drupa Essentials of Print

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We deliver herewith a series of articles, from designers, brand owners, printers, converters, journalists and influencers. We look forward to working together with experts, who enrich our drupa Essentials with fresh impulses, sound expertise and remarkable experience. All these articles will allow visitors to understand a world that has changed dramatically since the creation of drupa in 1951 and will continue to evolve. Different observations and perceptions of an industry seeking innovation in a fast-changing world. Give free rein to your instinct under the adage: "to each his own drupa".

We are happy to provide you with this expert article and we would be pleased

if you publish it.

Be inspired!

Good reading.
Sabine Geldermann & Team
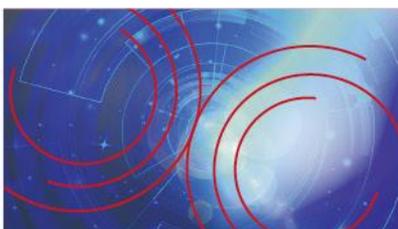
David Pittman –
Digital drivers in labels

VITA

David Pittman

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David Pittman – Digital drivers in labels

It has been a few decades since the term 'digital' first entered the lexicon of the label printing industry. Since then, those at the bleeding edge and adopting when the market was still very much embryonic have been supplanted by a mature customer base deploying tried, tested and refined solutions as digital printing has become commonplace.

With the technology evolving – faster speeds, better quality, increased consistency, etc –, so the market has embraced the opportunities digital printing permits. This has been realised in pressrooms the world over through hardware installations as printers look to respond to 21st Century consumer behaviours, the advent of short runs and ongoing trend for personalisation, and brand owner demands for new business models to provide just-in-time delivery and minimise waste in the supply chain. This sees many digital adopters in labels now operating multiple lines. They are also embracing the different digital printing technologies and the unique characteristics and capabilities of each to further their ability to respond to today's business environment, and that of tomorrow.

Increasingly, the end-use is driving the choice of technology, be that: challenging substrates as often seen in wines and spirits; durable labels that are resistant to various environmental factors; beer and beauty labels, where achieving the correct look and feel is paramount; or food labels, which must be aesthetically pleasing whilst meeting stringent regulations for food safety.
For most, these digital presses have slotted in alongside flexo and offset machines. There are examples from the early days of this not providing the most effective route to ROI, with the capabilities and capacities of digital printing undermined by attempts to make the technology work within existing workflows. Today, it is widely acknowledged that to make the most of an investment in digital, the ecosystem around the press is as important as the machine itself. This helps get incoming orders through pre-press, onto the print engine, then forwards to finishing and converting in the most streamlined and effective way possible.

The starting point is invariably the correct MIS/ERP, designed to handle the greater number of orders and jobs, the complexities of such work and the amount of data involved, whilst being able to keep up with the press and keep it filed with saleable work. Web-to-print business models are now springing up at an increasing rate, bringing the convenience of e-commerce as experienced by consumers on a daily basis to the business-to-business world. While this will not work for all, it's likely that a growing amount of work destined for digital label presses will come from online avenues. This then creates an entirely different structure for label printers who might be more au fait with established workflows that see orders coming through the door and being processed by the pre-press department.
The likely deskilling of the pre-press process will result in a need for companies to find new roles for staff. This can be a boon for many as it creates new opportunities for growth, taps up underutilised resources within a

workforce, and strengthens the personal development roadmap for staff. This may seem scary to some but it is an inevitable consequence of digital transformation. It should not be feared but be embraced and made a part of corporate strategies for the future.

Similarly, for a period there were concerns about how digital transformation would impact analogue print processes and their place in the food chain. Driven in part by the digital industry's excellent marketing activities and loud vocal presence permeating the supply chain, the furore reached such a fever pitch that there was a brief point in time when the digital printing industry was having to go on record to state, 'We're not here to kill flexo.'
In recent years, the flexo industry has staged a 'fightback' and gone through a technical resurgence of its own, including efficiency gains, automation of press set-up and better standardisation of the process. It has also got more vocal and better at fighting its corner. Its marketing efforts have improved to highlight the strengths of flexo in the 21st Century.

As a result, the reality on the factory floor today is that digital and analogue are entirely complementary print processes. This is realised through the growing amount of 'hybrid' options available – 'full' hybrid, 'true' hybrid, 'integrated' hybrid, etc – that combine the best of both processes, as well as the capacities that have been freed up and created. By taking the burden off a flexo press to print short runs when implementing a digital printing workflow, for example, label printers can increase the amount of volume work they put through their Gallus/Mark Andy/Nilpeter/MPS/BOBST press. Similarly, digital presses are now able to take on longer runs, leaving a flexo press free to produce the highest value jobs, perhaps. This maximises OEE and hastens the ROI, for both digital and analogue hardware. For many label printers, this has now opened up new business opportunities and new markets to them that they may have previously been unable to service.

One such opportunity has been digitally printed flexible packaging. Flexible packaging is a widely spoken about open goal for label printers. Technical challenges remain in this area given the greater demands placed upon primary packaging and how it relates to established label printing technologies such as UV, although work is ongoing in the supply chain to mitigate and alleviate such concerns. Further, a growing amount of hardware is now available to permit fast turnaround of digitally printed flexible packaging constructions, printed using either aqueous inkjet or toner technologies and suited to 'print-for-use' business models. There remains a need for education amongst label printers as flexible packaging materials and end uses are entirely different. That being said, it's likely we'll see more and more label converters moving into flexible packaging as opportunities present themselves.

Adding value is another area of opportunity for label printers deploying digital. In the ongoing battle to win at the 'Moment of Truth' and offer the greatest shelf appeal, more and more systems are being introduced to enhance

and embellish digitally printed labels with either post-print analogue processes, or newer digital-native systems that can apply foils, varnishes and other visual effects, as well as haptic elements to appeal to consumers' desire to touch and feel.

As such, I believe that the label industry is well placed to embrace the next iteration of digital transformation, coupling its engrained knowledge of digital printing coupled with a capacity to adapt and change. Rather than being fretful, the label industry is looking forward to how digital can future-proof business and is ready to embrace all the opportunities this will present. Let's keep a close eye on this at virtual.drupa!