



HARNESSING THE POWER OF DIGITAL PRINT AND EMBELLISHMENT

Author:

Sharon McNee

March 2022

An IDC Vendor Spotlight sponsored by Konica Minolta

IDC #EUR148901022



Harnessing the Power of Digital Print and Embellishment

Introduction

Digital printing, embellishment and finishing technology innovation is enabling increasingly sophisticated and artistic printing possibilities suitable for an ever-widening array of media, substrates and surfaces. The benefits to print service providers (PSPs), label convertors, brand owners and the end customer are clear, but barriers to growth remain. Cost/value benefits are increasingly weighing in favour of aesthetically enhanced print jobs, but the environmental impact of perceived unnecessary and overelaborate printing and packaging is inhibiting further adoption and growth.

Much of the concern is unfounded and can be solved by customer education and by raising awareness of the ongoing incremental environmental gains that are being achieved in digital print hardware, software, media and consumables. Vendors, PSPs and label convertors must therefore clearly demonstrate the additional revenue possibilities to their customers and assuage any concerns about environmental impact. This IDC Vendor Spotlight

explores the pros and cons of enhanced digital printing, embellishment and finishing, particularly as it relates to environmental impact.

Print Embellishment Benefits

What Is Embellishment?

Embellishments are finishing options typically applied after printing in the post-press phase of production. These include the use of specialty inks such as neon, metallic, white and invisible ink and more recently the arrival of scented, biometric and thermochromic inks. Foils and holographic foils can be applied for décor and security purposes. Coatings and varnishes enrich and protect printed pieces. Substrates can also be embellished by die cutting, embossing and debossing to produce patterns and raised patterns.

The Power of Print Embellishment

In a commercial world, customer experience and engagement are key. Any technology that can make a product stand out is a coveted commodity. Embellishments can elevate a simple print job by enabling it to pop visually and create a more rounded sensory, tactile, haptic experience. When a product looks and feels good and evokes a memory or an emotion then the customer is more likely to buy. Luxury goods, for example, almost demand equally luxurious printed

AT A GLANCE

KEY STATS

- » In 2021, Western European digital label and packaging (L&P) production printer shipments came in at 228 units at a value of \$121 million. This equates to unit growth of 23% and value growth of 44%.
- » The Western European digital L&P production printer market is expected to increase at a CAGR of 13.1% between 2020 and 2025.

WHAT'S IMPORTANT

The growth in ecommerce is fuelling demand for L&P solutions. Digital printing and embellishment enable PSPs and label convertors to build new revenue streams by offering brand owners an increasingly feature-rich toolkit with which to prise open the buyer's psyche and wallet.

materials and packaging. The role of packaging is no longer just functional for carriage and protection purposes; the packaging is an integral, valuable part of the product experience, a largely untapped piece of real estate ripe for development.

The embellishment opportunity enables greater ROI for the entire ecosystem, from technology vendors through to the end customer. PSPs and label converters can charge more for print jobs, and marketing managers, creatives and designers, brand owners and ambassadors have access to an increasingly feature-rich toolkit with which to prise open the buyer's psyche and wallet.

End customers benefit from their own perception of having made a good purchase. Cost and value barriers to future growth continue to fall and PSPs and label converters are increasingly motivated and financially supported to invest in embellishment technology to further tap into this potentially huge market.

Trends

Drivers and Inhibitors

eCommerce

Market trends are both driving and inhibiting embellishment market growth. On the driver side, the rise in ecommerce sales is fuelling demand for label and packaging (L&P). Buying habits have changed and consumers are purchasing everything from food and groceries to high-end consumer goods via the internet. While growth rates are expected to stabilise in 2022 after two years of unpredictable circumstances and unusual growth patterns, eMarketer forecasts that worldwide ecommerce sales will reach around \$7.4 trillion and represent about 24% of all retail sales by 2025 (source: eMarketer, January 2022). This in turn will lead to increased demand for label and packaging solutions.

Digital Label and Packaging Flexibility and Capabilities Driving Growth

In 2021, Western European digital L&P production printer shipments came in at 228 units, at a value of \$121 million. This equates to unit growth of 23% and value growth of 44%. Some of these are short-run print jobs requested by larger multinationals for targeted personalised campaigns and others are commissioned by small businesses, stores, restaurants, artisans, hobbyists and crafters seeking to give the appearance of a larger operation by their use of exclusive labels and packaging. Access to bespoke short-run L&P solutions levels the playing field for brands and companies of all sizes. Digital printing is completely flexible and enables variable data printing that plays into the global trends for sustainably printing on-demand, short-run print jobs and customisation and personalisation of goods; it also opens the door to differentiation through embellishment.

Digital printers have been steadily closing the gap on analogue and can now handle print job runs of any length across a growing number of substrates, such as folding carton, pouches, pillow boxes and wooden packaging. Automation is another digital boon. Ease of operation and automated workflows enabled by digital drives business growth. By addressing workflow inefficiencies and the interruption of manual processes, partners and customers can drive up

profit margins. Automation can also lessen reliance on people, which is important in the print industry where it is notoriously difficult to recruit and retain staff.

Sustainability

On the inhibitor side the growing concern for sustainability and the environment is challenging people's views on technology, encouraging them to reevaluate the impact on the planet. The paper-making process gets a bad press and there is a general misconception about the extent to which it damages the environment. However, the industry is highly regulated, with forestry certification ensuring the use of sustainable and renewable resources. In Europe, paper is highly recycled and reused and the rates for cardboard and paper packaging are even higher, making paper the most recycled packaging material.

Printing is also regarded as particularly harmful; while it does undoubtedly leave its mark, improvements are being made on a continual basis. In fact, digital printing's environmental credentials compare very favourably against the traditional, incumbent flexo/offset/analogue print technologies.

In comparison, digital printers:

- Generate less waste
- Do not require prepress and set-up time
- Have less downtime
- Do not require screens or plates
- Offer better registration quality

The capacity to print on demand digitally as opposed to stockpiling and warehousing long runs of labels and packaging also has clear sustainability and environmental benefits. It also ensures that whatever is printed is dynamically updated and current. As well as constantly improving hardware, manufacturers must continue to lessen or offset the environmental impact of consumables, media and substrates.

Konica Minolta Vendor Profile

Konica Minolta Business Solutions Europe has subsidiaries and distributors in more than 80 countries in Europe, Central Asia, the Middle East and Africa. With around 9,000 employees (as of April 2021), Konica Minolta Europe earned net sales of over €1.9 billion in the 2020/2021 financial year.

Konica Minolta's printer product portfolio spans office devices through industrial and production printers. It currently offers one label printer, the AccurioLabel 230, and the AccurioPro Flux Label Impose related software. Konica Minolta's Igniting Print Possibilities offering helps printers, converters and brand owners maximise workflow automation to increase efficiency. Konica Minolta's PKG-675i is designed for corrugated manufacturers, converters, printers and brand owners looking for a short-run digital print solution.

Konica Minolta was listed among the 2021 Global 100 Most Sustainable Corporations in the World and received the highest level in the EcoVadis Sustainability Ratings. Konica Minolta and

MGI Digital Technology (MGI) have long been champions of sustainability and continually strive to achieve environmental accreditation across their hardware and consumables offerings. Some sustainability highlights include:

- Konica Minolta Simitri/HD (High Definition) polymerised toner (for high image quality at a low temperature)
- FOGRA accreditation for Simitri HD E (longer lightfastness, longer image lifetime)
- TÜV Rheinland food safety accreditation for packaging
- Konica Minolta's AccurioLabel technology (AL190/AL230) achieved the Certificate of Conformance for Food Contact Material Regulations, permitting the use for plastic film (food contact material) under European regulations (EU10/2011, Swiss Ordinance and Nestlé Guidance)
- INGEDE (International Association of the Deinking Industry) deinkability certification (for recycling of coated and uncoated paper)
- MGI solvent free, deinkable water-based inks
- MGI solvent free, Universal Eco-Varnish
- MGI Green Foil

Konica Minolta and MGI's digital print and embellishment technology expertise combined with their ethical and ecological ethos has made them a sought-after partner for PSPs and label converter partners. As a result, Konica Minolta has become a leading player in the European L&P market in just six years. IDC data for 2021 shows that Konica Minolta ranked second in the 2021 Western European digital L&P production print market with a unit share of almost 23%; this is an increase of more than 40% over 2020, with growth almost double that of overall unit growth in the market.

Challenges

There is a global focus on the health of the planet and everything, including technology and specifically print, is being scrutinised through a green lens. As with most sustainability debates there is never a definitive answer and while one technology excels in one aspect, it fails in another. Notably, the myths around paper and print need to be debunked. A balanced view must consider the pros and cons of all available communication options and evaluate the environmental gains being made by manufacturers that are redoubling R&D efforts to lessen the negative impact of their products.

To align with sustainability goals and targets, some organisations are issuing guidance around the use of embellishments such as foiling and lamination. As with many things, moderation is key, less is more and embellishment must not be overused. It should be applied judiciously and made to count — precision of message over profligacy.

Currently and in the short term, supply chain issues, shortages and rising costs — especially of natural resources such as wood, paper and water — are crippling global economies. The aggregate impact of all these problems will curb expenditure and lead to delays in technology purchases. In addition, marketing budgets are being slashed, resulting in lower spending on things such as branding exercises and activities.

Longer term, as digital replaces analogue, we can assume that new technologies on the horizon will erode some of the current business going forward. Direct to shape or object printers will replace many of the current label and packaging printer applications and use cases.

Conclusion

IDC believes incremental, environmental gains will continue to be made in digital printing hardware, consumables, substrates and media. These improvements will help drive demand for embellished products. Konica Minolta has sustainability in its DNA and is continually improving every part of its digital printing ecosystem — making significant headway in the label and packaging sector. IDC believes sustainability will become an increasingly influential purchasing criterion and will be critical for success in the digital printing sphere. The successful vendors will be those that prioritise and promote sustainability.

MESSAGE FROM THE SPONSOR

Driving a Valuable Marketing Vehicle with Digital Production

Ongoing innovations in technology will enable packaging to expand its traditional role of transporting something in a container or a label identifying "what's inside" into a valuable marketing vehicle. Trends for 2022 include enhanced finishing such as embellishment, increased automation, online print purchasing and web shops — plus, of course, the unstoppable analogue-to-digital transition. Demand will continue to increase for complete start-to-finish manufacturing processes with more all-in-one solutions and for production devices that need fewer and less-skilled operators.

Labels and packaging will continue to form the supply chains of basic necessities and provide vital tools to convey information and enhance branding. Healthcare, pharmaceutical and food and drink sectors, among others, will continue to be growth areas for digital label and package printing in the future.

Gain more efficiency with a combined packaging approach: <https://www.konicaminolta.eu/eu-en/campaigns/packaging-workflow>

About the Analyst

[Sharon McNee](#), Research Manager, IDC



Sharon McNee has 27 years' IT industry experience focusing primarily on the imaging and print hardware, software, solutions and services markets. Her current research areas include office and production print with a specific focus on the growing industrial print space. As well as continually researching these markets, she also works on custom research projects to support vendors and channel partners in their product and marketing strategies, business plans, and research and development.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

IDC UK

5th Floor, Ealing Cross,
85 Uxbridge Road
London
W5 5TH, United Kingdom
44.208.987.7100
Twitter: @IDC
idc-community.com
www.idc.com

Global Headquarters

140 Kendrick Street,
Building B
Needham,
MA 02494
+1.508.872.8200
www.idc.com

Copyright and Restrictions

Any IDC information or reference to IDC that is to be used in advertising, press releases, or promotional materials requires prior written approval from IDC. For permission requests contact the Custom Solutions information line at 508-988-7610 or permissions@idc.com. Translation and/or localization of this document require an additional license from IDC. For more information on IDC visit www.idc.com. For more information on IDC Custom Solutions, visit http://www.idc.com/prodserv/custom_solutions/index.jsp.

Copyright 2022 IDC. Reproduction is forbidden unless authorized. All rights reserved.