drupa
Print Horizons
Report

Executive Summary
Introduction

Welcome to this special drupa Print Horizons Report. With drupa 2024 fast approaching, we used the survey for the latest Global Trends Report, published in November 2023, as an opportunity to ask a series of questions on key technical and market developments that are likely to dominate the show. As there was insufficient space to cover them all in the main Trends report, these have been analysed for this report.

We circulated two separate surveys to printers and suppliers in May and June 2023, which share many questions, but ensure that their differing interests are addressed. Over 600 printers and suppliers contributed and we must thank them. The full breakdown of participants by region and market is in the Appendix.

All printers, regardless of size, region or market, must recognise the seismic shifts in print caused by digitisation. Indeed, the problem is where to start, given so many radical changes are occurring so rapidly. It was from this debate that the Print Horizons report was born; a brief guide to the most important topics that printers and suppliers need to research when preparing to visit drupa 2024 in May/June.

Messe Düsseldorf, in its role as drupa organiser, must thank Printfuture (UK) and Wissler & Partner (Switzerland) for conducting and authoring this report series. We are confident you will find the resulting report insightful. We welcome your feedback and invite you to send us an email at drupa-expert-panel@drupa.de.

The drupa team
March 2024

PRINT FUTURE

Messe Düsseldorf

Executive Summary

The 9th Global Trends report, published in November last year, was remarkably positive given the challenges faced in the last few years. Printers and suppliers know that exploiting new technology is key to a successful future. The problem is how best to achieve this end. With this in mind, the 2023 Trends survey asked a range of questions on technology opportunities and priorities. From the replies, we have drawn up six key topics, which were at the top of the printers' priority lists for more research and investment:

1. The changing dynamics of analogue and digital production
2. Workflow and Automation
3. Print Embellishment and Finishing
4. Web-to Print
5. Digital Packaging and Labels
6. Sustainability and ESG

We will address each of these in turn and explore the survey findings, complemented by commentaries from industry specialists made in a series of interviews with this report's authors. In each case the data shown is for those survey participants that chose the topic as one of their top two priorities to be addressed in the next 12 months. In all cases we quote the data only where there is an adequate number of respondents in the sample.

To clarify, when we talk of 'printers' we mean printers, converters and those who have migrated into production of printed materials whether commercial, publishing, packaging or functional. And given the central focus on evolving print technologies, we should clarify how we define these:

Inkjet refers to Thermal, Piezo and Continuous inkjet technologies.
Toner refers to Toner and Liquid Electro-Photography
Conventional refers to Offset, Gravure and Flexo.

The transition to a digital world – Adapt or die

"Most SME printers need to start looking at where they're going in the future. Decisions need to be driven by your ability to diversify, specialise and scale your operations."
Commercial printer, Germany

Diversification is critical to any printer or supplier in the rapidly changing print market. Chart A demonstrates a sustained and rapid rate of change amongst both printers and suppliers, in the products and services they offer and the markets they sell into.

Diversification – Printer and Suppliers

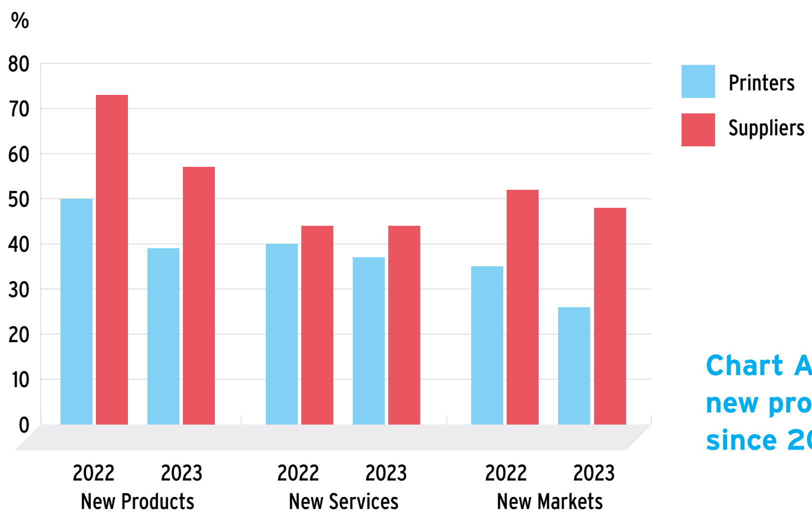

Chart A: Has your company introduced major new products/services/entered new markets since 2019?

drupa 2024 is the ideal opportunity for suppliers to promote new technologies and for printers to discover how they can best exploit those technologies. But they do have different priorities as evident in Chart B. Printers place a much higher priority on faster, more efficient conventional print and/or finishing equipment than suppliers, 49% versus 28%. Similarly, End to end automation is a priority for 38% of printers but only 22% of suppliers. Indeed, the only topic on which both parties are agreed is the importance of Digital print as a core production method, 31% each.

Printers' investment/development priorities versus Suppliers' marketing priorities

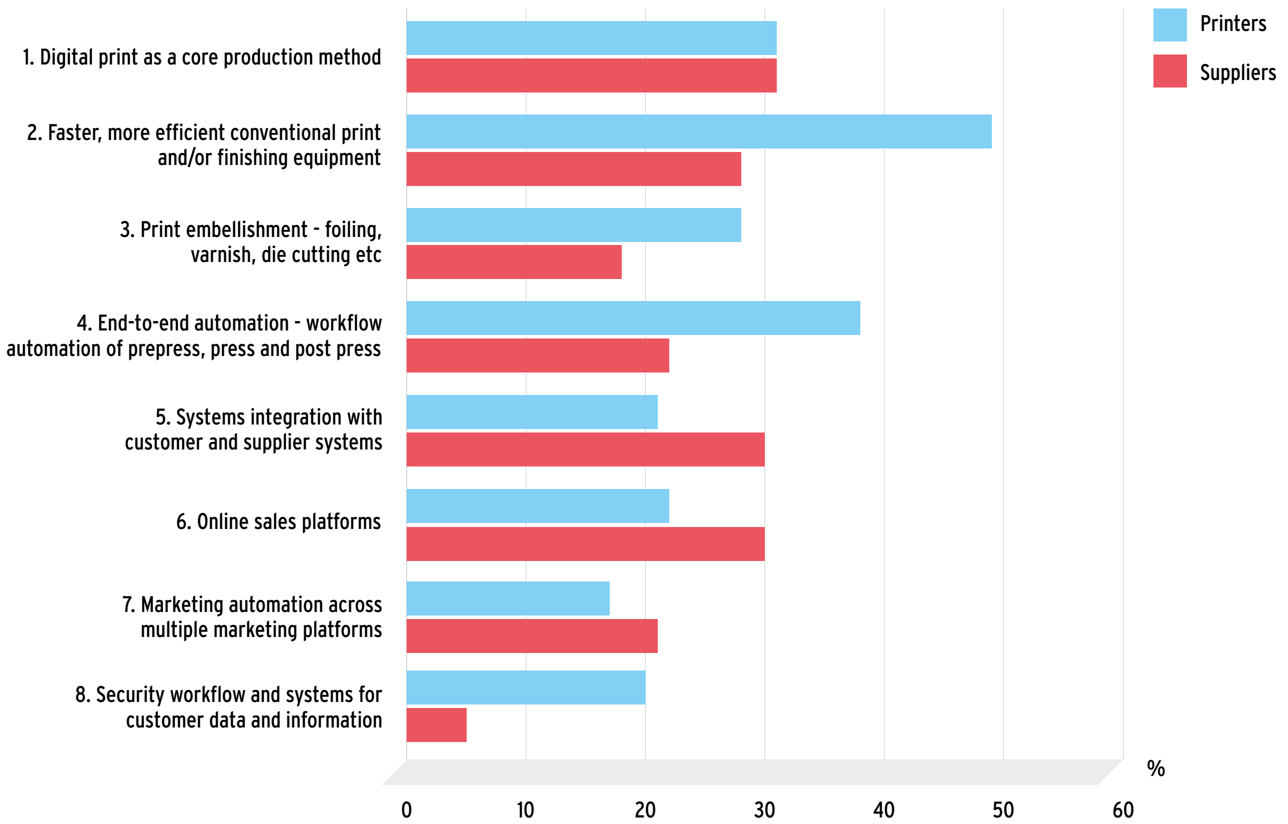

Chart B: Printers - Which of the following topics will you be prioritising for investment or development purposes in the next 12 months? Suppliers - Which, if any, of the following topics will your company plan to focus your marketing efforts on in the next 12 months?

"For most print companies they know change is coming, but human nature being what it is, we ignore something until impending doom or until something's knocking on our door. ... If you future-proof your business with the latest great technology, and build a digital platform behind it, you're becoming sustainable...rather than relying on short-term fluctuations."
UK Commercial printer

1. The changing dynamics of analogue and digital production

The majority of printers will continue to use conventional print in tandem with digital production. If implemented effectively, the two methodologies should complement, not compete.

Printer reasons for investment in conventional print/finishing

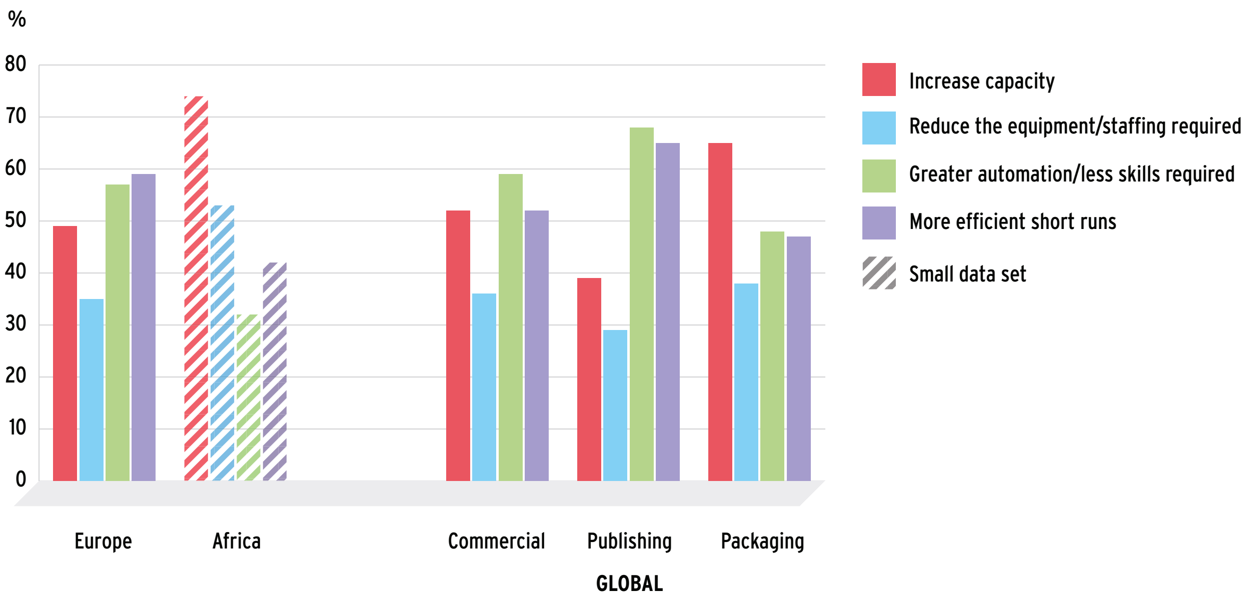

Chart C: What are the top two reasons for investment in conventional print and/or finishing equipment?

Faster more efficient conventional print and finishing

Most printers will look for more efficient conventional print and finishing at drupa 2024. The motivation will vary between regions (largely dependent on the cost of labour and the shortage of skills) and markets (largely dependent on the need for: greater capacity – Packaging, lower costs – Commercial and Publishing, or fresh product development – Functional.)

"The vast majority of commoditized print you can't add any value to really, except by delivering it on time to the right quality and the technology usually takes care of that. The technology preference still seems to be around Toner rather than Inkjet. There's still a fear around the cost of Inkjet. ..... People don't want to be locked into a technology, which they see is still evolving."
Gareth Ward - Print Business Magazine, UK

Digital print as a core production method

Sheetfed toner technology still dominates the volume end of this market, but inkjet in its various guises is where most supplier effort is focussed. Past simple conversations about the economic breakeven point between conventional and digital print have been overtaken by more sophisticated dialogues about how digital print can change a market, not just be economic for short runs and fast turnround.

We asked for the profile of the digital print produced in terms of lead time and run length. In terms of run length, there was no significant variation by region or market. Globally 57% of printers reported that run lengths of more than 5,000 sheets only occurred in up to 10% of their orders, i.e. rarely. Only 23% reported it occurred with more than 25% of their digital print orders.

Regarding lead times, 48% of Commercial printers reported that more than 25% of their digital print orders had a lead time of less than 48hrs, dropping to 32% amongst Packaging printers and 27% amongst Publishing printers.

"In print's history 15% of all pages printed are now digital. This is not a fast transition; it has taken 30 years. Digital print becomes successful when it is disruptive to an existing business model. Digital is then about value creation e.g. in the labels market, 20% of the value comes from digital production, but the volume is only around 8%. Replacement of offset pages since Covid when paper prices have doubled is effectively pricing yourself out of the market. Document printing is now more of a luxury product. The business model for low-cost pages has gone, it's not necessarily going to digital. … The industry is slowly evolving but we are doing it kicking and screaming." **Marco Boer – Vice President IT Strategies, US**

2. Workflow and Automation

Print companies need to understand that investment in digital printing needs to go hand-in-hand with the digitisation of other business processes.

End to end Automation was described in the Global Trends survey as a progressive process, starting with no automation, then with automated prepress colour managed workflow, then automated press and post-press workflow and finally end-to-end JDF (or similar) workflow.

We asked where companies stood on this spectrum at the moment. Globally 29% had none of the above i.e. had not started, 54% had prepress automation; 35% has press and post-press automation and 13% end-to-end JDF workflow (only one option was allowed). There were regional variations e.g. 46% of Asian printers had none of the above, while only 24% of European printers had none. What was striking was the bold ambition for this to change in the next couple of years, as shown in Chart D.

To date many printers have made valiant attempts at automating individual workflows, but few have yet to tackle the bigger challenge of creating a single automated workflow. The time, cost and disruption of implementing comprehensive automation remains a big stumbling block, though there are an increasing number of integrated software solutions from suppliers ready to assist. Systems integration with customers and suppliers is proving to be an effective means of removing unnecessary labour and errors. As a result, data security and accreditation are now increasingly being demanded by customers and regulators. Marketing automation platforms are also offering printers cost effective communications to both acquire and retain customers or even your customers' customers.

Printer ambition to automate over time

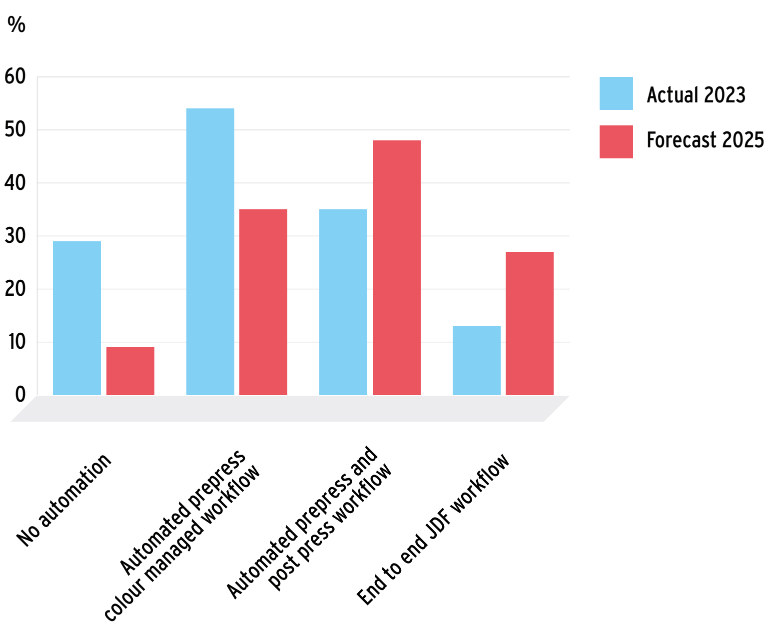

Chart D: Which of the following automation do you plan to install in the next two years?

The impact of Artificial Intelligence

AI is already in use within the print industry e.g., to monitor and analyse machine performance data to assist predictive maintenance schedules. It could also be used to make better use of materials, reduce waste and help with quality control. The print industry should prepare for an influx of files with text and images created by AI and customer service interactions being automated and improved by chatbots giving real time updates and answering customer queries. All these aspects improve operational efficiency and manufacturing processes in the supply chain. All of us are at the beginning of a journey to understand generative AI's power, reach, and capabilities.

"There's an on-going interest in AI now. You see printers that are using it to analyse their data and workflow and also use it in customer service and marketing. There are uses of big data sets and AI in customizing and highly personalizing output using unusual data sources. I think AI is still a bit pioneering, but it's finding its way into leadership and also into the IT department."
Peter Van Teeseling – Executive Director Dscoop, The Netherlands

3. Print Embellishment and Finishing

Investment in Finishing is as important as that in print production, according to the latest Trends report. The shift towards short run and on demand production has changed the dynamics and requirements of the finishing department. One aspect that gets increasing attention is inline finishing and digital print embellishment. This in turn needs clients to be educated in the opportunities and costs involved.

When we asked printers, "Why invest in print embellishment?", there were mixed answers. 79% of European printers who selected this topic as a priority stated it was for customer acquisition and 45% for improved profit margin. The figures for Asia were almost exactly reversed: 63% profit margin and 37% customer acquisition. No significant variation by market, except that packaging printers put a higher priority on customer retention than commercial printers.

50% of packaging printers who selected this topic as a priority, stated that more than 25% of their turnover by value contains print embellishment compared with 28% of commercial printers. It is quite striking that 73% of suppliers were focussing their marketing efforts on cost effective production.

4. Web-to-Print

The Trends report data is a puzzle. It shows glacial growth in Web-to-Print installations. One commentator explains this as the effect of printers outsourcing work via cloud-based web-to-print platforms without having to invest in one themselves. Hence volume grows but not installations. What is not in doubt is that web-to-print can accelerate the pace of automation within a print business, taking on so many otherwise labour-intensive tasks.

Back in 2014, 25% of our global panel stated they had a Web-to-Print installation. In 2023, the figure is still 25%. We understand that some regions use less e-commerce for cultural, infrastructure and other reasons, but even in Europe the growth is glacial: 2014 27% to 2023 28%.

Globally of those who stated in this survey that on-line sales was a priority, 42% have had their e-commerce system for less than 1 year and only 30% have had it for more than 3 years. As to why companies are interested in installing and/or upgrading their e-commerce systems; this is influenced by the market sectors they operate in. While both packaging and commercial printers were broadly agreed as to the importance of customer acquisition and retention – c.50% and 40% respectively, Packaging printers were far more concerned with marketing differentiation 55% than Commercial printers 28%. It was the reverse for automation and workflow – 41% Commercial and 23% Packaging.

"With W2P it is possible for printers to enter niche markets, own them and lock them down. … W2P allows printers to play with dominance in the market; we manage 5000 products, in 241 locations in 104 countries. We use printers who are incredibly good at one type of print, e.g. book printers, photo products, business cards and they become synonymous with that sector. … In this business model competitors can also be partners through a global web enabled network."
Tim Cox – Business Development Director
Cloudprinter, UK

5. Digital Packaging and Labels

It is acknowledged by all that the Packaging market has prospered through the period of digitisation and in consequence is receiving attention from many print companies of a different market tradition. At the high-volume end conventional print continues to thrive, but as supply chains break up and become more complex and the number of SKUs grows, there are increasing opportunities for digital production.

More than 10% of SKUs specified as digital print over time

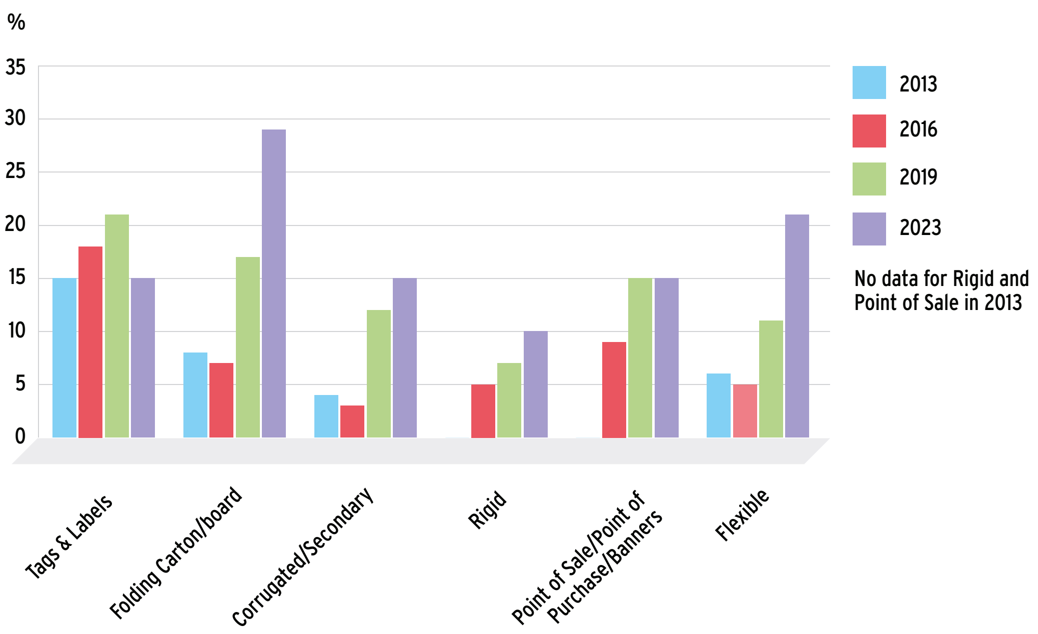

Chart E: What % of SKUs (Stock Keeping Units) specify digital printing?

"I definitely see there is a huge opportunity in the digitally printed packaging space where printing what you need, where you need it and when you need it, will be accelerated through the growing ESG agenda of brands. 60% of the footprint of print and printed products is created by the transportation. So, if you can eliminate that or reduce it to the minimum, then suddenly it becomes a very viable alternative."
Peter van Teeseling – Executive Director Dscoop, The Netherlands

6. Sustainability and ESG

Sustainability is not a fresh topic of interest, but one that no printer or supplier can afford to ignore any longer. Increasingly actions taken to increase sustainability are also good for the bottom line and anyway are demanded by customers, so it is a no-brainer to tackle the task with enthusiasm. 55% of all printers surveyed have a sustainability policy with specific goals and targets. This figure is true both globally and across all markets. This is an important recognition by the whole industry that the topic must be addressed effectively. It is no longer someone else's problem – it is ours.

"About 90% of the inquiries I now receive have a key sustainability component. We think this will continue to be a driver for brands in the coming years." **Packaging Manufacturer, France**

ESG is more challenging, not least because there is no clear definition and the legislators are struggling to codify what is meant. Nevertheless, there is a trickle-down effect from large multinationals to smaller suppliers demanding this is given attention. For now, our commentators advise that printers and suppliers start with what they understand, namely formalising their CSR (Corporate Social Responsibility) policy and processes.

"I would advise printers first of all, focus on what we used to call CSR, about your corporate social responsibility. Look about your business, go up through your stakeholders and down through your stakeholders, just to make sure everything is covered off. If anyone then comes and says, well, what about ESG? At least you have a structured approach that you can turn around and say; this is what I do about my designs, this is what I do about my manufacturing, this is what I do about my premises and all of my key stakeholders, this is what I do about CS-CO2, scope one, scope two, scope three, this is what I do about end of life or manufacturing waste." **Steve Lister – Sustainability Consultant to Brands and Retailers, UK**

In conclusion, all printers, regardless of size, region or market, must recognise the seismic shifts in print caused by digitisation. Indeed, the problem is where to start, given so many radical changes are occurring so rapidly. It was from this debate that the Print Horizons report was born; a brief guide to the most important topics that printers and suppliers need to research when preparing for drupa 2024 next May/June.