

17th to 20th April 2013
www.graphispag-digital.com

Offering printed products with more added value is key to the growth of the graphics sector

New technologies reinvent printing

Bespoke digital printing on demand, interactivity of graphic products with on-line media, web-to-print, electronic printing, 3D printing...are the latest trends that are revolutionising the printing sector. They give the over 10,000 graphics companies in Spain innovative business models and various possibilities of reinventing or repositioning themselves. Doing so in times of crisis and of accelerated change is more difficult but, at the same time, more urgent.

Yesterday, they only printed in large quantities of paper. Today, they have to be suppliers of graphic communication services, who continue to specialise in sheets and reels but are also capable of printing unique products on demand on any material, of using e-commerce platforms to contact their clients and of looking for maximum interactivity with new technologies.

The graphics industry is undergoing an authentic reconversion at a dizzying speed, obliged to adapt to the digital media boom, to new consumer habits and to the crisis. Many companies in the sector have turned necessity into a virtue and are turning their businesses around. In order to help them define and face this new stage, graphispag.digital, a show with new digital printing equipment, innovative substrates, workflows, software and cutting edge graphic applications, as well as numerous inspirational proposals to reveal the areas in which printing still has great growth potential, is coming to Fira de Barcelona from April 17th to 20th.

The President of graphispag.digital, Rafael Farrés, says: "the future development of the sector will not come from the increase in volume of printed products, but from the increase in value of those products". And, more added value, he adds means "expanding the offer of products and services and interacting with electronic media, such as print on demand, interactive printing –QR codes, augmented reality and smart labels– and web-to-print".

Along these lines, many companies are already using hybrid technologies, which combine traditional systems, such as offset, with digital printing in order to increase flexibility and reduce costs. Others have opted for specialisation (large format, packaging, textile printing and "green printing") and, meanwhile, emerging businesses based on digital printing on any substrate, electronic printing and printing on 3D objects are appearing.

Does conventional printing have a future?

"Any printer taking no action and simply awaiting an upturn in the economy is in for a shock as any lost volumes are likely to be lost forever". This is the emphatic opinion of Nick Waite, Head of Market Research at the prestigious consultancy firm Smithers Pira, on the graphic industry's situation. For Waite, the decline in demand for print on paper will persist "in the short term, affected by the global economic slowdown; and in the long term, mainly due to the impact of competing electronic communication media".

Javier Rodríguez Borlado, Head of R&D at the Tajamar Technological and Graphic Institute, agrees: "printing will continue to decline in areas where the printed product provides a poorer service than the digital product and it will continue to hold its own, or even grow, in fields where it brings added value or where it cannot be replicated, such as packaging or labelling". He recommends looking for synergies between printed products and the digital field: "Companies that know how to offer users of social networks the opportunity of communicating through printed products too will generate a lot of print output". For Rodríguez Borlado, trends in consumer habits are clear: access, generation and enjoyment of communication from mobile devices, customisation and greater participation of end users in the creation and distribution of contents. In this scenario, it is evident that graphics companies need to adapt to the changes, the difficulties in obtaining necessary financing are also obvious.

From web to print in one click

In this situation, the best ally of companies if they want to operate in a global market and make direct contact with end users is the Internet. Implementing web-to-print technology is one of the best ways to achieve it since it connects the production department with users, who decide the design of their graphic product, put in the content they want and get it printed professionally.



Pixartprinting is one of these online platforms from which you can design and print cards, posters, photo canvas prints, vinyl, fabrics, cardboard stools and an endless number of products. It was founded in 1994 as a traditional printing firm but, in 2000, it was transformed into an e-commerce digital printing company. This company's business model, ground-breaking at the time, allowed it to achieve undisputed leadership in Italy, and become one of Europe's largest online print businesses in Europe. Today, with 260 employees and 80,000 clients it is still growing and has a plan to expand across the border. According

to General Manager, Alessandro Tenderini, "we are witnessing a slow but inexorable passage from traditional printing to online printing where the offer of products that clients can request is increasing and being enhanced".

Impresum.es also went over to web-to-print after 10 years as a traditional offset printing company. "We realised that processes were endless with conventional workflow", said Dani Matoses, head of client services. They opted to adapt to new consumer habits and offer bespoke services. "The user is king in the internet and has the power to make decisions; we can only make recommendations". Impresum also offers something extra: green printing. "We encourage maximum use of recycled paper, we reduce waste and energy consumption as much as possible, we do not use chemicals in prepress and only use vegetable-based inks".



Printing smart labels, batteries and sensors

Experts say that emerging businesses do not come from nothing, but from industries with a long tradition and very valuable know-how. This is the case of the graphics industry, which has contributed to the birth of printed or functional electronics: the manufacture of electronic and photonic devices and circuits using conventional printing technologies. They are flexible, ultra-thin and cheap photovoltaic cells, integrated circuits, sensors, flexible screens and batteries that can be printed on packaging, fabrics and other surfaces.

Some applications are already on the market: RFID labels, printed batteries for electronic devices, flexible photovoltaic surfaces and glucose monitoring sensors for diabetics. Others will soon transform our lives, according to Jordi Carrabina, President of PEC4, a cluster of 5 technological centres in Barcelona dedicated to printed electronics. "Their growth in lighting and photovoltaics will be imminent; we will have mass production in RFID and batteries in 2-3 years and, in biomedical

and food and beverage areas, we will have to wait around 5 years", he says.

The company from Murcia, Vivainnova, has already started to market a low-cost automobile battery tester manufactured in flexible plastic lamina. It is placed in the vehicle's glove box and lets you know when to change the battery. For Julián Serrano, Managing Director of Vivainnova, "functional printing and 3D printing open up new perspectives for an industry, like the graphics one, which is excessively dependent on habitual markets and applications". Carrabina, from PEC4, agrees: "it is an opportunity for reinvention, not only for printing companies but also for those related to lighting, photonics, machinery, chemistry and materials".

3D printing: the latest revolution

Printing a three-dimensional prototype, model or jewellery is already possible with a 3D printer. But, can you imagine printing a kidney from stem cells? Or a kneecap that is stronger than a human one? And what if we manage to print materials on the Moon, instead of transporting them there? It appears to be science fiction but they are projects under research in various universities around the world. Every day, 3D printing becomes more perfect, more versatile and more economical and, according to experts, it will transform medicine and cause a new "industrial revolution".



Hewlett Packard, Roland DG and the Spanish firm Protorapid already have 3D printers on the market, while dozens of companies are discovering original business models with them. In Japan, for example, you can already enter the first 3D photo cabin and come out with your own miniature

figure. Closer to home, the Catalan company Crayon Creatures prints children's drawings in 3D. Their creator, Bernat Cuní, a graphic designer, who wanted to give life to one of his daughter's drawings said: "after an initial test with a domestic 3D printer, I printed it professionally with the colours of the original drawing. The result was so pleasing that I decided to turn it into a service". Cuní also works in jewellery and decoration and studies new business models: "before, doing things was a privilege in hands of an elite, but now you can decide to do it. 3D gives people access to production media".

Graphispag.digital will feature these trends in Image&Print Congress and in the presentations that will be taking place in Image&Print Corner.

Author:

Natàlia Torrent for graphispag.digital

*The contents of this article can be reproduced totally or partially.
If reproduced, graphispag.digital should be quoted as the source.*