for any project where bright, vivid, and consistent colours are required.

A key drawback of digital printing compared to flexographic printing is its limited options for substrates and finishes, as well as its lower volume turnout.

Hybrid printing: why not both?

It's important to note that flexographic and digital printing are not mutually exclusive. On the contrary, they can be used together as a hybrid solution that offers the best of both worlds.

Hybrid printing empowers printing businesses to offer their customers the full spectrum of printing services. If a large FMCG client requires a high volume of bottle packaging, flexographic printing can be used on the project. If a short-run project arises that needs more control and accuracy across prints, such as brochures or flyers, then digital printers would be the better choice.

For the sophisticated, future-proof print business, digital and flexographic printing are complementary technologies.





CHAPTER 3: TRENDS IN PACKAGING

Staying abreast of key industry trends and developments is an effective way to prepare for an uncertain future. We've identified the following trends are pivotal in 2021 and beyond.

Label transparency

Rather than being literally transparent, this trend speaks to the growing trend of companies clearly communicating what a given product contains. A transparent label won't try to hide or obscure potentially harmful ingredients — in food or cleaning products, for example — and helps consumers understand the impact and consequences of their buying decisions. While the terms [“clean label”](#) and [“clear label”](#) have been around for several years at this point, in 2021 they are becoming better defined and understood.

Sustainable packaging

As the realities of climate change and our collective responsibility sink in, consumers and governments alike are demanding more sustainable packaging from the business sector. This is leading to development of packaging methods and materials that have a reduced impact on the environment.

[According to Mordor Intelligence](#), the biodegradable packaging market was valued at USD 93.59 billion in 2020, and is expected to grow significantly to USD 126.85 billion by 2026. Forward-thinking print businesses should ensure that sustainability is integral to their business practices, including their material choices and supply chain.

Personalisation

It's no secret that consumers respond well to personalisation. Adweek has found that personalisation can [reduce customer acquisition costs by 50%](#), while Epsilon has reported that 80% of consumers are more likely to purchase from a brand that offers personalised experiences. This trend has already entered the world of product packaging, with Coca-Cola's [“Share a Coke”](#) campaign being a clear success story. But while that campaign relied on printing common names with broad strokes of personalisation, developments in [digital printing](#) capabilities make it easier for brands to offer their customers customisable products and packaging.

Flexible packaging

Flexible packaging offers brands and consumers versatility and convenience, while taking up less

space than its rigid counterparts. As the technology advances and better materials are developed, flexible packaging is viable for a wider range of product types: from tech gadgets to FMCGs and everything in between. With increased availability of biodegradable materials and sustainable printing practices, flexible packaging is suitable for environmentally conscious consumers. [According to Smithers Pira](#), the flexible packaging market is set to reach a value of \$269 billion by 2024.



CHAPTER 4: RISE OF ECOMMERCE AND ITS IMPACT ON PACKAGING

As the gravity of the global pandemic set in and governments started issuing nation-wide lockdowns, millions of people were suddenly unable to shop from brick-and-mortar retail outlets. This led to a massive spike in global ecommerce activity. [According to the United Nations Conference on Trade and Development \(UNCTAD\)](#), the share of global retail trade accounted for by ecommerce rose from 14% in 2019 to approximately 17% in 2020.

Practically overnight, shipping companies were swarmed with a high volume of packages to deliver far and wide. This led to increased focus on packaging materials and practices, for two primary reasons.

The first is the environmental impact of ecommerce packaging. While largely out of sight of the consumer, an ecommerce transaction generates a considerable amount of waste: from excessive single-use packaging materials, to the carbon footprint of shipping transportation. As ecommerce activity increased, the environmental impact only multiplied.

The second reason ecommerce places packaging under the spotlight relates to customer experience — specifically, the brand experience.

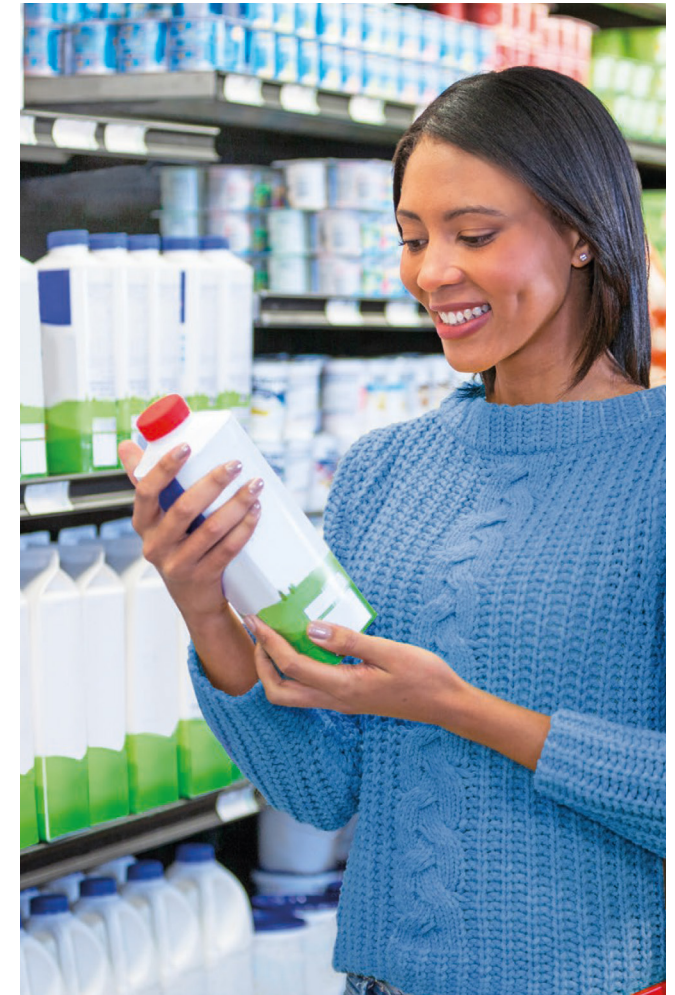
Without being able to physically enter a store, see window displays, and engage with employees,

consumers have a less-immersive experience. Brands can no longer rely on the atmosphere and hospitality of their retail outlet to deliver a fulfilling brand experience. This places far more value on the unboxing experience once their package arrives.

After all, [unboxing videos have been a popular phenomenon for nearly a decade](#) — people are extremely receptive to a carefully curated unboxing experience, whether they're the one receiving the product or not. [Research has also shown](#) that many consumers consider a product's packaging as important as the brand itself.

So what does the meteoric rise of ecommerce mean for a print company that wants to thrive in the years to come?

Provide a high-quality, curated brand experience through your packaging, while allaying environmental concerns with sustainable materials and printing processes.



CHAPTER 5: DEMAND FOR SUSTAINABLE PRINTING AND PACKAGING

We now understand how increased ecommerce activity has amplified demand for sustainable printing and packaging. But how does this demand manifest, and what does sustainable packaging look like in practice?

Demand for sustainable printing and packaging stems from consumers and public bodies.

From a consumer standpoint, people vote with their wallet. A 2020 report by Boston Consulting Group — which involved surveying 15,000 consumers from Europe, the United States, and South America — revealed that [74% of consumers](#) are willing to pay more for sustainable packaging in their ecommerce orders. This is largely in response to increased awareness of the environmental impact of human activity; specifically the abundance of plastic packaging waste that ends up in a landfill or the ocean.

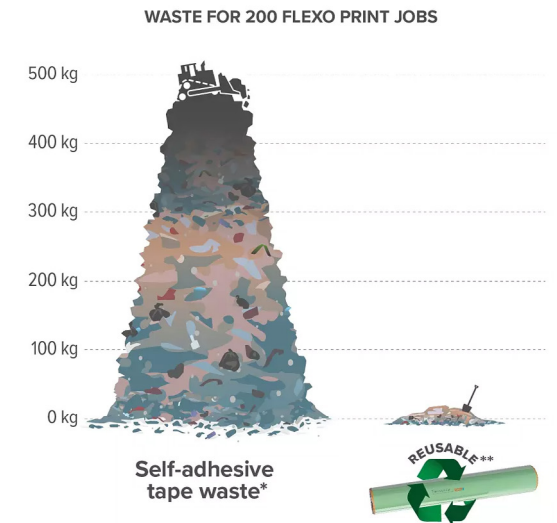
To address these consumer concerns and [build customer loyalty](#), brand are starting to offer sustainable packaging options in their online stores. Toothpaste brand [Better & Better](#), for example, uses a combination of flexible and biodegradable packaging to deliver a premium, guilt-free ecommerce experience to its customers.

From a regulatory standpoint, governments around the world are listening to public outcry and rolling out legislation to minimise the environmental impact of packaging waste. McKinsey describes the global effort in their 2020 article [The drive toward sustainability in packaging—beyond the quick wins](#). The European Union recently implemented a packaging-and-waste directive aimed to reduce environmental plastic waste, with France, Germany, and the UK going further by, for instance, setting more aggressive targets and introducing fees for non-recyclable packaging.

So how can print and packaging businesses meet these sustainability targets and set their consumers' minds at ease?

A 2020 research paper published in the Journal of Cleaner Production, titled [Sustainability in e-commerce packaging: A review](#), offers some insights. While further research is needed before fully renewable cellulose-based packaging materials can be adopted at scale, improving distribution systems and processes can alleviate the environmental impact. The researchers also highlight the need for innovation across printing and packaging technology, as new technology and processes can lead to more sustainable packaging production.

At this point it should be clear that continuing with wasteful processes is no longer financially viable for print managers and organisations. The entire supply chain is under government and consumer scrutiny, while failure to innovate also means they're missing out on the benefits of modern printing practices that are more efficient, sustainable, and, in many cases, cost-effective.



* Approximately 466 kg self-adhesive tape waste sent to landfills based on the following assumptions: Set of eight colors, repeat 450 mm, width 1.290 mm, two plates per sleeve in 450 mm x 600 mm, single use of tape.
** Just under 9 kg disposable waste of eight tesa® Twinlock layers.

CHAPTER 6: MAXIMISING ROI

Business resilience and being “future proof” is worth little if the company isn’t making any money. Financial problems, including rampant overheads, low ROI, and inconsistent cash flow, are consistently named as a [key indicator that a business will fail](#). As such, print businesses should pay careful consideration to the financial impact of any business changes — whether it’s investing in a new technology, entering a new market, or modifying the supply chain.

The printing industry is extremely competitive, often leading to a “race to the bottom” where low product pricing results in low profit margins. Profit and viable margins are therefore a common point of contention for printing organisations, increasing the stakes to run the printing operation as efficiently and streamlined as possible.

As we touched on earlier, the cost of inaction and continuing with the status quo can far exceed the investment in innovation — it’s just less immediately apparent. There is a strong business case for ensuring your printing operation is using technology that’s efficient, durable, and sustainable.

When considering a new system or technology, considering [the full range of benefits](#) over time will help you determine if it’s worth the investment. For example, investing in a process that reduces carbon emissions by 25% will yield far more than its direct financial impact. The company’s corporate reputation, attractiveness as a potential employer, and attractiveness to ethically minded consumers will all see a benefit.

Another way to maximise ROI in the printing industry is to automate and reuse equipment wherever possible. This is as valid in the design and prepress processes as it is the final printing operation. While automation and reusability aren’t new concepts, industry innovators like tesa are always hard at work developing new and better ways to put those concepts into practice.



CHAPTER 7: TESA® TWINLOCK

In the previous chapters we've looked at several key aspects of making a print business future proof: understanding printing and packaging trends, taking action to meet sustainability requirements, analysing the impact of ecommerce, and advocating a holistic hybrid approach to printing techniques.

We recently launched an innovative flexographic printing technology that can help your business face these challenges and more. This technology is called tesa® Twinlock.

While it's the first of its kind, the underlying concept is quite simple: to provide sustainable and reusable plate mounting solutions for cost-efficient and consistently high-quality print jobs.

This is how it works:

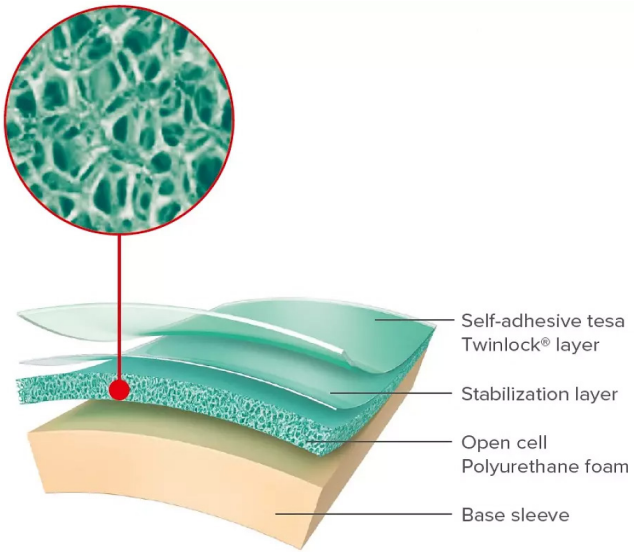
First, we select a base sleeve or cylinder for our customer's preferred supplier. Then a polyurethane (PU) foam layer is applied to that base sleeve. This layer is then coated with a proprietary polymer that can stay permanently tacky. Once the sleeve has been used, it can be cleaned and used again.

That's right: if tesa® Twinlock is handled correctly and properly maintained, it can be used indefinitely —

so the more you use it, the greater your ROI. This reusability translates into lower running costs, a reduced carbon footprint, and more accurate planning and time estimates for lengthy projects.

The tesa® Twinlock plate mounting sleeves also offer exceptional print quality, even after extended periods of use with high-volume printing projects. This might sound like printing magic, but it's simply a marvel of expert engineering. The sleeves' open cell foam structure absorb any shock or bouncing movement that occurs during the printing process, while the size of each sleeve diameter is guaranteed to meet your exact requirements.

To learn more about, [visit our tesa® Twinlock information hub.](#)



	Foam	Color code	Print motif
tesa® Twinlock Soft Sleeve	Polyurethane	White	
tesa® Twinlock Medium Sleeve	Polyurethane	Green Blue	
tesa® Twinlock Hard Sleeve	Polyurethane	Black	



CHAPTER 8: HOW TESA HELPS YOU

At tesa®, we strive to be a forward-thinking and innovative solutions partner that helps our clients prepare for — and succeed in — an uncertain future.

We achieve this by creating custom solutions for the specific needs of each client. Whatever your printing situation or needs, we can put together a suite of products that delivers your ideal outcomes. We also offer extensive onboarding, training, and support, which ensures our clients and their teams can get the most value from our solutions as quickly as possible.

We promise every client close support, high quality products, and measurable ROI.

If you're interested in working together to future proof your print business, driving innovation and efficiency across your printing operation, click the link below to contact a sales representative or request a product demo. We're looking forward to working with you to create a better and more sustainable printing industry.

[CONTACT US](#)

