

Spindrift

News Focus • Opinion • Reviews
Techno-Babble • Attitude

Volume 1, Number 1
15th April, 2003

...Serving The Graphic Arts Industry Since April 2003

spin doctor • n. *informal.* a spokesperson for a political party or politician employed to give a favourable interpretation of events to the media.

spindrift • n. *spray blown from the crests of waves by the wind*

spin dryer • n. *a machine for extracting water from wet clothes by spinning them in a revolving perforated drum.*

(Oxford English Dictionary)

Dear Reader,

Welcome to the first issue of Spindrift a newsletter with a difference bringing you an unparalleled, if oblique view of graphic arts and publishing technologies. Nowhere else will you find quite the same twist, quite the same blend of technoslalom and industry nous.

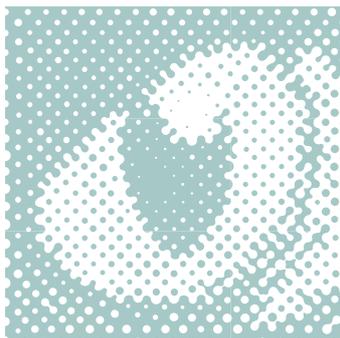
Spindrift is about publishing in all its forms including print and electronic, analogue and digital. We care deeply about technology and we believe technology is the bedrock of our industry. But technology is not all there is, and Spindrift is not yet another techno-rag. We peel through hype and the bleeding obvious to get to the developments that really matter and explore their impact on our business.

We feature cross industry business studies with technology explained not in isolation but in commercial context. Besides features, Spindrift will have some regular columns to educate and entertain you as well. We'll throw in some levellers to keep the PR writers on their toes and we'll even throw in the occasional tip for getting the best out of software, and some news and views on stuff beyond our boundaries that affect the printing and publishing industry. Last but not least we promise not to be bullied by suppliers, PR people and distributors – now there's a thing!

This is our first issue – read it and you'll get the picture.

Cheers from the Spindrift crew,

Laurel Brunner
Cecilia Campbell
Paul Lindström
Todd Brunner



In This Issue

Flat pack workflow – Ikea and JDF

Ikea is proposing a massive JDF compliant data processing model for its catalogue production. Its move to JDF will affect many hundreds of people involved directly and indirectly in catalogue production, but there's no question that production manager Björn Zitting and his team will make it happen. We've been to Älmhult, Sweden to find out how this monster implementation is going...

see page 7

Proofing proves its real value

It would be premature to say "forget hard copy proofs!" but the trend is clear; proofing is gradually turning into approvals management, relying on soft proofing, as part of the workflow. And using the Internet as a proofing environment not only speeds up proofing processes, it also allows everyone with an interest in the content to be involved. We went along to a luncheon where the real benefits of Internet supported approvals management were revealed...

see page 11

Stochastic screening – what it can do for you

A veritable explosion has occurred on the market for stochastic and hybrid screening technologies, with all major prepress vendors launching or updating products. For printers stochastic screening can mean a quantum leap in print quality, but also a few initial headaches. We have talked to European printers who have made it work...

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Regular Columns

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News Focus

Acrobat?

Somewhat later than the Feb/March timeframe Adobe announced last year, Acrobat 6.0 will be available at the end of May. Allegedly it's based on a new file format called .iap (Acrobat Protocol), which is really PDF 1.5 renamed. Acrobat 6.0 is a suite of three products, a ploy that makes Acrobat more relevant for more people, although it makes for a massively fat application. Available for Windows and OSX, there's no OS 9 support.

Version 6.0 will likely include Adobe Photoshop Album, plus features to help future-proof PDFs possibly using PDF-A (A for archive). This could further encourage the use of PDF for archiving, although some tweaking may be required. There will also be embedded multimedia support for Flash, MP3, WMF and other formats, plus tighter integration with web servers, particularly those of an Adobe or WebDAV persuasion. The new version makes it possible to write JDF compliant files within the Distiller, and has an updated Tagged PDF feature.

Acrobat 6.0 Professional is for business professionals working with complex, graphically dense layouts, and has tools to assist document interchange, review and archiving. Reviewer lists plus their comments collected into a single PDF can be exported to Word, and various drawing tools assist the review and tracking process. PDF Optimiser aids PDF creation to avoid massive file

sizes and provide workflow benefits. There is also a split pane view and zoom, and a forms creation tool, plus improved handling of output files (including such things as transparency flattening, automatic addition of set marks and bleeds, colour separation previews, and inRIP separations). Profile based preflighting (Callas') supports preflight report interchange (in ASCII or XML formats), and there is comprehensive checking for PDF/X compliance. With batch processing and workflow management utilities, this version is well suited to server based applications.

Acrobat 6.0 Standard has less intricate tools for document reviews plus a new user interface. Acrobat Elements is a tool to allow companies to put basic PDF creation tools on every desktop for automatic creation of PDF files from Microsoft Office applications and for Windows users from Explorer. This version is sold on a volume license basis and will help Adobe to finally capitalise on its investment in Reader, some half a million copies of which have been downloaded. Neat.

The Windows version also has a document merge utility to allow the conversion and combination of documents into a single PDF. Perhaps it will make it easier to manage headers and footers than is the case in Word.

Adobe Reader (it's been renamed) is due to be available by the end of May. We expect this to have some means of providing bespoke functions in support of the different functionality levels of Acrobat 6.0. The English version Acrobat 6.0 Professional for Mac and Windows will cost around \$449. Other languages have to wait 'til August.

Spindrift

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Raster Blaster Launched

Agfa has finally introduced a technology to allow its Apogee workflow system to output to nonAgfa devices. Raster Blaster is a data conversion utility that runs within Apogee Series 2, Series 3 and ApogeeX allowing operators to produce one-bit raster data that can be processed in either the Apogee PDF RIP or PrintDrive for output as colour separated data on engines from suppliers such as Screen, Heidelberg, IPA Systems, Fuji and Creo. Conceptually there is nothing new in RasterBlaster because driving alien devices is fundamental to distributed output processing, particularly in legacy environments. However Raster Blaster is an important departure for Agfa allowing it to offer the Apogee workflow management system independent of output solution. It may also give Agfa more leeway in plate deals.

Litho Supplies Gets the Gong

Xerox has awarded the UK's Litho Supplies its VAR of the year award. This award recognises achievement in helping to expand Xerox's share of the graphic arts

digital printing sector. This year Litho Supplies sold more than £4 million worth of Xerox kit in the graphic arts sector. The company installed over 60 Xerox engines including 27 colour devices such as the £170,000 6060 a potential competitor to the Heidelberg NexPress.

Bucks, Bucks But Not Enough Bucks

Heidelberg's recently released figures (€2.9 billion sales and operating income €48 million, versus €3.6 and operating income of €161 million) are superficially far from encouraging. However they reflect a substantial change in Heidelberg's business, and so in the global printing business. The company has seen no substantial recovery in its key markets, and attributes this to reticence in the advertising business. This may be true but it is perhaps worth considering the fact that in many of Heidelberg's key markets, especially Europe and North America, there has been overcapacity in the printing industry for quite some time. Maybe printers and publishers are thinking more carefully about how they invest, and are looking to place their capital elsewhere in the production chain.

The Heidelberg board, mindful of its shareholders interests, has stated that Heidelberg no longer expects to be able to achieve its earnings goals for the current fiscal year. Total sales are expected to be in the region of €4.1 to 4.2 billion, with a net loss of €50 and 70 million due to nonrecurring restructuring expenditures. The cost cutting programme underway since last year will continue, with production capacity matched to order rates. Overall this means that the company's earnings capacity will be enhanced mainly by reductions in costs.

Agfa's Mega Plate Processor

Agfa has announced the sale of its 1000th LP82 Ultra plate processor. Whoopee. Aah, scoff ye not for this is indeed an important announcement. It is indicative of the market response to violet platesetters. Since launch at DRUPA 2000 Agfa has seen a growing demand for violet ctp. According to Theo De Keersmaecker, Agfa's worldwide marketing manager for digital plates. "Violet has been popular in all areas of the print market, 4-up and 8-up in particular have seen huge growth." Of the 1000 LP82 Ultras sold around 70% were installed with Agfa ctp devices, of which around 300 went with Palladios and 335 with Galileos. So violet isn't just an Agfa proposition after all.

China Star

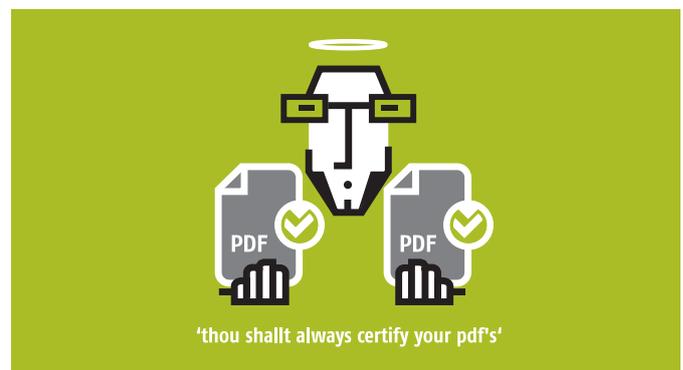
The South China Morning Post is installing a dual language Atex Media Command Sales Command advertising system (that's the ad system that isn't Enterprise for those more familiar with Atex than Media Command). The new 100 user system will be used across the publisher's three titles producing English and Chinese language classified and

ROP (Run of Paper ie display) ads. This technology also supports classified ad pagination, system management and general administrative reporting and is based on an Oracle database running on Sun servers. The system will accommodate advertising coming from the South China Morning Post's legacy systems and provide interfaces to third party systems including financial. This sale provides Atex Media Command with an important site in the region. The South China Morning Post is the leading commentator for greater China and is also the market leader for advertising. The newspaper also reaches an international audience through its subscription based online service.

New Focus for Camps

Peter Camps is standing down as CEO of EnFocus, the company he founded a mere ten years ago, and for the best of reasons. EnFocus is now a grown-up and under the guidance of parent Artwork Systems is well able to march ahead independent of its originator.

EnFocus has long been recognised for its pioneering PostScript and PDF related technologies. The company continues to be at the forefront of the PDF revolution,



...and your spelling! Peter's new business card, front and back.

shaping workflows and building systems components that help make the world of distributed PDF processing a little less scary. In this capacity EnFocus is working on new developments to maintain its position and lay the foundations for new directions.

▼ Peter in his new and as yet unspecified role will surely continue to be at the forefront of whatever it is he decides to pursue. We wish him every success in his new life and we wish EnFocus' new CEO David van Driessche the same. As the company's first employee David has worked alongside Peter since EnFocus first stood upright. His knowledge of the company, its technology, market and purpose are assets that will help Enfocus to continue on its present golden path.

Van Meeuwen on the Meeuve

NexPress Solutions has added what could be the most powerful weapon yet to its arsenal. Alexander van Meeuwen latterly of Esna Limited and Agfa UK has joined the company as vice president of global sales for NexPress' colour business unit. His title's a bit of a mouthful but Mr. van Meeuwen's focus is far from unclear. He will drive NexPress 2100 press sales worldwide, working in close cooperation with Heidelberg market centres. Mr. van Meeuwen's time at Agfa UK saw the company grow substantially, and laid the foundations of the formidable sales machine that is Agfa UK.

In common with Xerox its primary competitor, NexPress has a steep hill to climb. Selling digital presses into a market that suffers the twin handicaps of overcapacity and investment reticence isn't a task many people would embrace. Mr. van Meeuwen has the background and experience not only to embrace his task, but to teach it to tango as well.

... on the Other Hand

Xerox expects to sell 100 iGen3 digital presses by year end. The machine costs around \$500,000 and orders are apparently at a "satisfactory" level. Besides its new Freeflow initiative for opening up the workflow for improved business, operations and process management, Xerox is opening up its DocuSP API and will announce new front end partnerships in the coming weeks, including a new deal with EFI. Other enhancements are technology for driving toner into prechannelled (scored) substrates, and the ability to print on tabs.

KPG Comes Back Again

Last year, for the US market, KPG announced the Matchprint Virtual Proofing System based on RTI's technology. The company is bringing this technology to the European market this year to provide virtual proofing tools for onscreen contract proofing. KPG expect this technology to be of particular interest to creative agencies, publishers and their service providers. The system consists of a critical colour view environment using top of the range flatscreen CRT monitors, KPG's colour management and calibration technology, and RTI's Pixels-on-Demand streaming and workflow

management technologies. With this introduction KPG consolidates its position as the industry's leading provider of proofing solutions. KPG's range extends from low cost inkjet proofing through to virtual proofing with the Matchprint Virtual Proofing System to the giddy heights of Approval.

Krause Goes Purple

Krause has announced a new LaserStar Edition violet ctp system. The new device outputs 21 plates per hour at 2400dpi and can handle plates up to B1 (820 x 1050mm). The new machine is based on Krause's existing technology but can have either violet or NdYag optical systems. The LaserStar Edition's exposure bridge moves across the plate by way of linear drives for accuracy and precision. Designed to address the needs of smaller printers the system is upgradeable for higher performance.

iSCSI, You SCSI, It SCSIs

Most important of all we SCSI! the iSCSI protocol is now a ratified standard. Oh good. No really it is good because this standard is the one that uses standard connection protocols to link devices via the Internet. The implications for storage area network devices are obvious (Are they? Yes. Read the footnote.) but the implications for distributed processing in the media industry could be far reaching.

iSCSI is basically the same in principal and SCSI. The Small Computer Systems Interface provided a simple means of connecting desktop devices without having to have dedicated cabling and interfaces (plugs). It was a vital contributor to the plug and play concept so beloved of Apple et al. Today's world is not so much plug and play as drag and click, and iSCSI facilitates this model. It is a means of linking devices in the virtual space that is the prepress and publishing industries' distributed digital production environment.

Footnote: If you have a distributed workflow that needs lots of storage, you need to be able to access devices easily ie cheaply and easily and this protocol allows you to do that. iSCSI is based on IP and uses cheap standard internet and Ethernet connections. This will also help to make implementation mindless because the technologies are so familiar.

In the Name of the Law

According to a study by law firm Browne Jacobsen, many British retailers e-commerce sites are in breach of the law. It seems that they fail to comply with such things as the Data Protection Act and laws dealing with e-commerce and distance selling. Most of the breaches seem to be failure to provide the right forms for data protection, but there are hefty fines for processing consumer data

without obtaining consent and registering under the Data Protection Act. Quite what this means for online publishers depends on what constitutes consumer sales, but for newspapers it could be something to consider. Things will get even more interesting when the Disability Discrimination Act comes into force in October next year. Under this law web sites are required to give full access to all users, including the ocularly, aurally and orally challenged. Doing so will probably provide more than a challenge to the web design community, but this could have wonderful development potential for the media business. Back to the eighties and hype for multimedia

Acrobites

(Something to get your teeth into)

SAN -- Storage Area Networks; distributed network based storage, traditionally accessed with fibre channel interfaces, and costing around GBP1500 per server. Important for archiving and content management and an up and coming must have for publishers.

XACML -- nothing to do with the Incas this little mouthful stands for Extensible Access Control Markup Language. It's a security standard for expressing XML policies for information access. It doesn't sound like something you want to know too much about, but your network and web server people should be looking into it.

iSCSI -- This is important. Internet Small Computer Systems Interface is a means of linking web based storage systems, a way of connecting Storage Area Network devices using Ethernet and network interface cards. An important brick in the distributed processing wall, or should that be floor?

Say What?

Iffy Writing Award Presented in the Ether for Obfuscation, Confusion, Misinformation or All Out Pretentiousness [that'll be you then -Ed.] Apart from Spindrift contributors, authors names withheld, because we aren't that cruel!

From a brace of UK trade magazines:

"This helps owners of Océ wide format printing systems to take advantage of a combination of software application that sits on their printer's local server, that manages their clients' files and an online service allowing clients to view their construction plans, share them with other project partners and order prints quickly and easily."

"Profiling the RIP to the customer's chosen proofing standard or press means narrowing down the colour gamut to make it easier for the press operator to match the resulting inkjet proof." Whew!

Letter From... Lubeck

Ich bin ein reader von Lubeck. Wir haben nichts mit printing zu do but wir will schreiben anyhow zu die Spindrift (ein good name ich think). Wir haven many volk dat ist working im printing, aber they haven ein very sticky zeit von it now.

Mein freund, Wolfgang lives close bei in Hamburg, und das ist nichts so far von Kiel. Er used zu be in printing aber now ist sein job alle ganz kaput. Wolfgang used zu be ein typographisches type und seine frau Helga was ein gute scanner geoperator in der town. In Kiel läste year war alle ever so gloomische. Wolfgang's factory ist geclosed und Helga's scanner job was uber. Für both of them es ist kein more arbeit und das was really grim. But es ist nicht alle bad news. Now they arbeiten für ein car dealer und Wolfgang und Helga sind very jolly glücklich und happy happy.

Every tag they kann play mitt ein spanking neu Volvo, or ein sleekische Saab, or ein speedy und shinische BMW. Es ist very jolly all round. Occasionalische they kann also drive by Siemenswalh where die factory ist, und they kann wave zu alte freunds. But these alte freunds are immer without smiles, und very anxiousische because so oft koms more grimische news von die factory. Wolfgang und Helga say dat die printing industry in Kiel is like ein Morgue. Was say Spindrift's readers? Ist graphic arts really ein sad industry, und especially für die Prepress volk?

Ich finde Spindrift sehr gut but ich bin a bit gemuddled. Why schreiben you about ein industry das so sad ist, ein industry das has so few volk in Kiel? Aldo ich bin ein bit gemuddled up, ich think das perhaps es ist because seine industry ist much more interessant, than autos? Yah, das muss be it.

Mit freundlichen Grussen!

Uwe Mätter

Driftwood

(Useful stuff washin' in on our shores)

Web Content Accessibility

This may not yet seem like a big deal for publishers, but it's coming. The W3C is currently working on version 2 of its Web Content Accessibility Guidelines (WCAG 2.0) and even if you think it won't apply to your business, if you have a web site, you have a responsibility to make it accessible.

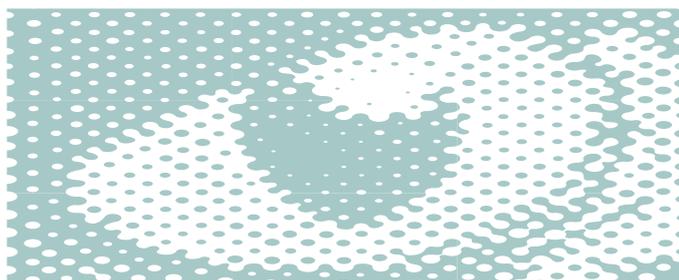
The purpose of WCAG 2.0 is to make "Web content accessible to people with disabilities and to define target levels of accessibility". Some of the guidelines to follow are that the site can be perceived by any user (think sound and vision), operable by any user (think user interface), navigable (think idiot factor), understandable (see previous) and robust. WCAG 2.0 is still very much a working draft, but it is a document that will be used as the definitive reference for web accessibility, and lawyers will love it.

Remember what the man said:

"The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect."
– Tim Berners-Lee, W3C Director and inventor of the World Wide Web

XSL-FO

Extensible Stylesheet Language-Formatting Objects is beginning to show signs of life in publishing. It is most relevant for automated document production where interaction is not a priority. Newspapers and magazines are probably not ideal candidates, although as the standard evolves, they could well be. In the meantime applications that require automatic generation of content driven documents will be of most likely interest to developers. This includes insurance policies, investment proposals, owner manuals for cars, and consumer goods, or contracts. The sort of document that varies its content according to the user profile could also be ideal for XSL-FO, but it's early days yet. Keep an eye out for the first releases of XSL-FO plugins to composition tools such as InDesign and XPress.



Spindocs

(Where the spinner gets spun!)

These are our favourite press releases this month. Sorry to Heidelberg and Fuji if we have embarrassed you, but in the case of Heidelberg a headline like this simply cannot be ignored. And as for Fuji, is there really nothing more interesting to share with us?

• "Heidelberg Responds to Customer Demand (!!)

Customers who have bought new equipment in the last five years from Heidelberg UK will be given free access to its Help Desk for the next six months. George Clarke Managing Director says: "We got it wrong. We thought there was an opportunity to improve customer service using our enhanced help desk service*. We'd seen the benefits in prepress and digital and felt that we could invest in staff and extend this to sheetfed and finishing.** Using a Help Desk should reduce downtime and save customers' overall service costs. We thought customers would be happy to pay something towards this - provided they could see the benefits."

"Now we realise that at the very least we need to demonstrate to customers that we are offering an improved level of service before we can consider charging customers who have invested with Heidelberg UK.***."

* we think this might mean they thought there was an opportunity to squeeze more money out of customers. But we could be wrong.

** we think this might mean they thought sheetfed and finishing people might be as soft a touch as prepress and digital people. But we could be wrong.

*** we think this might mean they didn't get away with it. But we could be wrong.

• "New Fuji website for 2003

Fujifilm Graphic Systems today announces that its redeveloped website, www.fujifilm.co.uk/gc has gone live."

It goes on for about a page, but you get the idea.

JDF and Ikea: How and Where Does It Fit?

Ikea's corporate philosophy is based on principals of holistic, sympathetic production. As far as the furniture is concerned this means rather more than the fact that you build it yourself. It also means that everything in the supply chain is produced as economically and ethically as possible. Sympathetic process efficiency is the guiding principal applied to Ikea's production, and it also applies to the company's digital production workflow for printed catalogues. The massive Ikea catalogue is produced annually in 35 languages and distributed to countless countries worldwide. Ikea Catalogue Services is now looking for further automation and improved production management using JDF, the Job Definition Format.

In the publishing industry automation has been a key target for content management and production ever since digital processing first came onto the scene. Although a company such as Ikea is not strictly a publisher, their information production requirements are as complex if not more so, than many publishers. In Sweden there are four yearly catalogues and one annual sourcebook for many media. A single annual catalogue is produced for Ikea's many international markets. Ikea's catalogues are available worldwide and there are 35 different language editions. Some countries such as Switzerland require catalogues in several different languages and an average Ikea catalogue has 370 (210 x 250mm) colour pages. This page dimension was originally selected in order to minimise paper waste, and over the years it has become established as part of the Ikea brand. Although the main catalogue is only produced annually, Ikea also produces numerous seasonal and sector specific catalogues dealing exclusively with kitchens, offices and so on. In each language edition of the main catalogue there are 6,500 colour spreads.

Ikea's internal editorial department includes around 240 people who deliver PDF or TIFF files to external printers. Printers make plates and print the pages at numerous print sites around the world: there are twelve or thirteen gravure printers plus an equal number of offset printers in addition. A content management system designed and supported by Swedish developers MWM system uses the Ifratrack standard for document management, keeps track of all files and their almost endless combinations within Ikea's two discrete workflows.

Two Separate Workflows

Each Ikea catalogue spread is produced via two separate workflows with one colour layer and one black layer localised for each country. The colour spreads, produced as TIFF/IT P1 files and country specific vectorised PDF black overlays, come together at output.

Many of the demands inherent to catalogue production are similar to those of daily newspapers, albeit with an annual rather than daily frequency. Both involve huge data volumes, and both have complex file management and workflow management issues to resolve. Automated workflows in both newspaper and catalogue production must be flexible and according to production manager Björn Zitting face many of the same production demands "we saw that we were going in the direction of news production". It is for this reason that Ikea models its production



The soft furnishings and textiles store for use in Ikea Catalogue Service's photo studios. There are several studios located at Ikea's Älmhult offices where the bulk of its catalogue images are created.

About Ikea

Ikea was founded in 1943 by Ingvar Kamrad. The group includes a worldwide network of franchised retailers, a product development centre, a design, commissioning and quality control organisation and a service organisation responsible for coordinating all Ikea activities. The Ikea Group is now owned by a charitable foundation based in Holland and turnover for the financial year 2001/2002 was well in excess of Euros 11 billion.



At first glance this looks much the same as a standard Ikea store's warehousing, but this area is used for building and architectural supplies, such as fireplaces, radiators and window frames, used to create interiors for new product photo shoots.

▼ workflow management to some extent on that of a newspaper, and in part why it uses the Ifratrack newspaper production standard to manage file delivery between its hub, satellite production and printing plants. But for Ikea Ifratrack does not go far enough and the company is looking to the Job Definition Format to take automation and content management to another level. Björn Zitting believes that “JDF is part of that model: workflow definitions, name standards and everything even without automation it makes sense ... it triggers events such as the timing of catalogue releases.”

JDF is an XML application designed to manage job information within and across digital systems. It is the digital equivalent of the traditional printer’s job bag, but because it is a data formatting specification the data it contains can be accessed by any digital system. This is why JDF is important for Ikea moreover according to Björn Zitting “It’s bigger in scope than just publishing; it’s process control and management for reporting and proactively making things happen in the workplace.” JDF can help to provide management data for MIS systems, providing the company with valuable production management information. It can be used to bring together different datatypes within a single production environment and it can also be used to manage variable content production. Although this is not yet on Ikea’s map, this last has particularly interesting implications for short run highly targeted catalogues, and content personalised for Ikea’s customers.

Passive Tracking Step 1

Appreciating the benefits of this still largely untried technology is not the same as implementing JDF within Ikea’s already complicated workflow. However unlike the traditional graphic arts approach to new systems implementations, JDF can be implemented very gradually. Because JDF can manage data and processes throughout an entire supply chain, a strategic view is imperative so for Ikea the first step is to monitor processes in the workflow and Björn initially wants: “Passive tracking to see what’s happening at various points in the workflow, especially where we know what is happening. So we can monitor progress. I’m not sure we have so much use of devices reporting in isolation as we have seen with Ifratrack. During the editorial process this is not so interesting for the workflow. It’s dangerous to trust just statistics but it’s interesting to collect metadata that is relevant to multiple devices or systems. Because it is based on XML JDF will be relevant also in IT structures.” The idea is to collect information about the processes to get a better understanding of how processes affect and inform one another. For Ikea there is little value in merely measuring how many images a scanner captures, or how often a file is opened, unless this information is evaluated in a larger context. Thus if a file has to be opened many times in order to instruct other subprocesses this might suggest a point of improvement in the workflow.

Organic Process

JDF implementation is an organic process. Its implementation depends on many factors so one might just as well ask: how long is a piece of string? The string’s length depends on where and how you start to measure it, and likewise the rate of a company’s JDF implementation depends on how quickly JDF compliance turns up in software and workflow management systems. It also depends on how frequently software and hardware are updated by supplier companies. ▶



Ikea Catalogue Services maintains its own store of props for use in its catalogue images. Looking much the same as an Ikea store, most of this material is used as backdrops for new product shots.

JDF Doodle Bugs

Creo has launched version 2.0 of Pandora, its PDF based step-and-repeat software. Version 2.0 is JDF compliant and for packaging and label producers this software will provide an important bridge from layout to management. The software has some clever new features including such esoterica as editable nonrectangular bleed paths automatically derived from CAD die line information, bleed overlap detection, simple tools for overlap correction, and such like. Given the fact that labels and packaging are one of the few areas of print the Internet can’t replicate this software could be worth a look for commercial printers and service providers looking for new areas to pursue. The fact that it is JDF compliant as well as having support for PDF will make it easy to integrate with existing workflows. For Creo this is also an important rung in its JDF ladder.

For Ikea, most catalogue data is created in house so JDF implementation obviously also starts inhouse. But Ikea's content also passes out to printing companies and to web hosters so subsequent implementation issues are a little less straightforward. At the very least "JDF is useful for print delivery and we expect printers to take control of managing incoming documents" according to Björn Zitting. Once JDF is a known and expected factor in the production process, printers will be able to work with more detail than just file names. Such things as file management will include preflighting as a matter of course. As Björn Zitting sees it "When you link several nodes of a JDF file you can build big networks – where one system's output becomes another system's input – that can allow software tools to work within the JDF format. We could produce the same results with different tools depending on the industry we are working in. So it won't matter if systems use different data formats."

Long term JDF could be the means of managing data and format incompatibilities through automated conversion, across technologies. Short term implementation is a matter of coercive system development, with JDF used to gradually enhance and develop content applications rather than just to monitor workflows.

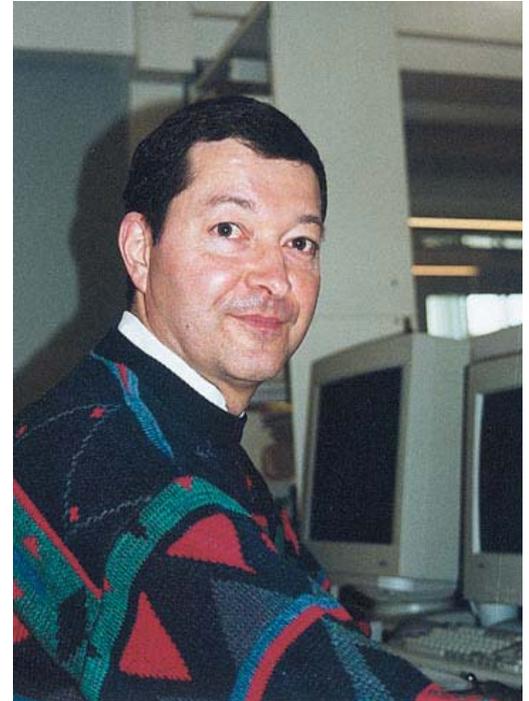
Everyone's Responsibility

Ikea sees JDF implementation as everyone's responsibility, proceeding on many fronts simultaneously, with no specific individuals responsible for evaluating, implementing, communicating and training for JDF. Rather the technology and its effective use will make its way into the supply chain as part of Ikea's normal software upgrading, a process of organic deployment. "We are sharing documents with printers using PDF and TIFF-IT P1 now but using JDF tools depends on how the tools are introduced and how editorial systems change".

Implementation is likely to start with images. Currently most Ikea images are created digitally at Ikea Catalogue Services photo studio in Älmhult where 250 people are responsible for catalogue production, some 25 of them photographers. Image files have an attached XMP file, a file that is not dissimilar to a job ticket. As the XMP file can be opened in Photoshop Björn sees "This is our starting point." he continues: "It's tempting to see XMP as an underpinning for JDF, but I'm not really sure if Adobe sees this for JDF." Quite how XMP fits into Adobe's plans for supporting JDF is indeed a little vague, however both are XML applications. What is not clear is where XMP ends and JDF begins, but either way "Image management and validation of digital images coming from other countries is an obvious initial implementation of JDF for Ikea."

Ikea's support for JDF will affect every link in the company's supply chain. The company anticipates that JDF compliance will come with each upgrade to application softwares, so the transition to JDF will not cause too much digital trauma for service providers and content managers. At least not in terms of technology. In Björn's view the propagation process is fairly straightforward: "As we upgrade software we are automatically transmitting JDF files and so parsing happens almost on its own. If JDF is a specific part of the [software application's] feature set we will teach the people in the supply chain." It is more about developing organisation and methods to take advantage of what the technology can do. Ikea has already thought of this, looking

"For Ikea there is little value in merely measuring how many images a scanner captures, or how often a file is opened, unless this information is evaluated in a larger context."



Ikea Catalogue Service's development manager Björn Zitting.

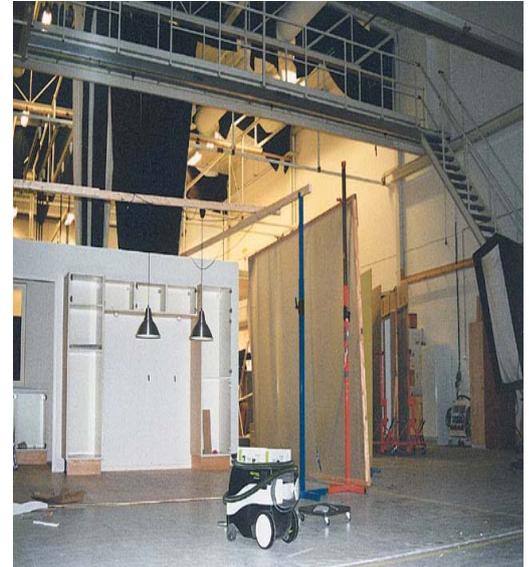
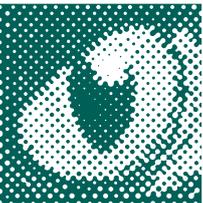
farther ahead because: “It’s very tempting to use JDF for managing copyright – to have an official carrier for metadata so we will have such a requirement on digital pictures.”

In much the same way as PDF has provided a foundation for automated processing of digital advertising delivery, JDF could provide a foundation for additional content management and related services. This will obviously require changes in the working practises of service providers, but it presents interesting content management options. Inevitably for companies such as Ikea JDF will lead to lower costs and shorter times to market, and it should help reduce late changes costs because they will be less frequent. But JDF will also have an affect at remote print sites and how they manage content. For example JDF will allow for further automation of imposition, safer late changes and tighter deadlines for individual pages. JDF works with metadata, and so could instruct imposition, effectively bypassing dedicated imposition processes.

JDF has the scope to open up the print production market, and this naturally includes businesses using the web as their commercial and production environment. JDF will go much farther in this respect than Ifratrack. Björn believes that “JDF could have a role in web publishing and electronic commerce because all display relating to these environments has to be produced in some graphic production system. JDF can support automation and declaration of files for web, validating, parsing etc. I believe that the speed of that part for retailers and wholesale distributors over the web will just increase.”

When the Swedes decide to do something, it seems they go all the way to make it so. At the very least Ikea’s JDF implementation will provide many publishers with a useful reference point, a JDF compliant production system that is a true test of how JDF could reshape publishing processes. A friend of mine told me that his sister’s idea of a history book was last year’s Ikea catalogue. Ikea’s JDF implementation will indeed have historic importance, but it will be because of something rather more substantial than the whimsies of fashion.

– **Laurel Brunner**



There are several of these large sets used to create interiors for showing off products in the Ikea range to their best advantage.

RTI & Online Proofing: A Roundtable Discussion

The chitter chatter about this or that proofing technology is starting to get louder, and more interesting. The likes of Agfa, Seecolor, Colorbus et al have already rattled the cages of traditional proofing system providers, but we are seeing this sometimes less than fascinating debate start to take a new turn. These days the focus isn't so much on hard copy options as it is on soft proofing applications and how proofing contributes to the workflow.

Soft proofing is where we are headed for most proofing applications. Of course very few large presses get rolling purely on the basis of an onscreen proof, but plenty of other stages in the workflow can roll very nicely so this is where we chit chatterers tend to focus our attention. We recently participated in a Round Table Discussion (read expensive posh lunch with only a few diners and paid for by a technology developer) where participants shared their views on soft and remote hard copy proofing. The attraction of soft proofing is not just as a possible alternative to hard copy proofs, but in the technology's influence on workflows.

The View from Production Response

One of the participants in the discussion was Pat Mulvaney, joint managing director of Production Response and familiar industry voice. Production Response is one of the UK's largest reprographics companies and has been a user of softproofing technology for the last three years. Production Response is an important customer for RTI the technology developers who not only footed the bill for lunch, but also gave us the chance to hear both sides of an interesting story at the same time. In fact RTI was substantially outnumbered by their guests with only Alex Granat RTI's European regional director there to push the RTI message.

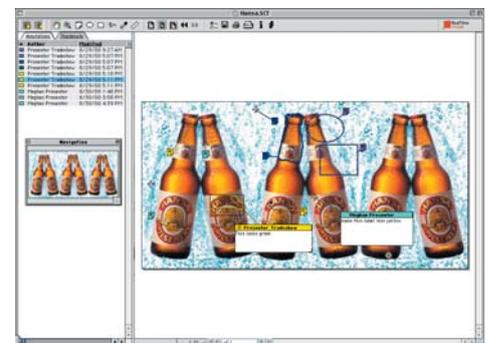
Production Response is part of the massive Vertis group. Along with Ad Magic it is one of the two prepress companies that constitute the Fusion Prepress Division a subsidiary of Vertis Inc. Production Response is doing well despite the pandemic gloom in the UK printing business. The company's UK based prepress services generated GBP33 million in turnover last year a stable and slight improvement compared to its previous year. This leading production and repro house uses RTI's technology for four major clients, including retailers such as the Dixons Stores Group and Matalan. Production Response handles a substantial amount of Dixons business advertising, but a short while ago Dixons moved their marketing department to Dublin. Production Response was in the tricky position of either losing the client to a local competitor or coming up with a new way of working.

Both Production Response and Dixons needed a proofing solution for mixed retail ads that would work in a distributed environment, and they needed technology that could support up to 15 people at once. Production Response put together a preproduction proofing system based on RTI's technology so that everyone involved in the workflow can simultaneously view and annotate an ad if required. For Matalan Production Response is using RTI's technology in conjunction with a hard copy proofing system because according to Pat Mulvaney "our

Who Is RTI?

Like its luncheon guests RTI is also enjoying growth, gaining prominence particularly in corporate, publishing and packaging markets, and in providing managed portals for clients. The company employs around 50 people spread evenly between the US and Israel, and has a turnover of nearly USD30 million serving the graphic arts and medical markets with the revenue contribution split evenly between the two.

RTI is essentially an Internet imaging vendor with a softproofing technology derived from its patented Pixels-on-Demand streaming technology. The company has an impressive list of OEMs including Heidelberg, Wamnet and KPG who rebrand the RTI technology, plus a number of others who supply RTI technology as an add on to their existing workflow systems. Besides working well with workflow management systems, the technology integrates with XiNet WebNative, Canto Cumulus and other asset management technologies. RTI is now moving towards closer integrity with digital asset management. As XML uptake spreads this process is getting easier because XML facilitates support of any file format in the workflow, not just PDFs for proofing. The implications of this could take RTI far beyond softproofing applications and into such realms as output managed asset delivery.



RTI's proofing software has features supporting new and conventional proofing models, such as support for progressive proofs and the automatic breakdown of specials to CMYK based on densitometer readings. RTI supplies a digital swatch book with 10% gradations for on screen

clients are still very critical about how it looks on paper. I think online and remote proofing go hand in hand". So it isn't a question of either or, but a question of where and how in the workflow soft and hard copy proofing interact.

Production Response uses the RTI technology in conjunction with Dalim's Twist. This manages the file tracking and associated workflow in an Internet based production environment, and was purchased after the soft proofing technology was installed. Production Response is looking to integrate the soft proofing process more tightly with Dalim's technology, which shouldn't be difficult since Dalim is an RTI OEM. The idea would be to use RTI's technology to provide a managed proofing layer, and Twist to keep track of where everything is.

This proofing model works in conjunction with hard copy production proofing. Production Response has set up a proofing service running online, using RTI's technology to create a virtual environment for clients who can then do their own hard copy proofing as they choose. The company is also providing tracking and archiving tools.

Proofing for Magazine Printing

Retail ad production has its own set of production requirements, so RTI also invited David Brown of magazine printers Wyndeham Heron to their lunchtime gathering. Wyndeham Heron is another major client for RTI and produces forty thousand PDFs a month with a workflow that gets 150 magazine titles on press every month. The company produces all data direct to plate and has been film free for the last two years, during which time proofing processes have had to change in response to different workflow requirements. David Brown said that initially: "we found a number of clients that didn't have the confidence in digital workflows. We've found that a percentage of the client base wants a preimaging proof". This is where soft proofing technology has helped to tighten up Wyndeham Heron's workflow without expecting clients to make too much of a leap of faith. Fiscal constraints have also helped with acceptance. According to David Brown "more than 50% of our publishers do not supply us with colour proofs because of the costs". Wyndeham Heron's jobs are mostly printed on 32 page heat set web presses and prior to the introduction of softproofing it used to take 10 to 12 man hours to produce plates ready for press. Now production takes forty minutes. Tightening up the workflow or what!

Wyndeham Heron is also a beta site for Agfa's Apogee workflow management system, so it has had considerable experience with PDF proofing. Wyndeham Heron needs to view 32 page raster data PDFs but the quality is insufficient without high resolution data, which of course means large file sizes. RTI's streaming technology is used to view high resolution 32-up PDFs posted on the Wyndeham Heron web site. Clients access their production files through a specific URL and the service is used by around 10 percent of Wyndeham Heron's clients.

Both Wyndeham Heron and Production Response are closing the digital data management loop by combining digital delivery and file management, with softproofing techniques. Clients are able to work according to their own internal workflow, relying on the repro service providers to manage the flow and the technology that supports it. This kind of flexibility in the production workflow means that both Production Response and Wyndeham Heron can provide enhanced

► **RGB viewing.** The goal is to make all proofing faster including hard copy remote output, without compromising colour integrity.

RTI sells its technology through a number of channels besides its OEM route. There is a private label option where client companies provide their customers with branded ASP services and RTI manages the server and related technologies on their behalf. RTI also wants to sell its technology direct and has three distributors in the UK (Turning Point, NCS and Positive Focus). The company is very keen to develop its Scandinavian and European markets for which it has added four extra people and released localised versions of its software.



David Brown of Wyndeham Heron, left, and Pat Mulvaney of Production Response.

RTI Goes West

RTI has entered into a partnership with Printable Technologies in California. The deal is to provide an online proofing and approvals management system as an adjunct to Printable Technologies PrintOne services. PrintAbleproof.com is a branded version of RTI's image streaming technology and it will essentially turn Printable Technologies into an ASP, without the additional costs or IT investment generally associated with that role. Several thousand PrintOne customers will be able to work within a secure online environment which provides online proofing and facilitates approval cycles. This is an important customer for RTI which is working hard to develop its international presence.

▼ customer services, and be more responsive as their clients' workflows change over time. Despite a scowling economy both companies are enjoying growth.

RTI isn't so much in the proofing business as in the business of providing technology for approvals management. Neither proofing or asset management, approvals management isn't yet a widespread term, but it is an important application for prepress management technologies. We strongly believe that approvals management is a vital adjunct to the publishing process workflow. Apart from approvals management benefits it provides audit tracking, and adds considerable value to any distributed production process, not least remote PDF based proofing.

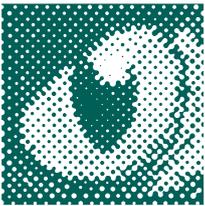
Where Too Now?

Most of the conversation over lunch wasn't really about proofing in the conventional sense. It was actually more about time, space, file and press management. Proofing in this context is a key component of production and customer service, a tool to enhance workflow efficiency. By far the largest community of interest in proofing is the content creators, page designers and production people. They care primarily about problems with content, and about correcting production flaws before they get too costly to fix.

Using the Internet as a proofing environment not only speeds up proofing processes, it also allows everyone with an interest in the content to be involved. Thus a proof is viewed and approved from all perspectives rather than in isolation as a production task. This is an important departure, one that lays the foundation for revised approvals processes and management. As users throughout the supply chain gain confidence in network based proofing, this will lead to greater confidence in remote hardcopy output proofing as well. With so many people potentially in the proofing chain, this along plus associated colour and approvals management tools equals a growth market.

– **Laurel Brunner**

“Our clients are still very critical about how it looks on paper. I think online and remote proofing go hand in hand.”



Adieu Moiré – Stochastic Screening Gaining Ground

Only a couple of years ago, few printers used so called stochastic screening with any success. Today the technology is fast gaining ground and all major prepress vendors offer alternatives to conventional screening software. So how can printing with stochastic screens benefit business and where are the possible pitfalls? This article examines the pros and cons from the users' point of view.

According to Oxford English Dictionary stochastic means “having a random probability distribution”. The random aspect of stochastic screens is in how the screen dots are placed within the printed image. Instead of being arranged along lines in a grid, as is the case in conventional screens, they are distributed without regularity in what appears to be a random way.

These kinds of screens are also called FM screens, ie frequency modulated screens. This term refers to the fact that the image is created through a varying frequency of dots, as opposed to AM screens (conventional screens), where the size (amplitude) of dots varies. There is some disagreement among industry experts about screening terminology; some hold that “stochastic” is the most correct term, others that FM best describes the technology, while some think the terms are interchangeable. In this article we will use both.

Enough said about the confusion over terminology – what is at the core of the issue? Basically, it is all about printing quality. Conventional screens, so called AM screens, can cause some unwanted effects in the printed image, problems that are largely eliminated when using FM screens. The primary concern is moiré, ie patterns appearing in the image. But FM screens also produce a more detailed image and a larger colour gamut – although there is not 100 percent industry consensus on the latter issue. There are other advantages, as well as pitfalls, in using stochastic screens. We will come back to these a little later.

Why Now?

The theory behind stochastic screening is well established, but it was not until 1993 that the first actual implementation of that theory was introduced to the market, in the form of CristalRaster from Agfa. The second vendor to offer stochastic screening software was Linotype-Hell, launching Diamond Screening, today sold by Heidelberg who acquired the company.

But there was no real breakthrough in the market. It took until a couple of years ago for the printing community in general to be able to benefit from the new screening technology. Why was this? One of the main reasons is the sheer computer power needed to handle the calculations in stochastic screens – computers (RIPs) simply haven't been powerful enough to provide a reasonable production throughput. Another important factor for the recent breakthrough is computer-to-plate technology. The dots in an FM screen are very small, and in order to correctly reproduce them you need very exact plate production. This poses a challenge for anyone employing analogue plate production, ▶



Using stochastic screens gives greater detail. Here, the same image has been printed using two different screens, Heidelberg Diamond Screening (FM), below and Heidelberg I.S. (AM), above. The image has been printed by Billes Tryckeri in Sweden and the detail has been scanned at 1000 percent. (Please note that these are low res pictures and will not do the screening justice if printed out)



▼ where register issues and dust in the plate making can wreak havoc when reproducing such tiny dots. With computer-to-plate these problems are eliminated – now it is possible to image dots as small as 10µ directly onto the plate (only Creo boasts such minuscule dots, normally FM-dots are between 12 and 30, usually around 20), rather than exposing a film onto a plate – a much less exact process. It is worth noting that most vendors use so called clusters of pixels in their stochastic screen, so that a screen dot on the plate is made up of at least 2 x 2 pixels.

AM Problems

As we have seen the basic problems that used to go with implementing stochastic screening technology have been eliminated. However, it does not follow that you can purchase new screening software and simply press the button – successful use of the technology makes other demands on the production processes, and we shall examine these a little later on. First, however, let's take a look at what gives FM an advantage over AM.

As mentioned earlier, one of the classic problems in four-colour printing is the appearance of so called moiré. Since the dots in a conventional screen are arranged along lines in both directions, they form a grid. When combining the four colour separations these grids have to be rotated at predetermined angles – screen angles. If the angles are incorrect or slightly out of place, moiré, an unwanted interference pattern, appears in the image. In a stochastic screen there is no grid and hence no screen angles – moiré is not an issue.

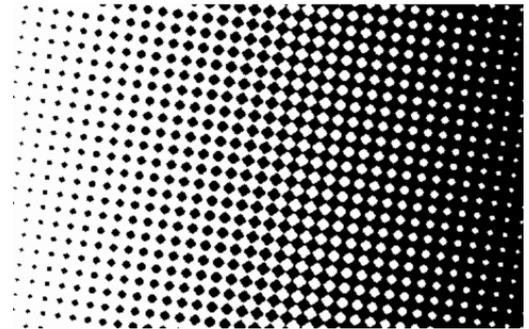
Another type of moiré appears when the screen dots interfere with a pattern in the actual image, eg the classic chequered jacket, and thus create a secondary pattern. Again, this is not a problem in a stochastic screen since there is no fixed dot pattern. The same is true for the rosette-patterns that sometimes appear as a result of the four screen angles.

Finally there is the jump in colour tone that can appear in what should be a smooth gradient blend. This is caused when the dots get larger as the tone darkens and suddenly touch each other – a sudden jump to a darker tone is perceived. In a stochastic screen all dots are (generally) of the same size throughout the image and do not touch in this manner.

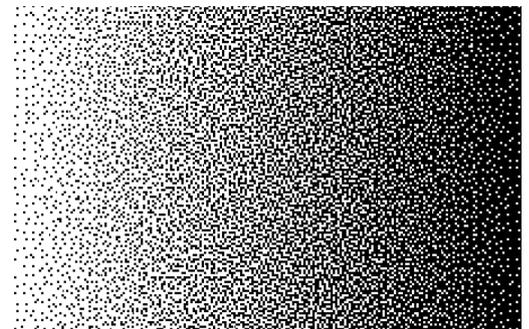
FM Demands Control

So what do you need to consider from a production point of view if you decide to offer your customers print using FM screening? As mentioned before – if you are employing analogue plate production, perhaps you should think again – it is fair to say that computer-to-plate is fundamental to successful FM implementation, at least if you want to avoid getting grey hairs.

Another point to consider is that stochastic screens do not behave like conventional ones in print. A basic difference is the increased dot gain – it is an established fact that stochastic screens create greater gain. This does lead to a more consistent printing process, but equally it means you have to compensate for the dot gain in prepress. All the users we have talked to mention the dot gain as a major factor in adjusting production to implement stochastic screening. Everyone ►



The dot structures in AM and FM screens respectively - note the dramatic difference in dot sizes. These screens are from prepress supplier Screen.



agrees that once the compensation is figured into the prepress process, the technology works very well and can even result in ink savings. The increased printing consistency has two sides, according to the printers; as long as your prepress is in order, it is a positive thing because it means there is less need for adjustments in the press. However, a couple of users point out that with FM you are unable to adjust the colour on press the way you can when printing AM screens.

Søren Henriksen, production manager at GraphX, Copenhagen, Denmark a web offset printing company, explains how stochastic screening has improved their print consistency. "Web offset has more variables than sheet offset, not least the speed – we print at up to 15 meters/second – we print on both sides of the paper simultaneously, on poorer quality paper etc. The consistency in the chemistry is also different than in sheetfed. Let's say the magenta density increases by 5 percent over a long run. With a conventional screen you'd get a very definite red tint. With an FM screen the increase is much less noticeable."

So why do FM screens lead to a more consistent printing process? Basically any fluctuation in the inking affects an FM screen less than it does an AM screen. The reason for this is that the dot diameter is smaller which means that the ink threads that are pulled between plate and blanket are thinner and hence break closer to the printed image. This, in turn, leads to a more even layer of ink.

There is also a risk of a level of graininess in the printed image when using an FM screen. Simply speaking, the risk of graininess increases when the distances between the dots vary a lot and when the number of dots per surface unit is small. We are in other words talking about the algorithms specific to each screening software, ie how the dot placement is calculated. The different vendor products vary a great deal in this respect. Generally you are obliged to use the screening software supplied by your platesetter supplier, but you should be aware of this issue when testing a new screening technology.

One user, Per-Arne Nilsson, prepress manager at Billes Tryckeri, Gothenburg, Sweden, has experienced graininess in what should be solid colour areas: "Solids are generally smoother when you use AM-screens and I think images look sharper as well. Let's say you've used Unsharp Mask in Photoshop – the results show up better using a 200 lpi conventional screen than they would with a stochastic screen, in my opinion. But FM-screens definitely give greater image detail."

Proofing is another area to keep in mind when using stochastic screening. It is vital to correctly compensate for the dot gain, and conditions vary depending on what kind of proofer you use. Per-Arne Nilsson, at Billes Tryckeri, works with a Kodak Approval that, unlike most digital proofing methods, reproduces the actual screen dots. If you are using an AM screen that is. With an FM screen the process is less straightforward, at least until the necessary compensation has been worked through. He explains: "It is not exactly straightforward to output proofs for FM-jobs on a machine designed for linear AM-screens. We now compensate for the dot gain in the platesetter so that the finished print corresponds with the proof that the customer has approved."

Generally it seems to be more important to co-calibrate the proofer with the press than for the dot structure of the two to be the same. ▶

Over the Edge

Agfa has launched a version of its Sublima hybrid screening technology for its commercial platesetters. Designed to provide enhanced quality at lower resolutions this technology has been in use at various newspaper sites since last year. The technology renders very fine details on a range of stocks at moderate imaging resolutions, improving contone reproduction with 1 to 99 percent dots on the plate and printed sheet. Dot gain compensation and output calibration are handled in the RIP so it is also possible that this technology could contribute to more efficient ink usage.

Sublima is based on a combination of Agfa's stochastic and conventional screening technologies. For rendering midtones Sublima uses Agfa Balanced Screens and for highlights and shadows Agfa's stochastic technology is implemented. Sublima can be used to output 210 to 340 line screens up to 2400 dpi on various Agfa platesetters including green and violet versions of the Galileo, the violet Palladio and the GLV based Xcalibur 45 and VLF thermal devices.

Use of the smaller FM dots also affects the plate life – smaller dots are worn down more quickly which means fewer prints per plate. Thermal CTP-plates work best, since they produce the hardest dots. Silver plates also work well, but result in greater variations due to the developing process. Photo polymer plates are less suitable since they have lower resolution, although this has nothing to do with the dot hardness.

One advantage in using FM is the relative ease with which you can print more than four colours – with a conventional screen the problem of additional screen angles makes it very complicated to add further separations without moiré appearing.

Stochastic screens are at their greatest advantage on uncoated stocks, according to the users we have spoken to. On these types of papers it is much more difficult to print fine AM screens than it is on coated paper. Stochastic screens produce details on an uncoated stock corresponding to up to twice the line resolution you could achieve with a conventional screen. Says Dirch George, prepress manager at Zetterqvist Tryckeri, Gothenburg, Sweden: “The stochastic screen we use is the equivalent of a 200 lpi conventional screen. However, if we were to print with a 200 lpi conventional screen on an uncoated stock, images would just fill in. With the stochastic screen we get great detail.”

Hybrid Screens – A New Combination

Over the last couple of years some vendors have introduced so called hybrid screens. Hybrid screens combine stochastic and conventional screening technology in one screen. In this group we find, among others, Fujifilm’s Co-Res Screening, Screen’s Spekta and Agfa’s Sublima.

Hybrid screens generally use AM screens in the midtones (about 10-90%) and stochastic screens in the highlights and shadow areas (this is not true of all products, please refer to the vendors for information on their particular software). The idea is to achieve rich detail in the highlights and shadow areas while avoiding graininess in the midtones. Also from an implementation point of view the move from AM to hybrid screening is less radical in production terms than a move to FM, since the technology less different.

Zwaan Offset in the Netherlands produces high quality full colour promotional prepress and printwork. The company was asked to beta-test Screen’s hybrid screening technology Spekta, and did so. It now uses the hybrid screen for about 40% of jobs, the jobs that require the highest quality image reproduction such as annual reports and brochures for cars, jewellery, glass etc. According to owner Marco Zwaan, the hybrid screening technology offers some of the same advantages of FM-screens such as elimination of moiré, better detail in fine lines and making shades softer and smoother. However, he also points out the advantages that he thinks Spekta has over FM-screens:

“There are no special needs when scanning and you can choose which screen to use, AM or Spekta, at the very last moment, before RIPping. The hybrid screen takes no longer to RIP than AM screens. Also, we can adjust the ink levels in the press in a way that you cannot when using FM-screens.”

According to Marco Zwaan, the only adjustment in work procedures required when they decided to start using Spekta was fine tuning the

Creolithic

APS a Cheshire UK based commercial printer has recently installed a Creo Lotem 800 Quantum platesetter with Staccato screening. Following a trial period this investment is expected to provide the company with “a unique selling point” according to deputy managing director Rick Snelson. APS has built its commercial printing business providing integrated digital services including conventional design and artwork supply, short run digital printing and facilities management. The move to a Quantum model was made specifically for Staccato and so that APS could offer it in 100% of its work, providing highly quality with no extra cost, as part of its customer commitment and to enhance client retention.

Some Of The Products On The Market

Stochastic Screens:

Supplier	Product
Agfa	Cristal Raster
Heidelberg	Diamond Screening
Creo	Staccato 10*
	Staccato 20*
	Staccato 25*
Fujifilm	Stochastic Screening
Screen	Randot
Esko-Graphics	Monet Raster

Hybrid Screens:

Supplier	Product
Agfa	Sublima
Screen	Spekta
Fujifilm	Co-res Screening
Esko-Graphics	Sambaflex Raster

*The number refers to the size of the dots, eg 10µ.

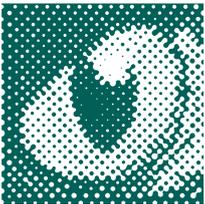


presses to the new screening technology. “A little more ink is needed when printing with Spekta compared to conventional AM screening. But because Spekta, in combination with thermal CTP, creates finer detail, this does not create filling in problems.”

Hybrid screens are relatively new to the market and are sure to draw a lot of interest in the near future.

Both stochastic and hybrid screens are on the up and most vendors experience increased demand. And it’s no wonder considering the technologies can be used to print up to the equivalent of 300 lpi (on coated stock) with no loss of detail. They could become an important factor in the industry’s ever increasing competitiveness. It remains to be seen when the print buyers catch on.

– Cecilia Campbell



“Solids are generally smoother when you use AM-screens and I think images look sharper as well... But FM-screens definitely give greater image detail.”

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