



Digital Dots

Spindrift

Volume 7, Number 10 • 2nd March, 2010

News Focus • Opinion
Reviews • Technology
Interviews • Ranting
Psychotherapy • Fun

...Bamboozling The Graphic Arts Industry Since April 2003

The products of all quarters of the globe are placed at our disposal and we have only to choose which is the best and cheapest for our purposes, and the powers of production are entrusted to the stimulus of competition and capital.

– Prince Albert's speech following the Great Exhibition of 1851, the forerunner of IPEX

Dear Reader,

Trade shows are arguably an anachronism in this, the age of instant messaging and immediate digital interactions. The Internet has created new communications channels and modes of interfacing with people and information. It's changed our expectations for how we share knowledge too.

But there's still nothing in the digital world to truly match the experience of touching, feeling and seeing new technology in action. Even the smell of it is exciting and, as yet, impossible to equal in bits and bytes.

As we start the countdown to IPEX, this is something to keep in mind: there is no substitute for being there. If you're interested in digital production and print technologies, IPEX is your best opportunity this year to make some serious inroads into strategies for the future.

Enjoy!

Laurel, Nessian, Paul and Todd

In This Issue

IPEX Coming into View

Just in case anyone has forgotten that the IPEX show is due to get underway in a few short months, Laurel Brunner has been to an early preview and uncovered a few gems that will be worth seeing at the show itself. Stay tuned for further reports from IPEX in the next few issues.

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From start to finish

Workflow used to be all about helping printers organise their internal production, but with the addition of other areas, such as web-to-print and CRM, it has become increasingly customer-focussed. To better understand this, Nessian Cleary examines the Kodak approach to workflow which is now moving into the creative sphere.

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New trends for monitors

Now that LCD displays have proven themselves in the high-end monitor field, many manufacturers are starting to turn their attention to other issues, such as ecology and ergonomics, as Paul Lindström discovers.

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News Focus

Ricoh has released a new printer for the light production sector, the Pro C720. It prints at up to 72 pages per minute, on coated and uncoated stock up to 300gsm. Resolution is 1200 x 1200 dpi and there's a mechanical paper registration unit for better registration accuracy. Paper can be loaded and toner bottles replaced on the fly. Trained users can replace a number of key components (OPC belt, developer, charger unit, drum cleaning unit, belt cleaning unit and paper transfer roller unit) instead of waiting for a service engineer. It comes with an EFI Fiery controller.

Epson will launch its Digital Label Press at IPEX. It uses Epson's Micro Piezo inkjet technology with an enhanced 6-colour pigment ink system that will print to various media, including standard semi-gloss, film and matte label stock up to 320 microns thick and rolls from 80-330mm wide. It runs at five metres per minute. The label press has been shown in beta format at various shows over the last couple of years.

Agfa is to start selling XMPie's range of web-to-print, variable data and online marketing products alongside its own Apogee workflow. Bart De Pelsmaeker, head of software at Agfa Graphics, commented: "Through shared know-how, an extensive product portfolio mix, we can

offer customers a fully integrated solution. Jobs created in XMPie, flow to Apogee Portal and Prepress for automatic production processing of the proofs and plates."

Agfa has also claimed 6000 installations of its Apogee workflow, with 30% of users upgrading their system to the latest version 6.

Xanté has brought out three new Illumina digital printers, the heavy-duty Illumina Digital Envelope Press GT, high-end Illumina Digital Production Press GT, and entry level Illumina GL 330. The two GT models boast EFI controllers and a new platform supporting 1200 x 1200 dpi resolution and are aimed at higher volume applications.

Mimaki has announced a new textile printer, the TX400-1800B, a large format inkjet device suitable for the apparel, furnishings and soft signage markets. It uses an adhesive belt carrier system to stabilise fabrics that have a tendency to stretch and contract during printing. It has an eight-colour inkset, a 1.8m print width and can reach production speeds of around 25sqm/hour.

Fujifilm has added three new large format papers. This includes a 255gsm microporous paper in satin or gloss for dye, pigment and some UV printers. There's also a Premium Lustre, similar to the Pearl range of photo papers, and an improved version of the matt bond paper, now called Premium Matt Bond. Fujifilm will also market PremierArt Eco Print Shield, a water-based protective coating designed specifically for water resistant inkjet media, which can be applied by brush, roller or spray gun.

Seal Graphics has launched a low cost anti-graffiti laminate file, PrintShield Pro Gloss, a solvent-based, pressure-sensitive laminate suitable for outdoor applications such as those using rigid PVC or aluminium composite panels. As well as protecting against UV, it also resists degradation by cleaners and chemicals commonly used to remove vandalism caused by marker pens and aerosols.

Four Pees has announced updates to PrintFactory and ProofMaster both of which it markets and distributes exclusively. PrintFactory v4 aims to be more of a wide

Spindrift

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▶ format workflow rather than just a RIP. It has a new WebFront that offers end customers an online portal to deliver and review their files to a printer and to see the production specifications. The Production Editor offers advanced tiling and there's an automation platform based on Enfocus Switch called PrintFactory Flux.

Meanwhile, ProofMaster v4 now comes in two editions. ProofMaster Plus has an enhanced editor for last minute corrections and gives a color accurate representation of the job before creating a hard copy proof and sending it off to production. It also boasts Generic Driver Technology that will drive any device that is installed on the system, albeit without guaranteeing colour accuracy. There's also a Certify edition for out-of-the box standard compliant proofing.

Jo Comu is to step down as CEO of **Agfa Gevaert** after the shareholders AGM on 27 April. At the same meeting, the board of directors will propose electing the president of Agfa Healthcare, Christian Reinaudo, to the board so that they can then appoint him as CEO. He will continue to head up Agfa Healthcare.

Meanwhile, Agfa-Gevaert has released preliminary figures for the last quarter of 2009 which show sales of €735m, a drop of 3.4 per cent against the same period of 2008, or a mere one per cent excluding currency effects. The Graphics division recorded sales of €356m, down by 6.8 per cent on 2008, though showing signs of a recovery compared with earlier quarters in 2009.

Pakready has launched a new version of its packaging development system. Pakready LRS combines high quality colour printing with the capabilities of a much enhanced network cutter and creaser. It also integrates with Pakready Creator CAD design program, which now includes a bi-directional interface with Adobe Illustrator for exporting cut and crease wireframes.

GMG has updated its ColorProof to version 5.1 which is now compatible with Windows 7 and supports 64-bit computing, providing both 32-bit and 64-bit software. It also has drivers for the Epson Stylus Pro WT7900 wide format printer. Other new features include the advanced printing of legacy jobs, improved automatic nesting for

saving media and time as well as the ability to define custom settings as default for jobs to enable the faster creation of manual jobs. Furthermore, a major overhaul of the gamut mapping algorithm guarantees best photo reproduction and new GMG ProofStandards are available out of the box for high quality proofing as well as new PSR profiles.

GMG has also released GMG FlowConnect designed to work with Enfocus Switch. It gives users a central point of control over the ColorServer and InkOptimizer 4.6, as well as offering load balancing. The technology behind FlowConnect will also serve as the basis for future workflow solutions.

EFI has updated its XF platform to v4.1 to drive the Epson Stylus Pro WT7900 for the packaging proofing market. New features include easy and flexible white ink handling on difficult substrates such as transparent and metallic media, contone and dot proofing, accurate spot colour reproduction, easy printer linearisation and profiling, and multiple printer support.

AVT/GMI has said that it will demonstrate a new generation of automated closed-loop colour control and remote ink control at IPEX. This includes the GMI Microcolor/Mercury remote ink control, which adds a graphical, fully touch-screen enabled workstation and enables advanced automatic ink settings and control on virtually any model of litho or letterpress machine.

ECRM has updated its WorkMates prepress workflow to version 4.0. New features include Copy Source, which enables users to copy files automatically to other folders in the workflow, as soon as they arrive into a designated hot folder. It's also possible to copy RIP'ed files to other folders, and boasts automatic job tracking and archiving.

Kodak has opened a second production line at its Xiamen printing plate manufacturing facility in China. Diane McCue, General Manager, Printing Plates, Graphic Communications Group, and Vice President of Kodak commented: "The expanded manufacturing line in Xiamen will introduce Kodak's cutting edge production technologies, which will make the plant the most advanced plate manufacturing facility on our global map."



Press-Sense has promoted Amir Shaked from head of its American operation to CEO, replacing Shlomo Ben David, who is stepping down from the day to day running of the company. Shaked says: "I am committed to realizing the Press-sense vision of end to end business flow automation based on an open platform, and to the strengthening of our strategic relationships through alignment, transparency and execution. I have already begun making changes inside Press-sense to reflect this new direction."

Global Graphics has appointed Mike Finta as development director. He has over 25 years experience in the software and IT sector. He will report directly to CEO Gary Fry.

German MIS developer **HiFlex** has a new web-based quality assurance system, Hiflex Live. It notifies users when updates and patches become available, or of potential problems such as a disk running out of capacity. It also gives users some feedback as to how to optimise their system.

Software developer **Axaio**, has updated its MadeToPrint range, with added support for InDesign Markup Language, Flash CS4, SWF and INX formats. It includes its own preflighting and also integrates with InDesign's own Live Preflight.

Callas has added the ability to convert Microsoft Office documents, spreadsheets and presentations to rule-compliant PDF/A in its latest pdfaPilot 2.1 release. Other features include better document conversion to the PDF/A-1a standard. Callas says that PDF/A-1a is superior to PDF/A-1b because of its support for accessibility and eBook readers.





News Analysis

Océ has launched a new version of its flatbed UV printer, the Arizona 550 GT. Starting with the launch of the original 200 GT back in 2004, the Arizonas have been the best-selling flatbed printers of their class of all time, outselling all of their rivals combined.

This success is because Océ has got the mix right, combining a relatively low price point with excellent print quality. Much of this is down to the variable-droplet printheads giving a resolution equivalent to 1440dpi. Océ also claims that because of the variable-sized droplets there's no need for extra colours, which in turn leads to lower ink consumption, an argument that has found favour within the display print market.



Océ has doubled the number of printheads on the Arizona 550 GT to double the speed.

The new version boasts double the speed of its current 250GT model and will be an addition to the line-up rather than a replacement. Product manager Jeff Edwards explains that it wasn't really possible to increase the speed that the heads moved across the media, so Océ has simply doubled the number of heads, giving it a much wider print swathe, and a production speed of up to 40m² per hour.

In addition, Océ has added an Express print mode, which can print at up to 67m² per hour, while still delivering a reasonable print quality.

Océ claims that print quality is identical to previous Arizonas so that customers can be confident that repeat jobs printed on older models will come out the same. However, although Océ is using Toshiba Tec heads as before, the 550 GT does have a slightly later version of these heads.

It uses Sericol CMYK inks, with an option for white ink, and in practice most customers do order this. There's also an optional roll-feeder that takes media up to 2.2m wide. It comes with an Onyx RIP.

The flatbed table accepts media up to 1.25x2.5m wide and 50.8mm thick. Océ has also said that it plans to introduce an XT version within a few months, which will have a 2.5 x 3.05m bed. As with the current 350XT, the table will have separate vacuum areas, allowing users to print on one half, while loading media onto the other side.

Alongside the other Arizonas, this printer will also be rebadged by Fujifilm, which will call it the Acuity Advance HS.




Heroes & Zeros

Hero

Pazazz Printing's YouTube film presenting a dedicated print fanatic and his team who absolutely adore print. Pazazz Printing is a Canadian company based in Montreal, Quebec. The company recently won Canada's National Association for Printing Leadership (NAPL) award for marketing excellence.

▶ You can see why we love this for yourself: <http://www.youtube.com/user/PazazzPrinting>

Zero

Unisource Worldwide Inc. This paper company is promoting a line of office papers called the Save-A-Tree brand. They claim that if you use this line of products you will be "Saving trees by using high quality 100% recycled paper products." Greenwash? More of a green scrubbing!



Green Shoots

The ISO TC 130 Task Force on the carbon footprinting of media now has 35 members from 11 countries. The next official meeting is in St. Gallen, Switzerland at the end of April. It's not too late to join if you're interested, so get in touch with your national body.

Paper sludge is being considered as a possible replacement for plastic packaging. Margarita Calafell, a researcher in the chemical engineering department at UPC in Catalunya in Spain has applied a biotechnological treatment to paper sludge to create a replacement for plastic packaging. Apparently one kilo of paper yields one kilo of the new material, by modifying the structural and chemical characteristics of the raw cellulose. The new material is dense, flexible and fire resistant, and can be used in place of many plastics or rubber.

Carbon dioxide emissions at M-Real's Husum pulp and paper factory in northern Sweden have fallen by almost 50% since the mid 1990s. The company has increased its wood

bark burning capacity, and improved evaporation and energy savings to significantly reduce oil consumption. An internal climate programme that M-real ran between 2005 and 2009 reduced the plant's total steam energy need by 10%, saving 4,000 cubic metres of oil, equivalent to about 12,000 tonnes of CO₂. In the last five years electricity usage at the plant has fallen by 43,000 MWh and will drop by a further 17,000 this year.

A new initiative backed by 34 financial institutions with \$3.5 trillion in collective assets under management, has been set up. The goal of the *Forest Footprint Disclosure Project (FFD Project)* is to help investors identify how an organisation's supply chains and business activities contribute to deforestation. The project has recently published its first annual review, which concludes that deforestation has only limited recognition amongst the world's major corporations. It encourages companies to look more closely at their environmental impact and commitment to a low carbon economy.

Verdigris

Please take part in the Verdigris Environmental Awareness Survey. We value your opinions!

<http://verdigrisproject.com/survey>





An Interview

During the recent IPEX Media Summit we had a chance to catch up with Graham Moore, Director of Production Printing, Ricoh Europe PLC. We asked him to give us a longer term view of the company's interest and commitment to the graphic arts industry. Here is a summary of the interview.

Spindrift: Ricoh has come relatively late to the digital press market. What was the primary motivation for this move?

Graham Moore: Ricoh has grown to be a successful and global business as a result of our innovation, expertise and market foresight. The move was an expansion of our core business, into an area where we believe we can add value and bring a fresh approach to the market. We already had a strong foundation in the printing market and a global service and support network.

In many respects, the development of Ricoh's own digital production colour presses like the Ricoh Pro C900 and Pro C900S, and now the Pro C720 and C720S are natural extensions of our portfolio of market leading production black-and-white ranges, colour capable multifunction printers and full colour systems. The market segments these presses address are adjacent to our original core offerings.

Our Ricoh Pro digital colour presses are complementary to our ongoing partnership with Kodak with the NexPress cut-sheet digital colour press range. And of course the InfoPrint Solutions continuous form printers.

S: Where is Ricoh's digital printing presence strongest in the world?

GM: Ricoh is increasingly strong in digital printing worldwide, including EMEA and North America. The regions with significant recent channel acquisitions have broadened and deepened our reach and expertise in those areas.

S: What is your ideal customer?

GM: Our total portfolio addresses the needs of a widening range of customers in the broad definitions of commercial and corporate printing, covering the defined segments within these markets.

We are most inspired by customers who are pushing their businesses forward and meeting the needs of their customers in the most innovative and effective ways. Those are the ones who we work closely with to develop applications best addressed by digital printing solutions. And, more specifically, customers seeking a production print partner who will support them with a consultative approach to achieving increased productivity and profitability.



S: To what extent are you selling services versus hardware?

GM: Our results confirm our trend towards services from hardware. For example, recent analysis by our Ricoh Global Services Europe organisation, which address the needs of Fortune Global 500 and other international major accounts, detailed overall growth driven by production

▶ printing and managed document services including outsourcing.

S: How much of an increase do you expect the printing industry to contribute to Ricoh's revenues, from the current 4%?

GM: The printing industry overall is already a significant source of our revenues, which extends beyond the pure production printing products and services. We expect the percentage that production printing contributes to increase and it is an extremely focused and important part of our business strategy, in addition to other areas of our business such as outsourcing and managed document services.

S: What do you think of the Canon/Océ deal?

GM: Any development that increases the financial stability of vendors to customers is positive. There is evident consolidation of manufacturers and channels worldwide.

Ricoh has made its own acquisitions of Hitachi Printing Solutions, Infotec and Ikon, as well as the joint venture with IBM to form InfoPrint Solutions. We're now leveraging the value from these assets for our customers.

S: Are there any other acquisitions planned for Ricoh?

GM: We are unable to provide any information.

S: What is the intention for InfoPrint once the merger deal completes in June?

GM: InfoPrint Solutions will become an independent business unit within the worldwide Production Printing Business Group in Ricoh.

This continues our current approach so it will be very much business as usual. Our teams are increasingly cooperating to ensure together we can best meet overall and individual customer requirements.

S: Have you any plans to forge an alliance with a press manufacturer? If yes, what? If no, why not?

GM: We are unable to provide any information.

S: Well, well. Interesting indeed! To what extent do you focus on printing training, for instance such things as colour management or standards such as ISO 12647 and the PDF X series?

GM: The Business Driver business development programme I announced at the IPEX media summit includes a range of customer business development services. We are developing these services to include expert consultancy and training for customers to meet their needs.

We already provide extensive training to our customers delivered by our own resources such as our professional services consultant and customer training teams, and with our Ricoh Production Printing Academy in Europe. And we are complementing this with expert partner and independent consultant and training skills when needed.

S: What skills do you look for in your sales, marketing and support people?

GM: From a cultural outlook we look for people that will share our company values, which means we focus upon their talent to deliver results, have respect for others, and a socially responsible attitude.

We also look for appropriate production printing customer-related skills and develop these with internal and external learning, development and experience. We recruit people who are committed to delivering excellent levels of proactive and reactive service throughout the life of the relationship, providing the partnership-based support that enables customers to focus with confidence on building their digital print business.





Did You Know?

...that you can (and should) measure the nip pressure in your printing press? There are several potential problems that can be caused by running a press with the wrong nip pressure, even if it's only slightly out. If the nip pressure is too low it will lead to poor transfer of ink and water to the paper and so to a poor printing result.

On the other hand, if the pressure is too high it will lead to plate deterioration and generate too much heat. The latter might not be easily detected, but it is still seriously negative in the long run. Too much heat generated will affect the rheology of the ink and water and the behaviour of the two together, as well as using up more electricity than necessary - bad for the environment and the profit margin.

The Swedish company Nip Control, together with Hansson Consulting, has developed a software and hardware solution that can measure the pressure inside the cylinder nip, in order to find the perfect combination of blankets and underpacking. But why should this matter - can't you test that out in the same way as has been done since offset printing was invented?

Yes, you can use the trial and error method for this. Trial and error has been the rule up until lately. The benefit of Nip Control's method is that the printing result can be optimised and connected to a certain measured value.

The complete system is called Pressure Indicator and consists of a measuring device, a sensor and the evaluation software. By allowing the cylinders to pull the thin sensor blade through the nip, the pressure can be shown instantly. The software shows a pressure curve, from which the peak value can be determined. Besides helping to determine the correct nip pressure much faster, the system can also be used to evaluate what kind of blankets last longest, while maintaining good printing conditions. Maintaining correct nip pressure helps maintain the highest possible print quality over time. More info on price and availability can

be found at www.nipcontrol.com or from Rolf Hansson Consulting: Tel. +46-705 42 56 65.




Picture This

Last month Océ showed off a new printer, the Colorwave 300, a multifunctional wide format device for documents and CAD drawings, which uses the CrystalPoint technology that Océ first showed off back at drupa 2008. CrystalPoint involves solid round toner pearls, which are melted and then jetted onto the page. Océ originally intended to use this technology in its technical document wide format printers, but such is the quality of the print, that many customers are using these machines for graphics work.



The toner pearls themselves, looking very much like the Gobsmacker sweets we used to have as children, are easily handled. They are quite solid and, unlike the sweets, they don't melt in your hand.



IPEX Coming into View

IPEX has its origins in the Great Exhibition of 1851. That show lasted six months, during which period 6.2 million people came to gawp at 13,000 industrial exhibits from around the world.

When it was over one of the organisers, Henry Cole, said its most important effect derived from the fact that it had happened at all. Many an exhibition organiser will empathise with his view, and when IPEX closes on the 25th May it's a view the organisers will surely share: IPEX's traditional market is an industry in turmoil. For the last few years the printing industry has been plagued with contraction and uncertainty, a market infected to its very bones by the digital revolution.

The world of print no longer belongs to the giants, such as Heidelberg and Manroland, and their many customers. Digital arrivistes, giants in their own realms of press manufacture and printing, eclipse both constituencies. In response, IPEX and its core customer base are reinventing themselves to reflect the digital reality of modern print media.

Some of what's being done and a few spare glimpses of new technologies and future directions for the industry were presented at a recent summit for the world's trade press. Digital printing and the associated data management are high on the agenda, along with web-to-print, workflow and business development partnering.

Web-to-Print

Web-to-print is extending the do-it-yourself model to print buyers. And web-to-print for commercial purposes, rather than exclusively as an aid to workflow and productivity, is gaining steady traction. Red Tie and Ricoh both presented options for hosted services, the so called Software as a Service or SAAS model, where one pays for the use of the software without having to actually buy it.

Web-to-print is undoubtedly a tool for growth, both in terms of volume and the scope of work a printer provides. Much as electronic prepress in the late 1970s and 1980s brought down the cost of print media and made it accessible to a wider market, web-to-print has the potential to wreak similar havoc. It supports new ways of selling and reaches new customers and for printers is a means of reducing administrative costs, and boosting production efficiency along the way without requiring additional specialist skills. Having the technology as a hosted service removes much of the pain that has been a barrier to wider web-to-print adoption.

Red Tie started life as a web-to-print printing company producing calendars and other printed materials. It developed its own technology to support the business and soon realised that the technology had legs. Red Tie now has over 100 customers in the UK and a growing base overseas, including HP which uses Red Tie for some of its corporate print buying. Founder and CEO Marian Stefani and her small team "believe web-to-print is about embracing web technology to support all kinds of output".

Red Tie follows the principle that web-to-print is about control of a relationship with customers and a means of developing new business ideas. Red Tie's hosted technology costs around €200 per month, plus a flat fee of €1.15 per transaction and is available in two versions, RTT (Red Tie Template) an interface between printers and their customers, and RTQ (Red Tie Quotation) for more experienced users.

Most printers opt for RTT, which provides access via the web and controlled log-in to documents and branded templates for print products. These can be edited and include variable data and wide format output options. RTT also includes basic e-commerce support, so it's basically an online shopping cart and print manager for anything the printer wants to put on its site. This could be all manner of print, but also personalised goods such as pens and clothes.

RTQ is a more ambitious version that gives users more control over print jobs, with uploading, track and trace and





The Ricoh Pro 720

an interface into MIS technologies. It also has a quotation tool and business logic to fix spellings. Commercial logic links order options to the user's log-in, to control what can or cannot be ordered.

At IPEX Red Tie's focus is on growing and extending its range of services, so it will present its API (Application Programming Interface) for printers who want to do more with the RTT technology. The company is also developing a library of images where the usage cost is built into the product order details, so that image owners are paid according to how often images are used. We can also expect an announcement soon about "some unexpected partners for the Red Tie technology".

Red Tie is one of a new generation of service providers. Many printers will embrace the company willingly, simply to save themselves the hassle of dealing with web-to-print. But Red Tie is not the only option: a hosted web-to-print system from Ricoh will also be presented at IPEX.

Ricoh is so far unique amongst digital press suppliers in launching a hosted web-to-print system at IPEX. NowPrint is an SAAS for hosting and managing web-to-print, available on a subscription basis. Printers can use the service to avoid the hassle and overhead of managing their web businesses. Developed by Nowdocs, NowPrint has an active-document previewer and can integrate with XMPie for customised variable data campaigns. It includes tools to manage procurement paths on a customer basis so the printer has control over what they can order, billing terms and workflow.

There is also an entry level version of NowPrint called ASAP. This has all the features of NowPrint, with more limited site support, less enterprise data storage and lower job volumes. It also lacks support for quotations, XMPie and fulfilment tracking. ASAP is available as a trial version through Ricoh's new Business Driver programme.

Like competing services from Xerox and Canon, Ricoh's Business Driver programme is a suite of services for production printing customers. Available via Ricoh's extranet it has modules tailored for different business sectors and job functions. Multiple languages are supported including English, German, French, Spanish, Italian and Dutch, and it includes a knowledge base, e-learning and event services for customers.

Ricoh is a relative latecomer to the professional printing industry, but it's a name to watch at IPEX. Since launching its C900 digital press at drupa in 2008 it now has a fleet of engines ranging from the Pro 907/1107/1357EX monochrome engines to the colour Pro 720 and Pro C900 colour engines. The company also sells the Kodak Digimaster and Nexpress presses and the InfoPrint 5000, a rebadged Screen machine. Of Ricoh's \$21 billion of worldwide revenue \$5.2 billion comes from its European operations. A mere €200 million, excluding InfoPrint sales, comes from the European graphic arts business, but Ricoh plans to increase this figure substantially.

The company has some unique advantages over its more prevalent competitors, primarily its web hosting service and its long-term commitment to sustainability. Although

▶ matters green have faded somewhat from the print industry's collective conscience in the recession, its long term importance will not disappear. As Peter Williams, head of production printing for Ricoh Europe explained, for Ricoh "sustainability is in our DNA". The company has zero waste to landfill at its major production sites worldwide and sustainability will be an important part of Ricoh's message at IPEX.

There will be other Ricoh announcements at the show including new controllers based on Creo and EFI technologies, and more details about what happens to Ricoh's deal with Screen once the InfoPrint deal concludes in June. Other announcements such as a continuous feed colour engine based on inkjet technology, and a wider format device are also expected at the show.

Xerox will also be highlighting its web-to-print technology at IPEX, with live showcases of cross media production based on its XMPie web-to-print technology. However Xerox's most recent focus has been squarely on its digital colour output engines and at IPEX this won't change.

Go Digital

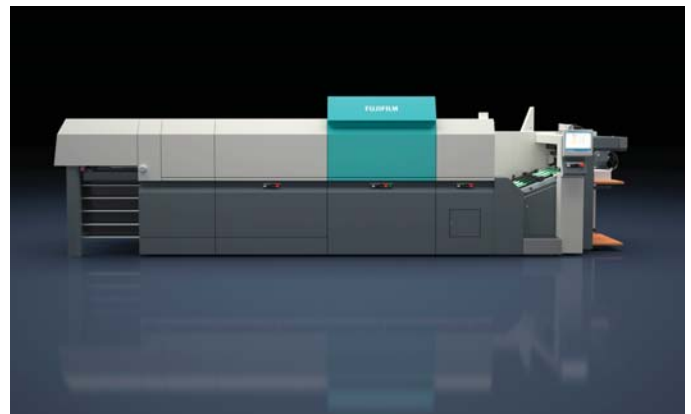
Digital printing has seen a dramatic upsurge of late, and high speed digital presses are one of the main attractions at IPEX. There will be new machines from both dedicated digital developers and companies more attuned to conventional print. At IPEX in 2006 companies offering products based on digital technologies accounted for 26% of exhibitors but in 2010 the number is rising to 38%, according to the organisers, IIR.

The increase is mostly at the cost of providers of litho presses, which have dropped to 26% of floor space from 41% in 2006. Of the largest stands, 80% are digital, with HP the top of the list with 3,000 m². Both Heidelberg and Xerox have shrunk their stands by around 50% over their 2006 spaces. Overall the committed space covers 57,000 m² and IIR is hoping for 60,000 to 70,000 m² by the time the doors open. This is about 15% down on 2006, but several manufacturers of digital presses including HP, Fujifilm, Canon, Océ and Ricoh have taken larger stands. Fujifilm is one of the few traditional manufacturers to be increasing its presence at IPEX, with 1700 m². It is also one of the few traditional manufacturers to be in reasonably

good financial shape. According to Ryuta Matsui, vice president, revenues from the graphic arts marketplace are up to ¥59 billion for Q3 of 2009/2010 from ¥58 billion for the same quarter in the previous year and plate revenues are now back to where they were prior to the recession.

At IPEX the company is presenting its new digital press, the Jet Press 720 B2, which it describes as "the future of short-run print". Digital inkjet machines are certainly the future for short-run work, but whether or not it will be the Jet Press 720's future only time will tell. But the omens are good: unlike most of its competitors Fujifilm has developed a press that can literally be slotted into the spot where once a litho press stood.

The Jet Press 720 is designed for traditional commercial printers who want to be more competitive for short run colour and for digital printers who need a larger format press to attract a broader range of work.



Fujifilm Jet Press 720

The press is based on a Ryobi press with Dimatix Samba piezo-electric printheads for single pass inkjet printing at 1200 x 1200 dpi. Fujifilm's Versadrop greyscale technology controls the droplet speeds of three different droplet sizes so that drops as small as one picolitre land at the same space on the substrate with excellent jetting straightness. The new press uses water-based inks with rapid coagulation to control paper curl and dot gain. In order to further ensure sheet to sheet repeatability the press uses a CCD sensor to scan every sheet, making any adjustments necessary in real time. Fujifilm claim the quality is "unprecedented". Certainly the output samples that we've seen look superb.

▶ This press prints a 750 x 550 cm B2 sheet at 2700 sheets per hour, equivalent to 180 A4 pages per minute. The Jet Press 720 is perfectly designed for sheet-fed pressrooms where runs of less than 2,000 sheets are needed. It works with a very wide range of finishing systems because the sheets coming out of the press are dry. It isn't being heavily touted as a variable data device, however it's got the scope for this too.

IPEX will also be the first public showing of the Fujifilm Acuity Advance HS UV inkjet printer, just announced. The new engine, a rebadged version of the new Océ Arizona 550 GT, has a modified print head to "virtually double" print speeds, to 40 m² per hour.

Fujifilm's strategy with all this is to give printers technology that helps them succeed in today's economic climate. The company's technologies are designed to optimise both conventional offset and digital print produced in short runs. Fujifilm's stand will also host several Xerox engines as well as the Jet Press 720.

Xerox has been developing its markets beyond commercial print where Fujifilm is currently focused. The company has worked hard to catch Océ since it entered the continuous feed business a couple of years ago. It claims to be catching up and will focus on this area of its business with the FX980 at IPEX.

Inkjet technology developments are, according to Eric Armour vice president of Xerox's Global Business Group "progressing well and at IPEX we'll be sharing more with you on that strategy". So there is indeed a strategy with an inkjet technology offering that combines speed, image quality, substrate flexibility and low cost of ownership.

Matters for Xerox are complicated by the new Fuji Xerox colour presses due to be introduced for Asia-Pacific this summer. The two new toner devices apparently have output quality equal to that of an offset press. The 100 page per minute (ppm) Color 1000 Press, now released in Japan, and the 80 ppm Color 800 Press, due for release this spring, use a new highly vivid toner for enhanced colour quality. It will be interesting to see if Xerox, the sales channel for Fuji Xerox, decides to take on these engines.

By May the Canon/Océ deal should be done and dusted, but in the meantime there isn't much room for much more than blandishments regarding IPEX. A couple of new products lately launched will be on show in Birmingham, including the Arizona 550 GT, the low cost, very high quality engine available in various models outputting from 22 to 40 m² per hour. The machine is Océ's highest capacity machine released to date with options to print rigid or flatbed media. It also has an express mode to



"For the first time ever, visitors to IpeX will be able to take advantage of a new, free-of-charge training and seminar programme at the event designed to tackle the issues that keep most printers awake at night. Designed to accommodate up to 60 people, the Printers' Profit Zone will offer dynamic and interactive Master Class sessions." – Nick Craig Waller, Marketing Director of IPEX

print at up to 67 m² per hour, which is almost three times as quick as the previous top-end Arizona. Océ has also designed it to be cheaper to make than previous models to make it much more affordable, some 30-40% less than competing engines.

Workflow

Workflow isn't really a topic that lends itself to dramatic shifts; however, there will be some news at IPEX. Most interesting so far is Fujifilm's recent launch of version 3 of its XMF workflow system based on the Adobe PDF Print Engine (APPE) and IPEX will be the first public opportunity to see this technology. Written in XML, this latest version is designed to combine flexibility with process automation. It boasts improved colour management, advanced imposition suitable for web presses, and improvements to the XMF Remote web portal for viewing gatefolds and Z-fold impositions.

So far, despite there being three months to wait for the doors at IPEX to open, there is a surprising amount of new kit on the way, mostly digital innovations. IPEX will be the show where the full extent of digital technology's influence on printing will be glaringly obvious and impossible to ignore. To what extent the heavy iron brigade are reinventing themselves for IPEX, it's too early to say. What is clear is that survival depends on a digital connection, somehow to stay in the race.

- Laurel Brunner



From start to finish

As print changes from being the dominant form of mass communication, to one of several competing types of media, so the role of printers is also changing. We took a look at the Kodak workflow to see how vendors are responding to this challenge.

For some years now Kodak has pursued a policy of buying other companies left, right and centre, and stringing diverse technologies together. As a result, Kodak has created a large and unwieldy portfolio loosely joined together under the banner of the unified workflow. Given the state of Kodak's finances in recent years we thought this was a crazy approach. But, in the last year or so some of the briefings that we've had from Kodak have started to make sense. (We really hope this doesn't just mean that we're getting old.)

For some years now Kodak has pursued a policy of buying other companies left, right and centre, and stringing diverse technologies together.

Matthieu Bossan, Kodak's European solutions director, says that one reason behind the unified workflow concept is that offset printers are now adopting digital printers and want a common production workflow as well as a link to their business systems, such as an MIS or CRM.

He adds: "Another aspect is unifying your client with your workflow which has driven a lot of the development over the past years around our Portal InSite products and that gives printers an extended service offering to secure business with their client."

Clearly some printers will continue to compete as trade printers, but Kodak believes that the majority are looking for a deeper relationship with their customers, as Nigel Street, European sales manager for Kodak's unified

workflow solutions, explains: "I think that increasingly printers are trying to find ways to lock in customers, albeit with fur-lined handcuffs, by offering a wider range of services and trying to find ways to add value to the print section which has become very marginalised, very thin on margins."

Prinerger workflow

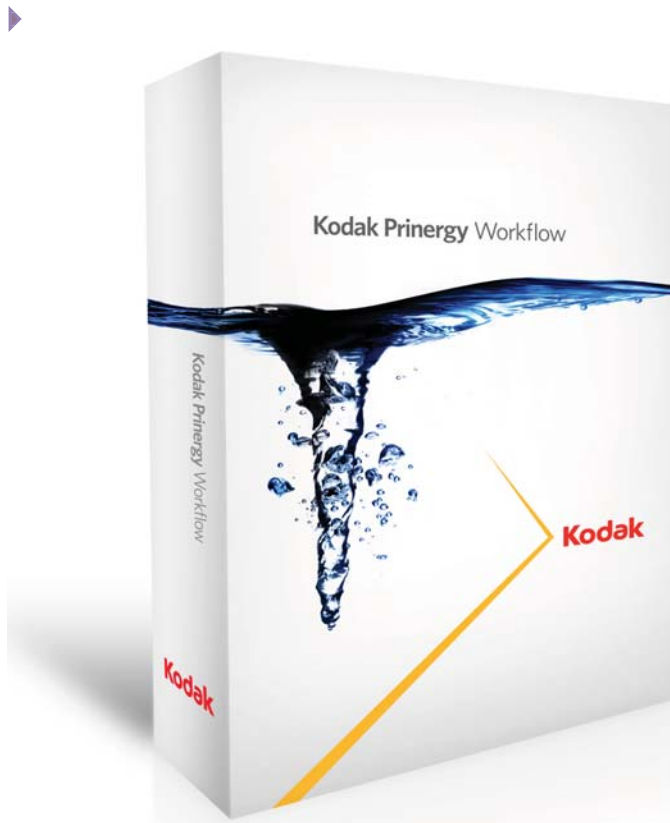
Kodak splits its unified workflow into two halves: production, which is essentially Prinerger; and Portal, which is a family of mainly web-based additional services.

Although the term workflow now means a great deal more than just the prepress, Prinerger still remains at the centre of Kodak's unified workflow. The main edition is Prinerger Connect, which has all the features that one would expect of a modern PDF-based prepress workflow, in terms of screening, imposition, colour management and archiving via an Oracle database. It has full JDF support and uses both the Adobe PDF Print Engine for native PDF files, and the older CPSI RIP for older legacy files.

Bossan says that automation is a very important aspect of Prinerger: "We give the user the ability to implement their own business logic how they want to work, so it could be things like deciding if you want to print the job digitally or offset, or it could be taking care automatically of archiving or any other process that you would like to do."

There's an entry-level version, Prinerger Evo, which has the same core technology, including the Adobe PDF Print Engine and imposition, but without the Oracle database. Bossan points out: "There are specific aspects like MIS connectivity that is not possible with Evo because we require a database to manage this, and the rules-based automation is only available with Connect as it makes use of all the job intent information in the database to automate your processes."

There are also Powerpack options for both Connect and Evo that add specific features for packaging. Bossan says: "Things like imposition don't really make sense in packaging so we use terminology that is more specific to packaging, from the step and repeat point of view, and we use Pandora rather than Preps, as well as a selection



of screening technology that is more applicable to the packaging environment.”

There’s also a Digital version designed for managing several digital printers in a pure digital environment. It is very similar to Connect, but the output formats have been restricted to the smaller page sizes found in digital presses, and with a lower price point to reflect this.

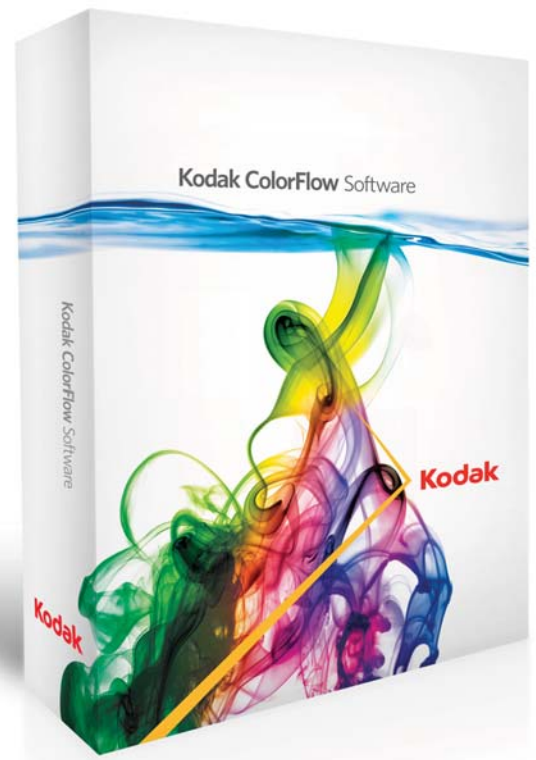
There are a number of other production tools, including proofing and the ColorFlow colour management. This is essentially a database of all the colour profiles in a print shop. Bossan explains: “You simply select the right colour set-up for a job – colour set-ups being defined by every characteristic of your print shop from the paper stock, the screening that you are going to use, the type of proofer that you have. Then Prinergy will automatically deliver the right profiles and curves at the right moment without any user interaction so we are trying to remove a lot of the errors that could be made by having too many profiles, and too many curves, too much colour information.” It only works with Prinergy, but Kodak is planning shortly to release a standalone version.

Portal products

When it comes to the online world, Kodak, in common with many prepress vendors, has a family of Portal products. These do work in conjunction with Prinergy, but they will also work as standalone products, as Bossan explains: “When you have Prinergy then you can push the job automatically through your production, but if it is standalone then it is a bit more manual but we can work it.”

There’s a prepress portal for online job submission, proofing and job status tracking, as well as web-to-print, and an InSite Asset library for hosting and finding images and other digital assets. There’s a number of proofing options, ranging from Matchprint virtual proofing, PressProof, for press-side monitor proofing and Smart Review for online collaboration.

There’s even an InSite version of Kodak’s Darwin VDP technology that allows it to be automated, such as in a web-to-print solution. Darwin itself is also available as a free plug-in for InDesign. Bossan says: “It’s also sold by other resellers including Ricoh and Xerox, and it works



▶ quite nicely from basic personalisation to barcodes and graphs.”

Bossan says that the portal products appeal to all types of customers, regardless of size: “They are certainly looking at web-to-print as a good example of a direction they should go, and you can subscribe to the software or you can buy it, so we have many different price points so that if you are price sensitive you can still get into that business.”



Matthieu Bossan, Kodak's European solutions director.

Bossan goes on to say that as the industry changes, the majority of printers are finding that they have to offer a total solution to survive. He says: “Printers feel that even with digital printing, even with variable data printing, at some point this will become a commodity because everybody can do VDP today, at some point people will ask for quotes from different printers to drive down prices.”

He adds: “Printers need absolutely to get involved in the project and nowadays this means they need to leverage the Internet to do that which explains why InSite is so strategic for us, and for the customers, because it just creates so much stickiness with their clients. Then it can

be really hard for them to go elsewhere and I think that many customers are starting to realise that.”

Among the portal products is the InSite Creative Workflow, which allows printers to offer a brand management service. Bossan says: “We have seen some of our printers becoming the biggest competitor to an agency. The InSite Creative Workflow is really meant to be involved much more upstream in the creative process so helping the enterprise or the brand to manage their projects and their assets. Everything is hosted at the printer site but they provide this space physically where the people in the marketing and the production guys get involved to validate a final layout before it goes to print. This is an interesting trend which shows that the printers are adding marketing capability more and more.”

Kodak has built on this with the purchase of an independent software vendor, Design to Launch, targeted at packaging brand management. It evolved from the design of the packaging to managing the entire marketing message up to and including a website. Street says: “We acquired that business very much to get further up the food chain, to help brand owners to be able to do that, but also looking at how that would then interact with our print customers.”

He continues: “We see a virtual circle there in that if we can help those marketers to improve the process and be more coordinated and involve their suppliers in the supply chain as well, then it forms a better and stronger relationship. So we can come at it from two angles, selling to the brand owners on the one side but also to the service providers at the other side, who may want to offer it as a service.”

Having it both ways

So, the unified workflow is about helping printers offer more than just printing to their customers so that they can move upstream into the creative process. Street says: “Our view very much is that we want to work in partnership with the printers who are our core customers.”

But Bossan makes it clear that Kodak is also selling its workflow technology to the creative agencies as well. He points out that several marketing agencies are already

▶
using Prinergy to create colour-managed, print-ready PDFs.

But for now, Kodak's activities are mainly limited to commercial and packaging printers, with services for marketing. Street says: "We would like to think that we will in time be bringing products to market that are specific to different key verticals. Publishing would be a very good example of that with the book, magazine and newspaper sectors and clearly there are workflows that fit in that space today and printing solutions in that arena."

This makes perfect sense given that Kodak has already said that it intends to tailor its Stream inkjet technology to better target specific market sectors, such as direct mail, books and newspapers. Kodak has put an enormous effort into bringing its Stream printing to market. Clearly Kodak will need to match the hardware with an appropriate workflow option.

- *Nessan Cleary*



New trends for monitors

We have been conducting tests of monitors for quite a long time now – the first in-depth test was made in 2004, when the CRT-monitors from Barco Graphics (the Reference Calibrator) and Radius (the PressView Color Reference Display System) were kings.

At that point the first LCDs had just started to make their way into the prepress departments, but were still considered unstable and difficult to calibrate. It took some years, but now the high-end LCDs have taken over entirely, with colour gamuts and brightness that no CRT could match. In this test, however, we look at monitors from a slightly different angle, as ergonomics and ecology are fast becoming the focus of some vendors on the market.

Later this year, we will come back with tests of proofing monitors again. For example, Quato is about to launch a monitor with a mighty 700 cd/m² brightness – a high enough luminance for it to be placed in the viewing booth by the press control centre, and still maintain a high enough contrast ratio. And Eizo, HP, La Cie, NEC and Samsung are all likely to have something interesting in the pipeline as well.

Ergonomics

There are several aspects to ergonomics when it comes to monitors. One is to be able to adjust the height and angle of the monitor to suit your own preferences. Another aspect is having a sharp and clear image, particularly for text in normal point sizes. Most of today's LCD monitors have a very crisp and clear image, while not all can be adjusted for height. Traditionally the surface of many monitors is treated to suppress reflections, and we personally favour that over clear, flat glass panels. One should avoid disturbing or contrasting light around the monitor, and also arrange the ambient light so it's not too dark. If the monitor dominates the view, and the brightness is set too high, this can be very tiring for the eyes.



A somewhat different take on ergonomics is the Philips monitor, Brilliance Lightframe 220X1, which has a soothing soft blue light shining from the frame.

This situation is exactly what Philips tries to address with one of its monitors in the Brilliance series, the Brilliance Lightframe 220X1. The frame of the monitor can be set to glow with a pale blue light of three different intensities.

We tested the Brilliance Lightframe over a longer period of time, since it takes a while to decide if you prefer this surrounding light, or become tired of it and switch the light off. It so happened that we already had a Philips Ambient Light TV at home with a similar function, and have gone from scepticism to fully appreciating the feature. So it was easy to accept that a slight blue glow around the monitor was very natural, unless you are doing image retouching – then you are better off without a distracting blue light in the edge of your field of view. So the ambient light didn't disturb us – rather it was soothing as intended.

What was disturbing though was a faint but noticeable high-pitched noise from the monitor, which increased with the intensity set for the ambient blue light in the monitor frame. Philips has to work on this – it ruins the good intention of the ambient light. And the monitor needs to be able to be adjusted for height, not just the

▶ viewing angle. If we are into ergonomics, it needs to be all the way! The price? Approx €270.

Ecology

The latest range of Apple Cinema Displays has LED backlight, but are also promoted by Apple as “their greenest displays ever”. They are being manufactured according to strict specification regarding ecological issues. As such the glass in the panel is free of Arsenic, BRF (Brominate Flame Retardants), Mercury and PVC. Apple claims that the aluminium monitor frame, as well as the glass, is “highly recyclable”. The power supply is said to be “very highly efficient”, which of course is essential since LED backlit displays in general consume a lot of power (the energy for high brightness of 330 cd/m² and a contrast ratio of 1000:1 has to come from somewhere).

As for aesthetics, the LED Cinema Display is a marvel, as so often with Apple products. The built-in speakers have decent sound quality, and no extra cables are needed other than the ultra compact Mini DisplayPort (this DVI port supports both image controls and sound). The monitor also has a built-in video camera. The viewing angle is very good thanks to the IPS technology (In-Plane-Switching). So are there any flaws in this amazing piece of engineering and design? The price? Not really – for about €800 you get a lot in the total package for this 24ins monitor.

But yes, we found two flaws. You can't adjust the height – this should be possible for Apple to fix, while still maintaining the cool design. And the monitor can't be calibrated properly, which is a more serious problem. The old calibration software that is built into the Mac OS has passed well beyond its sell-by date, and can only produce a fairly good job if you stick to the white point (colour temperature for the white light) close to the monitor's native white point (at around 6500-7000 K). Apple doesn't seem to provide the monitor calibration software vendors with SDK packages to control the monitor fully through the DVI interface. This is a shame for those designers and photographers who are loyal to Apple and buy a technically very competent monitor – but without the possibility of calibrating it!

Philips also has a monitor, not too unlike the Apple LED Cinema Display in features, which is sold on its ecological

features. We tested the Brilliance 225P1 ES, where P stands for Professional, which uses an IR technology to detect if the user is present or not. This means that if you leave the monitor, it shuts itself down to a mode that, according to Philips, reduces the power consumption by about 70%. The ES stands for Ergo Base, meaning ergonomics, and it's Energy Star compliant. Philips also lists a number of standards to which the Brilliance 225P1 ES complies: EPEAT Silver (Electronic Product Environmental Assessment Tool), RoHS (Restriction of Hazardous Substances) and, finally, it can carry the lead-free logo.



The Apple LED Cinema Display is a beautiful example of design and engineering, except for the fact that you can't adjust the height, and it can't be calibrated properly.

When we first started to use the 225P1 we were annoyed that it repeatedly shut down just because we weren't active enough in front of the monitor. I found myself waving in front of the monitor, a little like a short person standing in front of automatic doors that are supposed to open, but don't. But after adjusting the sensitivity somewhat, the sensors detected enough movement not to shut down too quickly.

For PC-users the 225P1 comes with quite good calibration software, a reasonably useful visual calibration wizard, which does a pretty good job considering it's not using a measuring device. Unfortunately there is no such software for the Mac user, and on two different Macs the picture



This fairly low-priced monitor offers good value for money – especially since its IR-sensor shuts down the monitor when the user isn't present. In this way Philips say that the power consumption will be reduced by about 70%.

was slightly less sharp, than on PCs. We don't understand why, but perhaps if Philips ports the software to Mac OS X, they will also discover that the picture quality improves with relevant drivers and calibration tools for Macs.

The built-in speakers in the 225P1 leave quite a lot to be desired, at least compared with the sound from the Apple Cinema Display. But there is a price difference for sure. The Philips Brilliance 225P1 ES costs only about €270, but is smaller than the Apple Display, 22ins versus 24ins, and doesn't have a video camera built in. But it can be adjusted for height and can be rotated 90 degrees, thanks to the Pivot function.

While the resolution is good in both of the Philips monitors, they are sensitive to the angle at which you view the screen. This is a quite typical phenomenon for standard TN-technology in the panel (Twisted Nematic).

Philips also offers monitors with the IPS technology, but then the price jumps up quite a bit.

So which monitor is the better of the three tested? Well, this is not a comprehensive test, rather a sample of what is happening on the monitor market in regard to ergonomics and ecology. The monitors address very different usages, but we welcome the ambition of combining quality products with considerations in both ergonomics and ecology – which of course are qualities in their own right!

- Paul Lindström

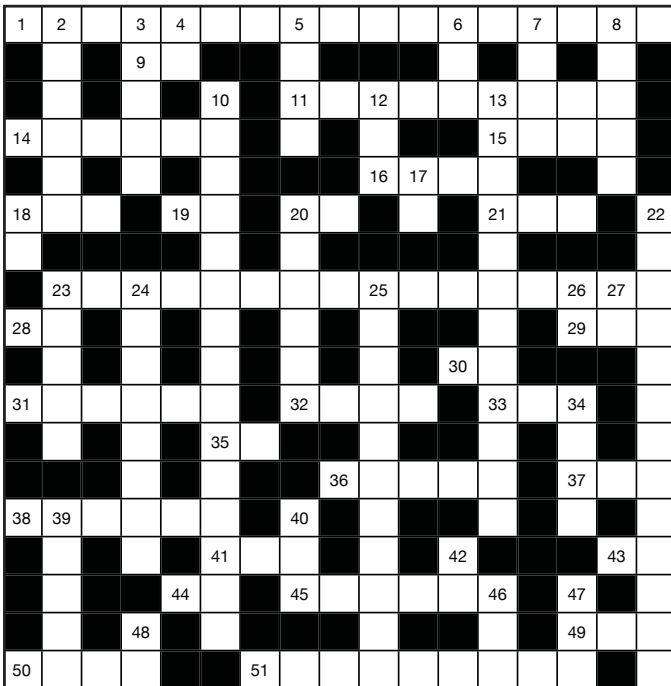




X-word Puzzle

Number 22*

The IPEX countdown has started so we thought we'd have a bit of fun with this month's crossword puzzle. It's got an IPEX theme and it might just be a bit easier than usual.



Across

1. This is where you'll fly into in May. (10, 7)
9. One of two indefinite articles in English. (2)
11. What you are coming to IPEX to do. (3, 3, 3)
14. This is the shape of the average aisle at IPEX. (6)
15. The European directive for reusing and recycling electrical and electronic equipment. (4)
16. Another word for trade fair, or to expose? (4)
18. Where many deals will get done in May. (3)
19. Not off. (2)
20. What you must do! Get a move on! (2)
21. The last three characters of a British URL. (3)
23. What accolade do JK Rowling and Lord Gavron share? (9, 2, 5)
28. Either? (2)
29. Only definite article in English? Add it to 16, 20 and 44 Across. (3)

30. A has been. (2)
31. How visitors will feel when they trek around the IPEX halls. (6)
32. What you will be if you don't get up in time on the 18th May. (4)
33. The last three characters of a European URL. (3)
35. How you'll feel at IPEX. (2)
36. And if you're lucky you'll feel like this. (5)
37. You need to do this to keep up your energy. (3)
38. Don't let this characteristic of speech confuse you in chats with exhibitors and visitors. (6)
41. Expect surprising new advances in this area. (3)
43. A hip (apparently) way to say yes. (2)
44. See 20. Across. Add a tiny word that precedes an English verb. (2)
45. A predefined plan for looking at specific things at IPEX. (1, 5)
49. Also known as. (3)
50. If not immediately, then as soon as possible. (4)
51. Something that is unvalidated? (3, 6)

Down

2. We hope this is the state of all exhibitors when IPEX opens. (2, 4)
3. Describes most IPEX visitors. (5)
4. Opposite of out. (2)
5. Are these for networking? Say bars and restaurants? (4)
6. An emotion hopefully absent at IPEX. (3)
7. A Facebook reminder. (4)
8. These could always be lower. (5)
10. Everything at IPEX is to do with doing this. (5, 10)
12. The magic word. (3)
13. The URL you need for all things IPEX. (3, 1, 4, 1, 3)
17. Hello in American. (2)
18. Go to Birmingham with at least one of these. (2)
20. Origins of the audience for IPEX. (6)
22. Another word for 20 Down. (13)
23. This is the slice de la crop that goes to IPEX. (5)
24. The bits of IPEX everyone should try to reach. (3, 5)
25. Don't forget to start doing this soon. (4, 3, 4)

- 26. Keep this in mind for workflow management. (2)
- 27. National Health. (2)
- 34. The bit of IPEX for used equipment. (4)
- 39. Many fruitful ones of these will occur at IPEX. (5)
- 40. A favourite music genre that's nothing to do with IPEX. (3)
- 42. The meaning of life or just 3.14159265? (2)
- 46. A colour model. (3)
- 47. Local Area Network. (3)
- 48. The IPEX organisers will make sure this is how you feel. (2)

* Answers at www.igaef.org

Number 21 - Answers

W	E	B	O	F	F	S	E	T	P	R	I	N	T	I	N	G
R				R		P			L			O		C		R
I	N	K	W	A	T	E	R	B	A	L	A	N	C	E		A
N				I		E			T							D
K	N	O	W	L	E	D	G	E	E	X	C	H	A	N	G	E
L				E					O		S			S		O
I	M	P	L	I	E	S			E	X	P	E	C	T	P	O
N				L			I		I	T		A			P	R
G	H	O	S	T	I	N	G		T		P	L	E	A		P
O							T			I		E			S	R
R	E	G	I	S	T	E	R	O	N	P	R	E	S	S		P
C		R		L		R			G			Y				E
R		A		U		I	N	K	E	X	C	E	S	S		R
E	A	M	E	R		N			N		L		U			T
A		M				G	A	N	G		A		B			Y
S	H	A	D	O	W		G		I		M	E	S	S	U	P
E		G		C			O		N		P		I			E
S	M	E	A	R	I	N	G		E		S	E	T	S		S

