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# Spindrift

...Scavenging The Graphic Arts Industry Since April 2003

News Focus • Opinion  
Reviews • Techno-Babble  
Attitude

Volume 5, Number 4  
July-August, 2007

**holiday** • *noun* **1** an extended period of recreation, especially away from home. **2** a day of festivity or recreation when no work is done.  
• *verb* spend a holiday.

– From the Compact Oxford English Dictionary

## Dear Reader,

It's not often we take holidays, but over the next couple of weeks we plan to do as little as possible. The reason for this longing for indolence is as much to do with overload as it is with inherent laziness, and we suspect we are not alone.

This year has already seen an almost unprecedented range of new technology and product introductions for the graphic arts industries. Keeping up with these new developments in workflow, digital printing engines, data standards, and a host of new business ideas, has left us more than a little dazed and confused.

But that seems to be the nature of the print media industry. Although times have been tough for many printers and publishers, a dynamic and urgent energy is rippling through the industry. It's tangible and unlike many in recent years, it's not just the result of vendor and PR hype. From rising circulations in the newspaper industry, through to the explosion in digital printing applications, there is plenty for everyone to get excited about. But not now, not this month.

We hope you enjoy this bumper summer issue, and especially the Digital Dots technology crossword on the last page. It should be perfect material for keeping your minds alert as you laze in the sun!

Our best wishes to all our readers for the best of the summer season, and we'll be back with you in our September issue.

Enjoy!

Laurel, Nesson, Paul and Todd

## In This Issue

### *Forward connections*

Laurel Brunner jetted off to Vegas, and even though we were hoping for tales of gambling and all-night partying, she insisted on writing about the EFI user conference and the increasing importance of MIS and superwide format printing to EFI's overall line up.

*see page 10*

### *Third generation JDF delivers*

Paul Lindström looks at Heidelberg's progress in developing its all-encompassing JDF workflow, Prinect. The final piece of the jigsaw puzzle, integration with the post-press system should be delivered by Drupa. In the meantime, two of Heidelberg's customers tell us of the benefits they've realised since investing in JDF.

*see page 16*

### *Giant-killer*

Inca Digital unveils its latest inkjet printer, a giant of a machine aimed at putting the hammer to the screen printing industry. Nesson Cleary was suitably impressed from a beta demonstration.

*see page 20*

### *Definition of print*

Jeremy Paxman got more than he bargained for when he questioned whether or not print is sexy. Laurel Brunner reiterates her impassioned defence at IPEX of all things to do with print.

*see page 24*

## Regular Columns

News Focus	Page 2
Acrobites	Page 5
Expandocs	Page 5
Driftwood	Page 8
Spindocs	Page 8
Crossword	Page 26

# News Focus

**Epson** has brought out a new larger, wide format printer. The Colour Stylus 11880 is Epson's first foray into the 64" wide size. It uses Epson's newest Micro Piezo Thin Film Piezo (TFP) print head. This has double the number of ink nozzles, giving 360 dpi for each colour, and a maximum resolution of 2880 x 1440 dpi. It still produces variable sized droplets, but new meniscus control leads to more precise formation of those droplets. It's capable of border-free roll printing up to 64" wide, and will take both roll and sheet fed media from A3 up, plus posterboard up to 1.5mm thick. It comes with USB 2.0 and Gigabit Ethernet connectors, and includes a take-up reel system. It's available from September, priced at £9995 plus VAT.

The 11880 also takes advantage of Epson's latest upgrade to its inkset with the new UltraChrome K3 with vivid magenta, which not surprisingly increases performance in the magenta and blue areas of the colour gamut. This means a slight change in the name for all of the previous printers, (4880, 7880 and so on) to denote the use of the new ink. Unfortunately the new inkset still has nine colours, and the older printers still only take eight inks at a time, so you still have to flush out one of the blacks when switching between matte and glossy prints. The only exception is the new 11880 and the A2-sized 3880.

Not to be outdone, **Canon** too has introduced a new 12 colour, large format printer. The ImagePrograf iPF6100 has built in colour calibration and is designed for the photography, fine art and graphic arts markets. In these sectors Canon claims its overall market share has increased from 5% in 2005 to 13% in 2006, and expects an increase of 20% on the numbers by the end of 2007.

The ImagePrograf iPF6100 has two high density print-heads to print 2,400 x 1,200dpi up to 610mm wide. It has a 12-colour LUCIA ink system with additional red, green and blue inks for an exceptionally wide colour gamut, with clear, vibrant colours and smooth gradations. The iPF6100 also uses four monochrome inks: black, matte black, grey and photo grey, to further enhance output quality. The inks are durable and scratch resistant and formulated to minimise the bronzing effect that can sometimes occur in certain light conditions. A new colour calibration tool adjusts colour differences as printheads age, and to compensate for variations between printers. Accurate adjustment takes around ten minutes for all media types.

Canon also has some new poster creation software. PosterArtist 2007, allows anyone to create professional designs in-house following four tab-guided steps. The software includes a large selection of artwork and templates for various industry sectors including retail, hotel, manufacturing, restaurant, education and office sectors. With PosterArtist users can produce large format prints from Microsoft applications such as Word, Excel and PowerPoint.

**Océ's** second quarter results show a drop in revenues of 0.8% from €783.6m for the period in 2006 to €777.1m for this year. However net income is up by 60% from €12.2m for the second quarter 2006 to €18.3m for the second quarter 2007. The drop in revenues is attributed to the unsurprising decline in Océ's fax business, however significantly increased sales of digital printing systems and wide format engines, both direct and on an OEM basis, are expected to improve recurring revenues over the balance of the year.

**Xerox** has developed a new text mining software that analyzes the meanings of words and their context so that it can accept ordinary language queries. Researchers at the Xerox Research Centre Europe in Grenoble have com-

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▼ bined a powerful linguistic engine with an easy-to-use interface for the FactSpotter software natural language search engine. FactSpotter works with “almost any document regardless of the language, location, format or type” and is designed to use the way humans think, speak and ask questions in order to produce relevant responses.

Xerox has also invented a technology for printing fluorescent words and letters without using fluorescent ink. It's available on Xerox colour production printers and can be used as a hidden signature to validate security documents.

**Esko** has released its Software Suite 7, a complete collection of Esko software tools for packaging applications. The suite includes established tools such as ArtiosCAD 7.3, DeskPack 7.0 packaging plug-ins for Adobe Creative Suite, PackEdge 7.0 PDF editor, Plato 7.0 for step and repeat operations, the BackStage 7.0 JDF-based workflow automation technology, FlexRip/FlexProof 7.0 with screening, Kaleidoscope 7.0 ICC compatible colour management, WebCenter 7.0 project collaboration and approvals, Visualizer 7.0 a new packaging visualization application, FastImpose 7.0 for JDF-driven imposition and the Digital Flexo Suite for automated flexo plate optimisation.

**Kodak's** Versamark VX5000e with enhanced resolution which is twice that of previous generations of continuous inkjet printheads is now available. It adds enhanced resolution of 300 x 1200 dpi for improved colour quality, clearer images and text, plus sharper barcodes.

**PerfectProof** has introduced Pakready for producing complete packaging prototypes. Pakready is a fully automated production suite, from creation to cutting and trimming that allows designers to create and import existing designs or work with a series of adaptable design templates. Designs can be viewed as animated 3-D objects which can also be sent to customers for review and approval. PerfectProof's ProofMaster colour engine handles colour management and output quality.

**Markzware** has announced its Universal Binary update of Markzware MarkzTools which takes advantage of the Intel-based Macs. MarkzTools is used for preventing corrupted QuarkXPress documents, overcoming bad file formats, retrieving text from corrupted documents and viewing images in grey previews to reduce file size. It also allows XPress users to do a Save As to Quark 4.1.

The company also has a Universal Binary version of its InDesign to QuarkXPress 7 conversion tool for turning InDesign content into a new QuarkXPress document.

**Esko** has announced Flexproof/E, a new proofing output module co-developed with EFI which will also be distributing it. Flexproof/E includes output drivers based on EFI's Bestcolor proofing technology, and drives a wide variety of inkjet proofing devices suitable for contract proof production, without needing an additional software RIP. FlexProof/E includes calibration and centralised colour management tools based on Esko's ICC-compatible Kaleidoscope colour technology. Esko technology manages colour management system inputs, and EFI's manages digital inkjet output devices.

**Océ** and **Press-sense** have announced that Océ will sell Press-sense Omnium, its business flow automation tool, in addition to Océ PRISMAWeb solution, powered by Press-sense. The move allows Océ to address the entire print provider's operation, from an initial quote to invoicing. Press-sense Omnium is to be tightly integrated with the Océ PRISMA workflow solutions via JDF/JMF.

**Xaar** has approved Aqua Tint's range of solvent inks for use with the Xaar 128 printheads. Aqua Tint is based in Mumbai, India, and is the first South Asian ink manufacturer to gain Xaar's approval. Aqua Tint has a 20% market share and a significant export business, particularly to South America, South Asia and the Middle East. Xaar works in partnership with ink manufacturers worldwide to develop and approve quality assured inkjet inks for its printheads.

**Inca Digital Printers** has launched a fine quality, or Q version of its Spyder 320 digital UV flatbed printer. The Spyder 320 Q Fine Quality has a new printhead, to deliver 10 picolitre ink droplets at production speeds of up to 37 sq.m/hr for high speed photorealistic output. Inca has also enhanced its Columbia Turbo, which prints display material up to 3.2 metres, with new formula inks from Fuji Sericol.

**Océ** has completed extensive tests with its VarioStream 9000 to print colour copies of the Financial Times, Guardian and Sydney Morning Herald as well as Spanish newspaper El Pais and Germany's Mitteldeutsche Zeitung. The company is also working on a system to improve print speed by over 50 per cent.

▼ **QuadTech** and **Manugraph** have installed the 100th QuadTech press control system on Manugraph presses in India. QuadTech representatives travelled to the country to award the founding member of Manugraph, Mr Sanat Shah, with a trophy of recognition, to commemorate the milestone.

**Screen** is organising a study tour to the IGAS trade show in Tokyo, Japan in September. Over 650 of the world's leading manufacturers and suppliers are expected to participate in the show which runs from the 20th to 30th September. The 10 day Screen Study Tour begins in Tokyo with a tour of IGAS and continues with a journey to Kyoto on the Bullet Train to visit one of Screen's manufacturing facilities. The tour includes ample time for sightseeing in Japan, and some days in Singapore on the return journey. It costs €5019 per person, including flights, transfers and accommodation. Email Dawn Tate for more information at [tate@screen.co.uk](mailto:tate@screen.co.uk).

**Kodak's** third annual Graphic Users Association conference for prepress, workflow and digital print takes place from the 3rd to 6th October at Le Meridien Hotel, Nice, France. This networking and technology event for conventional and digital commercial printers, gives participants the chance to meet technical experts, and get an overview of Kodak senior management's plans for the coming year. The three day programme costs €395 for GUA members plus travel and accommodation expenses and participants are eligible for a conference credit of €2,500 towards selected Kodak software. Kodak customers who want to join the GUA should go to [www.mygua.org](http://www.mygua.org).

As of July 2008 Bill Gates, **Microsoft's** chairman, will pull out of day-to-day work for the company to spend more time on work at the Bill & Melinda Gates Foundation. There will be a two year transition process and after July 2008 Gates will continue to serve as Microsoft's chairman and key development projects advisor. Current chief technical officer Ray Ozzie immediately becomes chief software architect, to work with Gates on all technical architecture and product oversight responsibilities. Microsoft has 63,000 employees in over 100 countries and annual sales of over \$40bn.

**Kodak's** Graphic Communications Group has announced the installation of its 10,000th CTP engine!

The recent Live Earth concerts, simultaneous events held worldwide to raise awareness of global warming were the

most watched entertainment event in online history, according to **Microsoft**. MSN has delivered more than 30 million live and on-demand video streams of the concerts. During the exclusive live coverage on MSN, more than eight million people watched over 15 million streams, with a peak of 237,000 people viewing simultaneously.



## Acrobites

*(Something to get your teeth into)*

### WRAP

The Waste & Resources Action Programme is an initiative to encourage businesses and consumers to think more about the packaging materials they use and to encourage recycling. The organisation was established in 2000 and aims to encourage sensible use of packaging and higher levels of recycling. One of WRAP's objectives is to save at least three million tonnes of materials by March 2008. WRAP has recently instigated discussion amongst its cohorts to extend its activities internationally to work with importers and exporters as well as domestic organisations and consumers.

### RFTON

Right First Time and On Time is what we all strive for but rarely achieve. It's good that someone's come up with an acronym that can give all of us some inspiration as we struggle to reach meaningful goals in our lives. On the other hand, the daily grind of bleak existence can be bad enough without the unhelpful reminder of how frequently we fall short!

## Expandocs

*(In this section, we aim to cast some extra light on a particular recent news story.)*

### ACAP halfway there

A new standard has been suggested for complex and accountable digital rights management, the Automated Content Access Protocol (ACAP). This protocol is about how permissions information can be embedded in content published on the internet. The ACAP initiative has gained a broad acceptance amongst publishers, not least from WAN members (World Association of Newspapers), which is one of the driving forces behind it and one of the project's main sponsors.

In June the ACAP project team hosted its first conference, to present the idea behind the proposed format and

report the status of the project. The event in London gathered close to a hundred delegates from around the world, reflecting the fast growing interest in the format. In addition to the official ACAP participants, which include Agence France-Presse, de Persgroep, Impresa, Independent News & Media, John Wiley & Sons, Macmillan/Holtzbrinck, Media 24, Reed Elsevier and the British Library, some of the other participants at the event included people from Microsoft, Google and Yahoo.

So why is ACAP needed? Aren't there enough formats already within the web publishing realm? Well, one of the first tasks for the technical working group led by Francis Cave was to find out if any existing formats or protocols could do the job the ACAP committee requires. The group looked at REP (Robots Exclusion Protocol), AdsML and XMP (the Adobe XML Metadata Protocol), but none of these fully met the requirements to provide information about permissions and rights that could be automatically recognised and interpreted by search engines. Nor could they be used to establish the publishing policies of the content owners. This is an extremely important part of ACAP and concern for its scope was expressed many times during the conference sessions. Mark Maddocks, a senior vice president for Reed Elsevier, believes ACAP's goal should be to ensure that rights are managed effectively online in an environment where people can be confident about putting content online in the first place. This will allow for different business models and the development of vertical sector products.

The design goal for ACAP is a protocol that is pragmatic and usable from both US and European perspectives, but there are numerous issues to resolve beyond the inter-necine politics. These include levels of granularity, the range of content types that should be indexed, the types of permissions, their portability and the update frequency. Given the complexity of content already out there, how far do you go to try to manage it all, particularly across sites that borrow from other sources and that use multiple levels of URL to find and deliver material to users?

There are some crucial points that must be addressed, both commercial and political, if this protocol is ever to

get off of the ground. The breadth of interest extends far beyond commercial publishers anxious to protect their interests and search engine developers keen to create environments wherein they can attract advertisers. ACAP should reflect the interests of anyone with a brand or content to protect. This means anyone in the media business, from radio, television and film to newspapers and magazines, and packaging. ACAP is relevant for any form of reproducible content that can be used beyond its physical form in an on-demand delivery environment, especially for the implications it has for future, as yet uninvited, business models.



*The Technical Workgroup for the ACAP project presented some of its findings during the Pilot Test program at the conference in London in June. Delegates came from all over the world, including representatives from Google and Yahoo. Here David Martin from the EDItEUR organisation explains how ACAP can use much of the semantics already in place in this e-commerce format.*

ACAP will need to define permissions in ways that give content owners the flexibility to determine what can be shown for free in a search result, versus what should be paid for in a consistent way. This will get incredibly complicated in the music and film businesses where profits are shared in extremely convoluted ways. Should permissions include links to a publisher's site or sites? Should they include or exclude new search engine services? According to Bob Weiner of the Copyright Clearance Center in the US, ACAP should characterise the existing communications channel between content owners and users. This means ACAP needs the scope to provide conditional rights according to use, geographies and rights agree-

ments, no matter how complex. For publishers the value proposition of a new rights standard is that it validates content for publishers and provides consistent accessibility for users. For content users it provides a secure and accountable commercial environment.

Speaking for the film industry Thomas Dillon, counsel for the Motion Picture Association, said that digital rights management is a vehicle for consumer choice. Rights licensing is a channel that ought to be defined to suit individual media usage, usage that a protocol such as ACAP mediates. ACAP's design should therefore reflect the idea

that content providers should deliver media services packages. ACAP should be the lingua franca for access permissions and that allows the industry to better compete with piracy which accounts for 50-60% of digital media traffic. Dillon added: "Search engines are an essential part of the future content economy. We see DRM as an enabler, not a block, and we must create a marketplace where customers and service providers can share content at a fair price. ACAP will help unlock the potential of the online video marketplace by helping content owners manage the channel."

The idea of a data protocol being used to define a delivery channel is curious enough, but it could have dangerous socio-political implications. John Sheridan works for the UK government and is very excited about ACAP because the Office of Public Sector Information where he works "is seeking to realise the economic and social value of public sector information". ACAP could help overcome barriers to information reuse, by helping to define what information about individuals can and cannot be reused thereby affecting how the state behaves and its accountability to the electorate. Alternatively this could sound like a very good reason not to develop ACAP!

Policing the protocol in this and any context is central to ACAP's development, even if at this stage it's just for commercial and legal reasons. Content used without

permission for example must be taken down from a site promptly, and mechanisms to protect its abuse have to be in place from the outset. Holding publishers to account and protecting the rights of citizens must also be considered within ACAP's scope.

### Whatever Next?

So the work defining the protocol is underway with plans to complete this project by the end of 2007. A second ACAP conference is planned for the 29th of November in



*If the ACAP format is to be successful, it has to work for both content owners and content processors, like for example, search engine providers. Dan Crow, product manager for Google, has been active in the ACAP Technology Workgroup and believes there are many mutual interests and benefits in the ACAP format, both for publishers and companies like Google.*

London, and hopefully the ACAP protocol will by then be presented in a more definite shape.

As for now, the Technical Working Group has defined a set of use cases, and also started up pilot tests based on

them. So far, the pilot tests don't indicate any insoluble technical challenges. The preliminary ACAP protocol seems to work well, based on expanding and extending existing standards. Besides the earlier mentioned REP format, used by many of the hundreds of search engines, ACAP will define the standard permissions semantics based on the EDItEUR standard (an XML-based format for Electronic Data Interchange).

ACAP is not only about copyright protection or digital rights management. It's more about trying to find an enabler to help facilitate the distribution of digital content and still respect the ownership and publishing rights. This is why ACAP is of interest to so many newspapers and publishers, even individual writers and journalists, and it should also be of interest to politicians. As Gavin O'Reilly, chairman of WAN puts it: "What we seek to do together is to create the foundation for what is surely the highest aspiration that publisher, aggregators, search engines and politicians could have for the content industry, namely an increasingly healthy, profitable and vibrant sector which drives knowledge and diverse thinking throughout the internet and the world and which creates new opportunities for everyone. Openness is one of the greatest of ACAP's many strengths, and I hope it will become one of its most enduring legacies."

Dress it up as altruistically as you like, but ACAP is all about commerce and control. It is about protecting the interests of commercial media and providing secure, controlled digital content use environments for consumers now and in the future. However although the future is ours to invent, it's not necessarily ours to control. So how far and for how long can commerce leverage the service, convenience and sharing ethic that is the foundation of the Internet? At the end of his presentation Thomas Dillon of the MPA cited an Arab proverb: "He who predicts the future is lying, even if he's right because the future is unknown". Given the anarchic nature of the Internet and the assumption that media sharing is inherent to the nature of media in the first place, defining the protocol is just the start. Implementing ACAP could be trickier than it looks.

## Driftwood

*(Useful stuff washin' up on our shores)*

During the recent ACAP meeting in London (see article under Expandocs), we came across some acronyms that were new to us. REP and EDItEUR refer to some important technology developments regarding digital rights management and electronic data interchange, so they merit a bit more than a quick definition.

Search engines use the Robots Exclusion Protocol (REP) to quickly determine if the content on a certain web server is available for searching and indexing. The actual job is done by what are often called 'crawlers', a software technology that acts like a normal web user, making requests to look at the different pages on a website. But the crawler's job is to index the content for later and much faster search and retrieval through a search engine website, such as Google and Yahoo. Crawlers are also called spiders or robots (or more simply bots) or automated user agents, and the Robots Exclusion Protocol (REP) is the formal name for what is currently the most widely used method of communicating permissions to web crawlers.

The information a crawler requires is normally provided in a text file on the web server called robots.txt, but although widespread, the REP protocol is not an officially established or set standard. As with many other standards used in publishing it's more of a de facto standard, although there were attempts in 1996 to have it ratified within the Internet Specification. The groups behind the ACAP protocol (Automated Content Access Protocol) would like to dust off the REP standard and make it, together with some necessary additions, the natural starting point for more detailed information about usage rights for the content on a website.

In order to describe usage rights the involved parties need to agree on semantics. This has been developed and fine-tuned for many years within the EDI (Electronic Data Interchange) community. One of the most established standards for EDI and e-commerce is EDIFACT, and a specialised version of this, suitable for book and magazine

publishing, is in preparation by the organisation EDItEUR. As the name implies this organisation has strong links to the European Union, although it also has members around the world. EDItEUR wants to offer a truly international standard, valid for publishers worldwide and has adopted EDIFACT as its foundation because it's the dominant standard for e-commerce and EDI in every other industry.

What is needed to turn EDIFACT into something suitable beyond EDI is a specialised vocabulary for trading books and magazines, and presumably newspapers. Such vocabularies have been developed on a regional level, both in the US and in several countries in Europe, but it's time for an internationally accepted dictionary of terms and message formats for publishing, including what is needed for libraries, within the EDIFACT framework. EDItEUR hopes to bring about an international consensus on a joint common dictionary and semantics for EDI within publishing.

## Spindocs

*(Where the spinner gets spun!)*

*Based on our extensive experience with technology providers and their PR companies, we rated Adobe's PR at the top of the crap list. So we are thrilled to bits that Adobe has recently switched from Firefly to Harvard, who will hopefully look a little further than their client base, when it comes to fulfilling their PR brief. In our experience it's a long way from reality, but this is how Firefly describes itself:*

**"Firefly delivers inspired communications consultancy on target, on time and on budget, but above expectation. Our fresh thinking, straight talking and specialist skills set new standards in the industry.**

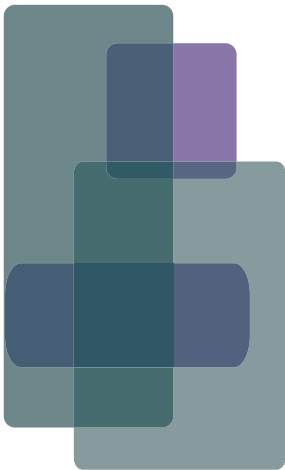
**"Firefly has established itself as a leading independent European communications consultancy, with a proven and award-winning track record in reaching business and consumer audiences. It is critical that any investment in communications can deliver demonstrable and directly business-supporting results. That is the basis of our philosophy and promise to our clients.**



▼  
“We have worked for a wide range of businesses at the heart of the modern economy. Our history is the history of innovation and technology, and our clients are the businesses that have fuelled its success.

“Recognised as a centre of excellence in all areas of PR and media communications, Firefly pioneers best practice thinking that redefines expectations of what is possible – no matter how challenging the market environment. And that’s what we mean by Trailblazing Communications.”

*That trail would appear to have encouraged Adobe to head for the door, and not a moment too soon!*



# Forward Connections

Last month we visited EFI's Connect user conference which took place in Las Vegas, a city not known for understated restraint, calm, dignity and gravitas. EFI charges its customers quite a lot of money to come to Connect, yet they come in droves, many of them year after year to hear EFI present its corporate plans and technology intentions. EFI is amazingly frank about what it's up to and dialogue with customers is open, top executives are easily accessible and there is a comprehensive exhibition run jointly with partner companies.

Marc Olin, EFI's vice president and general manager, has 18 people in his product management team to help him keep track of developments across EFI's huge number of diverse products. In his exhaustive overview of the new functionalities coming to all of EFI's product groups, Olin suggested greater cohesion and more simplified product lines. The overall objective is to help printers better manage digital print transactions and implement market driven workflows. This requires greater commonality across products for integrated data management.



*EFI's Connect conference is popular with customers despite the cost of attending.*

EFI's technology development plans suggest a shift in the company's direction away from heavy dependence on Fiery, EFI's mainstay for many years. There are now 1.4 million Fierys in the field and Fiery still counts for 50% of the company's turnover, with roughly half coming each from professional and office markets but the balances are shifting. Throughout the Connect presentations reference was made to closer integration with Fiery, from MIS through to web-to-print technologies and digital printing. Fiery will continue to develop, with Adobe PDF Print Engine to be integrated into it, but as a component within larger systems.

EFI is rejigging its infrastructure and operations to support this move, based on its three core product areas: controllers and servers (Fiery), digital inkjet (Vutek) and advanced print software. The Advanced Professional Print Software (APPS) division is the largest, responsible for EFI's advanced printing software and MIS technologies for which EFI has over 10,000 customers, mostly in the US. Jetrion, which EFI acquired last November, remains autonomous.

EFI has also set up new market segment-based focus teams to help customers in specific sectors to develop their businesses. There are teams for narrow web and flexo, direct mail, commercial digital printing in various

guises, superwide format printing and warehouse management. This model will be deployed to extend customer support beyond the US.

## Technology Shift

EFI is building APPS, its largest division, around its four MIS technologies plus Prograph. MIS efficiency is a key driver for digital print media production businesses because it drives productivity. With consolidation and changing print economics, printers need many more jobs these days to be profitable. They need to be able to exploit the Internet far more effectively and MIS can help leverage a printer's internet presence. According to Andrew Schaer, EFI's senior director of corporate communications, of the "3.5 trillion pages printed in 2005 in North America.....only 360 billion (10%) were digital". The lack of digital infrastructures in printing companies and between printers and their customers is impeding the digital shift. EFI's MIS technologies are therefore getting beefed up to meet this challenge.

MIS may well be the basis for complete digital integration, but looking at a messy array of MIS tools can be off-putting. EFI is therefore providing greater equivalences across MIS products, to make it easier to position them in the market, for buyers to have a better idea of what products are relevant for them.

For PSI MIS, the company is developing a new native digital workflow with a single set of screens for commonly used tasks. The technology will have greater integration with PrinterSite Exchange, direct order workflow, and JDF-based Fiery integration. To its Logic MIS, EFI is adding a new user interface as part of a complete makeover. The upcoming version will have close integration with Manhattan Outbound Shipping and more process planning from estimating. Hagen MIS was recently updated with Myform, a job ticketing technology that works within a browser, and this will be added to both PSI and Logic. Hagen is to have additional direct mail capabilities, tools for rapid order entry and invoicing using a single series of screens, with multiple shipments based on a single purchase order.

To Printsmith, its entry level MIS, EFI is adding support for Vutek wide format output as well as other flatbed engines, plus tighter Fiery XF integration, and closer integration with accounting systems. Marc Olin commented: "We see a new category of opportunity for MIS ... in superwide printing we [currently] see very little MIS in this area".



*Guy Gecht, EFI's chief executive officer.*

## Web-to-Print

Central to EFI's MIS development is the assumption that web-to-print workflows depend on successful MIS. Web-to-print is therefore a priority for EFI's MIS technology developments. According to EFI, 78% of four colour print jobs are for fewer than 5000 copies and 22% of print jobs must be turned around in 24 hours. This is why a successful web-to-print business strategy will determine a printer's success or failure. It's a means of increasing transaction volumes, streamlining job submission and can be the basis of improved customer services. EFI has two main web-to-print tools, Printsite Exchange and Digital Storefront.

Printsite Exchange is getting greater MIS integration, better fulfilment functionality, improved production and administration interfaces and better JDF support, plus expanded Fiery and Vutek integration. The Printsite fulfilment website now has XMPie for enhanced variable data handling and will add a new user interface with better branding and merchandising features. There will also be new payment methods and security features, an integrated payment, shipping and taxes calculation tool for customised products with a fast shopping capability, and an image picker so that customers can embed their own images during the ordering process. Presumably there will be some sort of quality control as well.



*The conference also included a chance to see the products in action, together with a host of EFI's partner's products.*

## Digital Storefront

Digital Storefront is available in various guises to suit different levels of sophistication. From the base customer-hosted product with five storefronts and one print shop, there are various configurations through to one with full e-commerce, VDP tools and site customisation. Each additional module costs \$11,000. EFI is also adding superwide printing support. The pricing for this will be based on levels of complexity and the output constraints of different printer models. Variable data printing management technology is key to the web-to-print model and digital printing, so EFI is planning greater integration between Digital Storefront and Fiery, using rules to manage composition automation, pre-sorting and other details before files hit Fiery.

In Digital Store Front version 3.0 EFI aims to improve shopper experiences and make it "the easiest to use online ordering and integrated production system on the market". This technology is designed to grow with a business as it shifts to a web-to-print model offering e-commerce for ▶

print supporting 13 languages. Version 3.0 is available on a standalone or integrated basis, ASP or customer hosted. The software helps printers extend their services offering, provide a flexible printer specific e-commerce platform with the scope to provide unique experiences for customers. DSF 3.0 is highly configurable for printers, although it is not yet possible for customers to reconfigure it. It is written in C#, Microsoft's object orientated programming language, and can support non-print products.

By version 5.0 EFI will have added selling tools so that printers will be able to sell and add advertising on their sites and search engine optimisation tools to help drive traffic. There will also be support for XPS, the new output format in Windows Vista.

### Production Management

EFI's Prograph publication planning solution is based on an Oracle database with tools for job specification, creation and submission. It works with Hagen MIS in LAN, WAN and thin-client environments and EFI is adding a JDF integration module to link Prograph to Fiery and CTP workflow systems, with a new operations planner and integration of Auto Count 3000, EFI's shop floor data collection tool. In Las Vegas Prograph was shown directing the building of impositions on the fly within Kodak's Prinergy. Now in beta testing, this JDF bridge to a CTP workflow has not been done before and could render bespoke imposition software, such as Preps, redundant.

Print Flow is EFI's scheduling tool and it is getting a to-do list that works for all MIS within Print Flow, and tools to manage, plan and schedule a mixed publication and commercial environment. There will also be more control over schedules via the to-do list which will have employee constraints and realtime status updates.

### New Technologies

Developing and selling superwide format printing systems can be highly attractive because, if the business is successful, it provides a great source of repeat revenue in ink and media. EFI acquired Vutek in 2005 for \$281m or so, with an eye on those revenues and a view to becoming the industry's single source for superwide printers, inks, workflow and output management. To that end it is revamping its Vutek product line and is working on a new superwide front end that will connect to Hagen and Logic MIS, due out at the end of the year. This technology will improve pricing and transactions management and EFI is partnering with Manhattan for logistics and warehousing management integration.

EFI hasn't change the Vutek business model, preferring instead to pour money into research and development, as well as adding one hundred people to management, services, support and engineering, and retooling manufacturing to meet rising demand. There are now over 2000 EFI Vutek engines in the field, including 150 of the QS series six colour en-

**Developing and selling superwide format printing systems can be highly attractive because, if the business is successful, it provides a great source of repeat revenue in ink and media.**

gines introduced last year. This gives Vutek a market leading position in UV and solvent products.

In Las Vegas EFI Vutek announced the latest version of its UltraVu 3360 EC, now renamed the Vutek 3360. Besides the new name it has a lower price and greater flexibility to support a wider range of applications. Instead of costing from \$199,000 to \$279,000 for up to four printheads, the new Vutek 3360 has up to six printheads and prices run from \$149,000 to \$279,000. There are up to 18 possible Vutek 3360 configurations, with a backlit output capability and an option for printing on fabrics with Vutek Fusion technology. Backlit printing requires high quality and precise double sided output, so EFI Vutek has added two cameras to the 3360 which make sure tic marks on the printed sheets match up. This ensures accurate registration and front to back alignment which EFI Vutek claims is “near perfect”. The operator can manually adjust the registration if necessary. This technology option is available now and costs \$10,000 or \$20,000 as a field upgrade.



*Marc Olin, vice president and general manager of EFI.*

The Fusion option provides a second set of ink tanks so that the 3360 can print either solvent or dye sublimation inks, to produce a wider range of applications. It takes less than five minutes to convert from one type of ink to another. This option is available now and for new printer engines at \$40,000 or as a field upgrade for \$50,000.

## Going Green

EFI Vutek has developed a line of new biodegradable inks based on corn oil and which are 100% biodegradable. At Connect EFI said there are now ten customers using BioVu inks and although BioVu has some speed limitations compared to EFI's conventional ink, it provides equivalent output quality. It also has the same yield and colour gamut as nonbiodegradable inks. Prices are expected to fall with rising manufacturing volumes, and EFI has also developed inks for use with difficult substrates, such as glass, without having to preprint the surface. The UV Series 50 inks are however not biodegradable.

Last November EFI acquired Jetrion, developers of four colour label and packaging digital printing inks and hardware for industrial applications. EFI reckons this market is worth \$1.7bn, only a small part of which is digital. The Jetrion 3000 and 3025 technologies for mailing and labels are designed for hybrid printing applications producing 316 dpi variable ▶

▼ data at a press's rated speed up to 80 or 125 metres per minute. This is piezo drop-on-demand technology using UV inks and later this year EFI Jetrion will introduce the Jetrion 4000 UV four colour printer which will output nearly 23 metres per hour in 101 and 203 mm widths. Expanded gamut inks are also coming and Jetrion will position its technology against the HP Indigo ws4500 label press, offering lower capital and running costs. The 4000 is already in beta testing and one beta tester, Truelabel in Ohio, USA, is using the 4000 to drive down its cost model to that of flexo printing.

Jetrion is developing technology for the packaging market, printing directly onto packaging material without the need for a label. This printer will digitally print full colour onto the flat metal, so that the printed sheet can be formed into a container. The inks must be robust enough to withstand the heat and mechanics of this process, without compromising the recyclability of the tincans. Jetrion's machine is past the prototyping stage and due for commercial availability this year.

## Conclusions

EFI's tale is one of ambition and vision, starting with its founder Efi Arazi and continuing to the present management team. With 2006 revenues of \$564m EFI is clearly a great success story for this industry, and with seven acquisitions in five years the company doesn't appear to have missed a beat, at least not in its domestic market. Further afield EFI is not as successful, so to address this EFI is setting up a team to identify what needs to be done to its products to make them more suitable for international markets, particularly MIS and web-to-print technologies. There is a substantial and growing MIS customer base in the UK, and also in Eastern Europe, India and the Antipodes, most commonly for Hagen. There are 600 installations of Digital Store Front and EFI expects to see more international installations of this technology this year. There are over 100 Vuteks in India and more than 200 EFI employees there.

Global expansion isn't as easy as it looks, although EFI said at Connect more acquisitions were to come, so perhaps the answer lies there. If EFI has plans to invest in a company with international expertise and presence, and complementary workflow knowledge its ambitions could be realised very soon. Time will tell.

– Laurel Brunner



## Third generation JDF delivers

Drupa 2004 was seen by many as the 'JDF Drupa'. This was the year when many printers decided to upgrade their workflow systems to be JDF-compliant and today there is an abundance of reports as to whether the move towards a JDF-based workflow made sense and provided a clear return on investment. According to several Heidelberg customers, JDF-based workflows actually do meet expectations.

Heidelberg was one of the driving forces behind first the CIP3 production format PPF (Print Production Format) and later on the development of the JDF (Job Description Format) specification. Since the presentation of JDF version 1.0 at Drupa 2000, Heidelberg's workflow solutions have gone through some major changes and overhauls, and today the various components are gathered together under the Prinect umbrella. The plethora of individual modules can be sorted into three main groups: Management Solutions, Production Solutions and Color Solutions, and JDF plays a part in all of them. Management Solutions of course includes Customer Relations Management, and the main component is the MIS system, which in Heidelberg's case is called Prinance.

The majority of components in the Prinect suite are within the Production Solutions group, including the prepress workflow system PressReady, which in turn contains the RIP system MetaDimension. Production Solutions also includes all the modules needed to set up and control equipment, as well as sophisticated tools for flexible scheduling. Last but not least, Color Solutions includes software and hardware to create and edit ICC profiles, and to perform colour control on press.

### A higher level of integration

Heidelberg started to integrate prepress, press and postpress data processing early on, and is now seeing its third generation JDF-based software and systems enter a phase of even higher level of integration. Its e-business and e-procurement solutions especially are coming into place. Better, more precise and yet more flexible scheduling, not least in a mixed production environment of both conventional offset and digital production of both short run printing and large format display production is also coming together. This means the RIP system has to be able



The management at Fotorotar in Switzerland see that their investment in JDF-compliant equipment and software actually pays off. To the left Jürg Konrad and to the right Otto Brunner.



to handle cross media production, as must the planning and scheduling system.

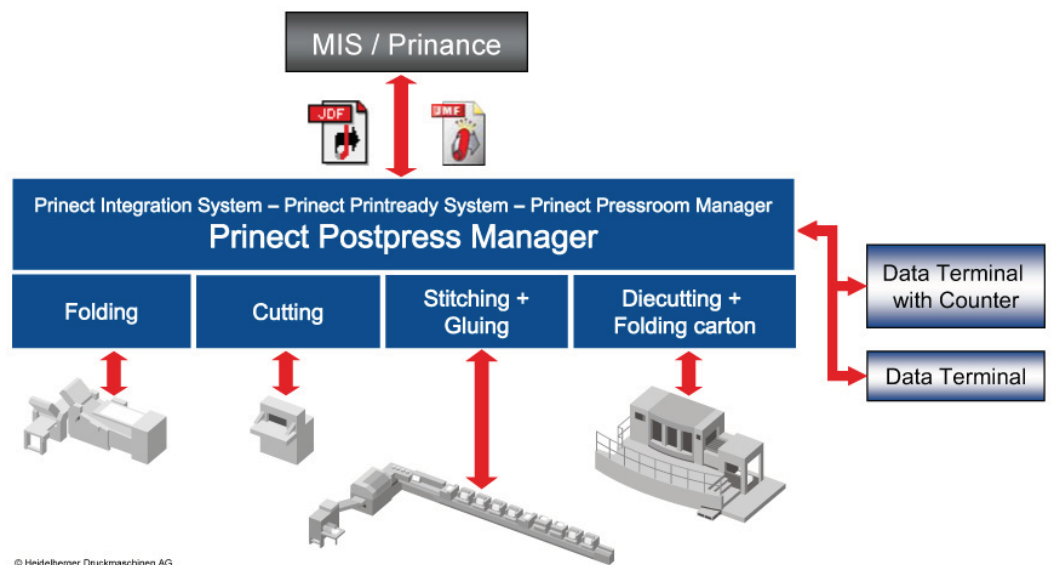
Heidelberg's Prinect PressReady was upgraded in June with the integration of a pure PDF processing capacity in the shape of the Adobe PDF Print Engine. Adobe's new rendering technology is now an integral part of the MetaDimension RIP, now in version 6.5. In addition to the other benefits of the APPE technology, such as better and more accurate processing of transparent objects in PDF-files, the APPE technology uses JDF in a more straightforward way than was possible with Postscript processing, and this suits the Prinect suite well.

The nerve centre of a Prinect workflow is the Prinect Cockpit, where all the activities for both the prepress and press departments are monitored. The new Prinect Scheduler, due for official launch at Drupa 2008, is now entering beta testing. This electronic production planning system ideally works with the MIS system, but it can also be used standalone, serving

the prepress, press and postpress control systems. The Prinect Scheduler works with any prepress RIP system and/or press control system, but Heidelberg hints that the full effect of cross-system integration will only be reached with a complete Heidelberg solution. The Prinect Scheduler is an option to the Prinect Cockpit, and is not designed to offer full automation in the planning and scheduling. Rather it provides semi-automatic assistance to the planner/scheduler. Heidelberg has found that while fully automated scheduling often sounds like an excellent idea on paper, those who work with this hands on every day prefer to do their own planning and scheduling, with the aid of the computer.

The new Prinect Postpress Manager is a natural extension to the existing planning and control system for prepress, press and post press and is entering beta testing now, ready for a drupa 2008 launch. The user interface is streamlined to be similar to that of Prinect Pressroom Manager, offering overall better and tighter integration. This not only offers better control of postpress resources, it will also help printers with more precise cost analysis, as well as faster and more accurate planning and scheduling. As with the other components of the Prinect Integration Solutions for prepress and press, the Prinect Postpress Manager has what is called Analyze Point for an on-screen display of the current status of all jobs and postpress machines.

## Prinect Postpress Manager



*Fotorotar will be beta testers of the new Heidelberg Prinect Postpress Manager, which will be fully integrated in the production workflow system, in the same way as the prepress control system PressReady, and the press control system Pressroom Manager.*

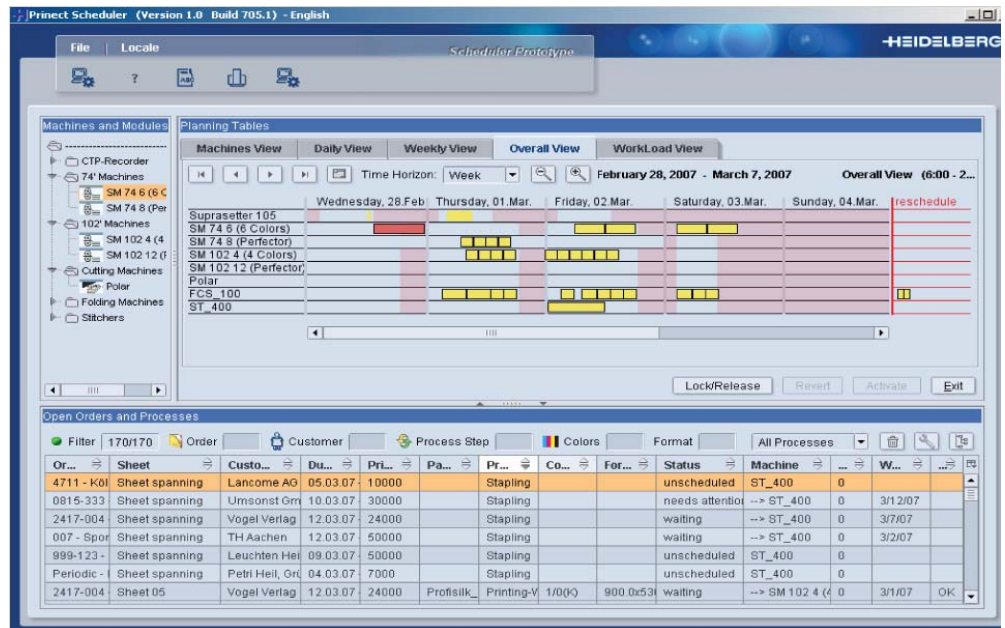
## Happy printers

Heidelberg regularly interviews its customers about overall satisfaction with the equipment and software systems they've bought, especially components with JDF connectivity. Although not all details from such interviews can be published because of their confidential nature, some printers are willing to share their JDF experiences. Two printers recently opened up their facilities and gave feedback on their investments in the last three to four years: Fotorotar in Egg, Switzerland, and BVD Druck+Verlag in Schaan, Liechtenstein.

Fotorotar in Switzerland has around 140 employees in six different departments, including security printing solutions, digital printing and publishing services. Fotorotar invests about 10% of its turnover every year in new equipment and software, including training. Thanks to this rather high level of investment Fotorotar has been able to maintain a decent profit, and a small but steady growth in turnover in the last few years, with about the same number of employees. Fotorotar will be one of the beta testers of the new Prinect Postpress Manager. Besides state-of-the-art production systems Fotorotar is considering investing into the new Heidelberg SM 52 with Anicolor inking unit. Among its findings during the test period with this press is extremely fast makeready: a maximum of 20 sheets, and a 90% reduction in paper waste.

A somewhat smaller printing house, but also very technology driven, is BVD in Liechtenstein. Peter Göppel is the fourth generation of his family to lead their company. He stresses the importance of evaluating investments made so that they give reasonable ROI, as well as providing services to customers, to make sure they really are profitable. This cost awareness coupled with business development has made it possible for BDV to not only stay profitable during a long period of intense competition, but also to stay ahead when it comes to investments in equipment and software, as well as in training and development of the IT department.

BVD is ISO 9000 quality certified and a key part of maintaining quality levels is the Image Control system for the Heidelberg presses. BVD is a beta tester for the latest Prinect Pressroom Manager, working with the PrintReady prepress workflow system. BVD uses the Heidelberg MIS system Prinance working with Print Plus a Swiss MIS. BVD is expanding its digital printing services as well as an IT-based data management service called Informatik. According to Peter Göppel it would be very



*BVD will be beta testers of the new Heidelberg Prinect Scheduler, which will offer more flexible yet more exact planning, scheduling and cost analysis functionality.*

▼ difficult to properly manage the 9000 print jobs per year without the support from the JDF-based system in place today. He decided at Drupa 2004 that BVD's whole production system should be JDF-compatible, and now some three years later he has found that the system lives up to expectations. As Göppel puts it: "I would not stick to a vendor if they didn't deliver what was promised, but so far Heidelberg have done, and we'll continue to invest in their new solutions".

While the printers presented briefly above of course can't represent all the printing companies that have invested in JDF in one way or another in the last three to four years, they do confirm that JDF can actually live up to expectations. It has contributed to faster makeready, reduced waste, better cost and quality controls, and better and less time consuming planning and scheduling. A more open and closer working relationship with customers is another promise that if not identified specifically by Fotorotar or BVD, was hinted at by them. Both companies are developing and expanding their e-business solutions, and the MIS systems and JDF solutions together form integral parts of this continuing work.

– **Paul Lindström**



*BVD in Liechtenstein, lead by Peter Göppel, combines investing in the latest equipment and technology with expanding the customer services to include advanced digital printing and informatics.*

# Giant-killer

**Everybody who makes and sells grand format UV and flatbed printers believes their long term future lies in cracking the screen printing market. But as yet digital inkjet printers are not fast enough or cost-effective enough over longer runs to seriously challenge screen printing. But all that may change, as Inca Digital unveils its latest project, the Onset, aimed fair and square at the screen printing sector.**

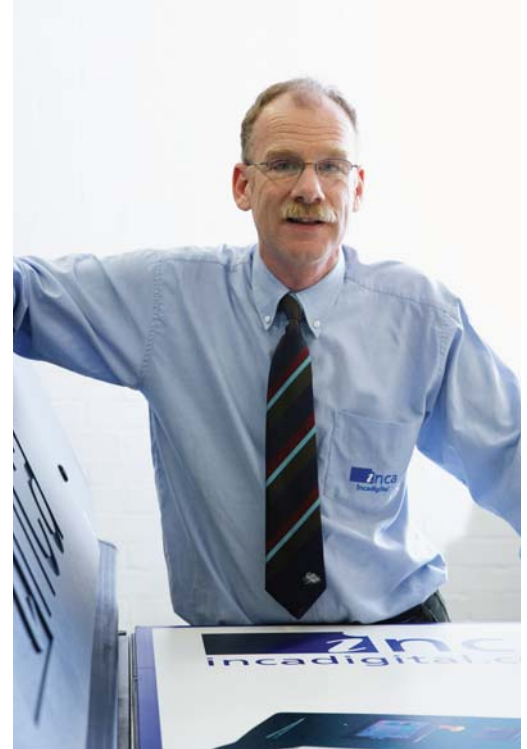
Bill Baxter, managing director of Inca Digital, says the Onset has been designed specifically “to put the squeeze on screen printers”. The Onset isn’t so much aimed at screen printing in general, but at specific applications, notably point of purchase. This is a high volume market, currently enjoying around five per cent growth in the UK.

The machine itself is huge. An Inca Spyder flatbed sitting next to it in the R&D building looked like a toy. Imagine two of Inca’s giant Columbias laid end to end to form the media bed, with the printer itself the size of a small house straddling the bed, and you’ll have some idea of the scale of the thing. Inca says that it needs a space measuring 20 x 12m.

It is blisteringly fast, with a maximum throughput of up to 500 sq.m/hr in standard quality with a satin finish. In quality mode, this speed falls to 420sq.m/hr, which is still pretty fast. Actual printing speeds are even higher, as the speed figures that Inca is quoting include loading and unloading the media as well as the printing time. To underline this Inca runs a very impressive demonstration in which the machine in Standard mode with satin print finish, with 10 sheets in the autoloader, loads, prints and unloads them all in six minutes and one second.

It’s capable of edge to edge printing, over an area measuring 3.2 x 1.52m. It will take substrates up to 15mm thick if they are manually loaded, or 10mm with the autoloader, and up to 10Kg in weight. Users can choose between a satin or a gloss finish at the press of a button, although this does affect the print speed. In standard quality mode, choosing the gloss setting drops the speed from 500 sq.m/hr to 420sq.m/hr. Nonetheless, this choice of finish is a neat trick, achieved through tight control of the curing lamps. The UV lamps themselves are air cooled with two huge extraction ducts above the machine.

The print quality with both satin and gloss finishes is superb – far better than one would normally expect to see from a beta machine. Baxter doesn’t like to be pinned down on the resolution, other than to say it’s equivalent to around 600dpi. As with other Inca printers, the Onset comes with a Wasatch RIP. The whole thing can be run by a single operator, and takes about 20 minutes to set at the start of the day to warm up.



*Bill Baxter, managing director of Inca Digital.*

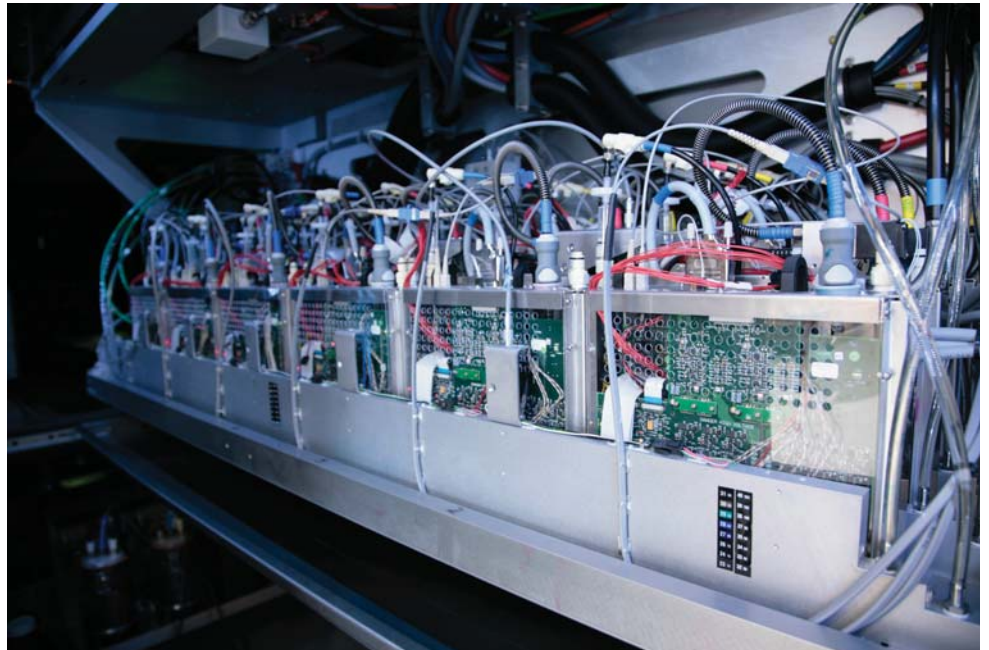
## ▼ The latest inkset

Onset uses the latest generation of Sericol's Uvijet UV-curable inks, which have been fine-tuned specifically for the machine. These inks use a Micro-V dispersion technology and are formulated with automotive grade pigments, which Sericol says will deliver good density and vibrant colours.

Tudor Morgan, marketing manager for Fujifilm Sericol explains: "We recognise that the people using this type of machinery are not going to be printing on acrylic, or on Dibond or glass at 500 sq.m/ hour. It's going to be predominantly aimed at the graphic POP display market. So, we've looked at the key media - paper, board, PVCs - that type of material and then we've optimised the adhesion performance of the inks and more importantly the actual finishing characteristics."

He continues: "One of the limitations of UV inkjet inks is that because there are such a wide variety of materials that people want to print onto, the ink itself has to be suited for all those materials, and the one criticism that always comes back is that when you guillotine it, it's a little bit hard. So in big stacks, when you cut it you get edge chipping where you cut the edge. With this ink we've recognised that the material is going to be much narrower, so therefore the chemistry is designed to have better finishing characteristics so that on papers, boards and for things like dump bins, when they are cut and folded the ink itself is going to be far more suitable for that application." He adds: "What we are sacrificing is that if you want to print on glass, or ceramic or those types of materials, it's going to be worse than the current ink system. It's not as forgiving."

The Onset uses a standard CMYK inkset, with the inks costing around £60 per litre. Baxter says that it might be possible to add other colours at some point in the future, but adds: "It's very much a possibility, not something that we are going to be doing, probably for the next year." However, Baxter also says that adding extra colours may not be commercially viable: "With an Onset, most of the cost is in the printheads, not in the rest of it, so adding colours, which you can do quite painlessly in something like a Spyder, is a significant amount of cost in an Onset, so you would have to have a good reason for doing it." Interestingly, Morgan hints that it might be possible to develop a four colour inkset with a wide enough gamut to obviate the need for extra colours.



*There are 576 of these Spectra SE printheads, giving the Onset a considerable amount of redundancy.*

▼ But for now there's no ability to add spot colours or white ink. Nor are there any metallics or fluorescent inks, which are commonly used in screen printing, but which do not work well with inkjet heads. Morgan dismisses this as an issue, saying that 90 per cent of the inks that a screen printer uses are CMYK colours. However, he also says that the Onset has the registration facilities to enable these extra colours to be printed on a screen process, and then the media married up with the CMYK image afterwards. And indeed, many screen printers already do just that with the existing Inca Digital printers, though it does rather negate the basic premise of the Onset as an alternative to screen printing.

As with previous Inca Digital printers, the print heads come from Spectra. These are arranged in modules with 24 Spectra SE heads in each module, and 24 modules, or six per colour. There are 576 heads in all, giving a total of 73,728 addressable nozzles. To put this in perspective, the Columbia Turbo, which is one of the largest flatbed UV printers around, has just 64 print heads.

There's more to this than just impressive numbers: having so many nozzles means that there's a high level of redundancy built in so that even with a large number of nozzles blocked the printer can keep soldiering on until a scheduled maintenance break. In the demonstration we saw, roughly 600 of these nozzles were out of action and the print quality didn't seem to have suffered at all. Baxter says that he hasn't explored just how many failed nozzles the Onset can get away with: "It's not a hard and fast number. If you have 20 nozzles out in each module, which is about 500 nozzles, fairly randomly scattered, then we know that doesn't cause a problem." He adds: "It also depends on the image as to how noticeable it is."



*The Onset is a huge machine, but it is also extremely fast.*

## Market forces

Although the machine has been built by Inca Digital, it's sold and marketed through Fujifilm Sericol. Inca has a longterm contract with Sericol to offer it first refusal on new projects. If Sericol is interested, then the two companies agree the specification and split the development costs.

Screen printing has been the mainstay of Sericol's market, and it is a dominant player in screen printing. But Sericol believes that this market is starting to decline, as it is being squeezed by digital inkjet in the shorter run lengths, and offset printing in the longer run lengths. Baxter explains: "Currently run length drives technology choice. We would expect flatbed digital to be used on run lengths up to 150sq.m, screen for 150-750sq.m, and then offset takes over." He continues: "We believe that Onset can be

▼  
cost effective up to 750sq.m, so this means that the choice in the middle ground will be between digital and offset.”

He continues: “A lot of printers want to move from screen printing but digital isn’t good enough, so we asked what throughput would allow the average customer to get rid of screen? The answers came back that customers wanted 100 sheets, or 500sq.m/hr, and that seemed to be the sort of throughput that would allow people to put away their screen printers.”

And that’s really the key to the Onset. It does have the kind of speed over long runs that one associates with screen printing. And as one would expect of such a high volume machine, the cost per print is relatively low, around £1 for a 3sq.m sheet. But more importantly, it offers all the advantages of a digital printer: every print within a run can be different and there’s virtually no set-up time for a print run.

The Onset is not cheap – it has a price tag of £1.5m (€2.2m). Nonetheless, Sericol is confident the machine can pay for itself within 12 months, assuming that a customer runs 5000 to 6000 sq.m over a 12 hour day.

Baxter accepts that the machine isn’t for everyone: “I think the world wide market for these things is barely in three figures, but that doesn’t mean it’s not good business. You need to be a big time operator to have an Onset, just to sell the material. Even for customers buying a Turbo today, many of them will take quite a long time to fill it up and get value out of it. So, the number of potential customers is quite small but that’s not a bad thing, it means that you can really engage with those customers and get serious with them.”

The Onset won’t be commercially available until sometime next year. The first machine is just beginning its beta test at the SP Group’s Redditch site in the UK, which is likely to take the rest of this year. But already there does seem to be serious interest in this printer. Earlier this year Inca hosted a technology launch, for which it flew customers from around the world to its Cambridge facilities. Morgan says that following this there are three confirmed orders, and ongoing discussions for several more.

– **Nessan Cleary**



*The front end uses a Wasatch RIP, and will be familiar to anyone who’s ever used an Inca Columbia Turbo.*

## Definition of print

Last year at Ipex during the Xerox-sponsored “In the Balance” debate, chairman Jeremy Paxman asked the panel this question: “Why is print sexy?” He got an impassioned answer from the floor from yours truly, but the importance of print media, the role it plays and our passion for it merits a more considered explanation.

Print is sexy because it’s about life. Ever since the first Phoenician traders scratched out their receipts and inventories using sound-based symbols instead of pictograms, the printed word has recorded and helped determine human experience. With words and pictures, print has codified and documented our world helping to determine our sense of being, our spirituality and sensuality, our passions, desperations, illusions and delights. It is through the printed word that we have preserved, defined and challenged our conceptions of humanity and of reality. Print has done this because it allows a direct communication between writer and reader that is at once profoundly intimate and yet universal. It is through print that we learn, and it is print technologies that facilitate learning.

Print technology, starting with the stylus and clay tablets, allowed us to share the spoken word initially with a select few, but rapidly on a massive scale. From scribbled parchments, to clay type and Gutenberg’s development of hot metal types, with each new technological generation, printed words and images have helped to define and refine our concept of the natural world and our relationship to it.

Print is important to us individually but it unifies us too, reinforcing our sense of community and helping us to understand who and what we are. Print can separate or join us, one to another, community to community, nation to nation. The printed word determines enquiry, debate, argument, confrontation and conflict, which is why control of the press and printing are high on any self respecting dictator or despot’s agenda. Print is about power, because print determines reality, even if only fleetingly.

It is through print that we record the human condition within a complexity of conflicting and congruent ideas and values. We trust print’s permanence and we trust print to document our world truthfully, and to accurately enshrine our most precious values and ideas of the world around us. We believe, rightly or not, that it provides our foundation for fact. It’s how we preserve and revere our collective experience and perceptions in all their diverse and shapeless colours and textures and intensities.

Print is about our passions, all that stimulates us and all our responses. It’s about our passion for experience, past, present and future, our fascination with one another, with what we know and don’t know, and with life itself. Perhaps this is because print has its own life, reflecting all of us individually and collectively, all our petty little existences and all the worlds of our imaginings.

**Print is sexy because it’s about life. Ever since the first Phoenician traders scratched out their receipts and inventories using sound-based symbols instead of pictograms, the printed word has recorded and helped determine human experience.**



▼ In the Digital World print continues to drive socio-economic change and fuel the spread of ideas and freedom, coexisting with alternative media and communications channels. New media invigorate print's power to unify and divide communities and systems of belief, to frame and challenge opinions. But print is uniquely physical. Like all media it expresses concepts, ideas and information, but it stimulates response using more subtle, tactile techniques. We have a singularly intimate and very physical relationship with print, because it appeals to virtually all of our senses.

The look of a magazine, the smell of a new book, the texture of a package, all stimulate us visually and sensually. We love the look, smell and feel of print, and of course its practicality. Print is portable and robust, it's accessible and easy to use, it's a signal and a declaration to others, and through it we can define ourselves. We love print's independence and unpredictability, the wanton serendipity of newspapers and magazines, the anticipation of what lies between the covers of a book, the icons and brands and labels that so excite us, just to sell shampoo. A shelf full of books is a collection of old friends who will never disappoint us, and who remind us of who we were and of worlds long gone, showing us how we have become who we are.

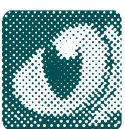
The printed word gives us a sense of permanence and occupies an intensely personal place in our lives, whether it's a treasured handbill from some long forgotten play, or the birthday card you got when you were six from the boy in the front row at school. You can't remember his face, but you've treasured his affection for years, preserved forever in print, dog eared and faded, but still there a memory beyond words or years.

All of life is about stimulation and response, and print is all about life. The words and images on printed pages stimulate our imaginations and passions. Print informs, delights and intrigues us, provokes us, thrills and disturbs us. We respond to it collectively yet individually, whether it is the label on a bottle of wine, or a newspaper headline. Print is our channel for intensely private and personal conversations, across time and experience, and it constantly changes as we also change.

It's personal and intimate, stimulating and arousing. It provokes responses beyond our control and it can leave us breathless, desperate for more and longing for the next encounter. It teases us with visual excitement, emotional engagement, tantalises us with its touch and smell. It's a constantly evolving relationship, sensual and private, evoking a kaleidoscope of desires and passions. It's a form of communication that stands alone in human experience, and only one other thing even begins to come close. Can there be any doubt that print is indeed deeply and profoundly sexy?

– Laurel Brunner

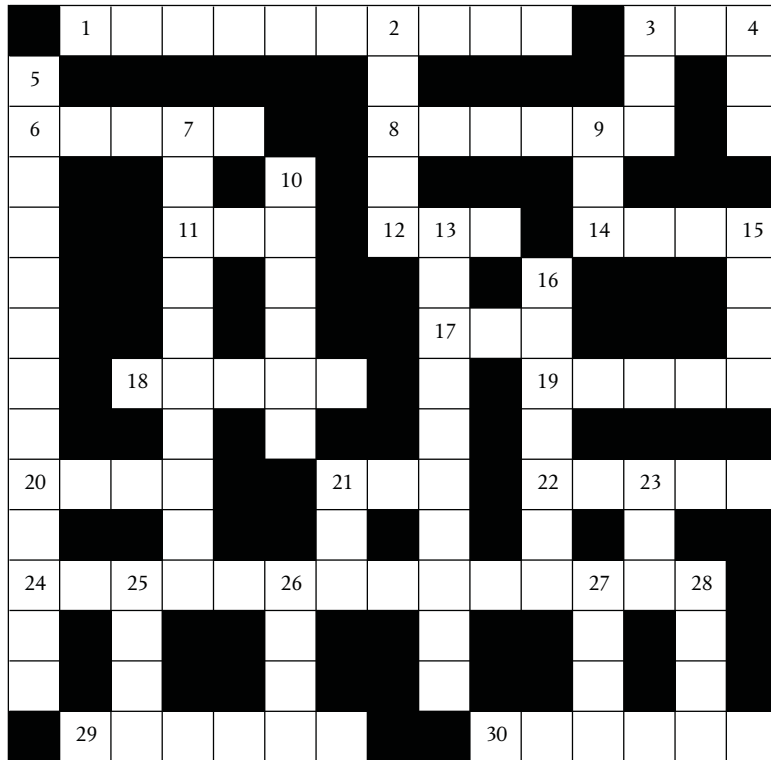
**The look of a magazine,  
the smell of a new book,  
the texture of a package,  
all stimulate us visually  
and sensually. We love  
the look, smell and feel  
of print, and of course its  
practicality.**



## Graphic Arts Crossword Puzzle **Number 2**

If you get stuck, go to the [IGAEEF](#) website for some hints. For those of you that really get lost, answers will be in the next issue of Spindrift.

The answers for last issue's puzzle are on the next page.



### Across

- 1 Machine for setting hot metal type. (10)
- 3 Really only if you spend money wisely on technology will you get it. (3)
- 6 A company whose name is mud. (5)
- 8 What more than cyan, magenta, black? (6)
- 11 French association for colour standards development. (3)
- 12 Something extra your senses need to perceive the answers to this puzzle. (3)
- 14 When a press isn't running, what is it? (4)
- 17 It doesn't mix with water. (3)
- 18 A special press for printing special identifiers. (5)
- 19 Without it all dots look the same. (5)
- 20 Not pro. (4)
- 21 US association for graphic arts companies. (3)
- 22 A guillotine? (5)
- 24 It begins with Postscript and ends with PDF. (14)
- 29 To put those dots in their place. (6)
- 30 What do you do to complete the print and the puzzle? (6)

### Down

- 2 Another word for format? (5)
- 3 The state of RGB data. (3)
- 4 An impressive substance. (3)
- 5 The process of putting all those dots in their place. (13)
- 7 What designers do to get ideas. (2, 8)
- 9 When something's past its prime. (3)
- 10 Curvaceous Illustrator? (6)
- 13 Random screening. (10)
- 15 One colour less than ten. (4)
- 16 Important comfort on press. (7)
- 21 The opposite of undercolour removal. (3)
- 23 A standard isn't simple to organise. (3)
- 25 Skin needs good screening to get this right. (4)
- 26 If it's not a stack, what is it? (4)
- 27 So important in a WIMP interface. (4)
- 28 Contact lines between blanket and impression cylinders. (4)

Answers for Graphic Arts Crossword Puzzle Number 1

	M	O	N	I	T	O	R			L	S	E		
	B				F					A		R		
C	O	M	P	U	T	E	R	T	O	P	L	A	T	E
O			R			A		H		T				D
L	I	N	E			T		E		O				G
O			S			O		R		P	L	A	T	E
U			S	C	A	N		M		U				T
R		A				E		A		M				O
S		D			D	R	I	L	L		I			E
P	I	A			E		O			N				D
A		P			A		N	O	T	B	A	D		G
C	A	T	H	O	D	E	S		V		N			E
E		I							I	N	C	A		
S	A	V	E								E			
		E		S	P	E	E	D	M	A	S	T	E	R



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