



Spindrift

News Focus • Opinion • Reviews
Techno-Babble • Attitude

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...Surviving The Graphic Arts Industry Since April 2003

Confidence • n. the belief that one can have faith in or rely on someone or something. > a feeling of self-assurance arising from an appreciation of one's own abilities.

From the Concise Oxford English Dictionary

Dear Reader,

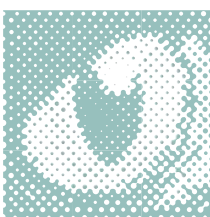
In the beginning was the word and the word was Drupa. Well hardly, but the scale of the beast had a touch of the immutable about it. We could spend the next five issues giving you an exhaustive explanation of the digital maelstrom that whirled throughout the show, but that would be too dull for words, particularly as the most important trends at the show were interoperability and enthusiasm for the future of our industry. Years of insecurity and economic vulnerability followed in the wake of Internet hype, but the printing industry seems to be on the up. Gobsmaekingly high order values (one company had clocked up over €7 million by the midpoint) and excitement bordering on the frenetic produced an air of confidence in the print medium and the business we haven't seen for years.

Internet and web technologies dominate virtual media, but for anything more substantial print has countered the challenge and is thriving. At Drupa indicators of the industry's sleek and toned new form were everywhere. It is no longer the industry it was, but it's far from dead yet. Within a few short years printing has metamorphosed from the corpulent to the athletic, serving the media business of the new century. Pundits called Drupa 2000 the digital Drupa, and 2004 the JDF Drupa. We'll look back not at the JDF Drupa but at a Drupa where the printing industry showed its tenacity, its regained confidence, nerve and audacity. Technology is finally playing second fiddle to the demands of print commerce, and printers appear finally to have got it.

Enjoy the read!

The Spindrift crew,

Laurel, Cecilia, Paul and Todd



In This Issue

Drupa news and comments

Back in reality, we take a look at what Drupa meant in terms of news and trends. In this issue we've split the news items into categories to make it easier to find the stuff you're interested in. We also summarise some of our impressions of what was going on at the show in broader terms...

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Making the move to JDF

You may think you've heard enough about this three letter acronym – you certainly have if you went to Düsseldorf. That's why it is now time to act. Laurel Brunner writes: "The transition to JDF and total automation begins with a thorough system audit, which is not necessarily as simple as it sounds. A system audit starts with defining the production system's boundaries, plus those of all contributing or related systems. JDF can bridge to other digital systems such as MIS or sales, so the system audit should include any related business systems as well." Read on to find out where to go from there...

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The Zen of JDF

For many printers, Drupa was a good starting point but it was far from the destination. With digital workflows well established printers large and small around the world are embracing JDF, in not in reality at least in concept. However a few brave souls have taken the plunge, including some smaller businesses. One such is Neidhart & Schön in Zürich where the approach is holistic process integration based on JDF. It's not so much about technology as it is a state of mind...

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News Focus

Some observations following Drupa:

After years of sometimes mindless technological stampede, business needs finally drive technology advances, rather than the other way round.

The market is responding to an excess of tradeshows: Drupa is turning into a newspaper as well as a commercial show; Imprinta won't happen.

JDF blah blah blah. You only need to know that it's a yes, so get on with it.

NGP is for people who can't spell JDF.

CTP advances have yet to peak.

Colour management is the stealth bomber taking graphic arts into consumer applications.

It won't necessarily be soon, but ultimately there will be a convergence between colour and monochrome output technologies.

Proofing ain't ever going to be a done deal.

Newspapers and commercial printing can coexist quite contentedly.

For digital printing and CTP no one understands what cost of ownership really means.

Direct Imaging presses aren't pointless equivalents of CTP after all.

Preflighting is synonymous with workflow management and quality control.

Environmental issues will take a healthy slice of our mindshare in the months and years to come.

Sex still sells. However, inept and portly dancing girls doing a halfhearted striptease do not belong at Drupa. Neither do squealing mock operatics. On the other, marginally less sexist hand, dazzlingly muscular, gravity defying acrobats do. Apart from their obvious charms, flawless acrobatic performance could be a metaphor for what this industry is all about: control, efficiency, grace under supreme pressure, perfect timing, success against the odds, and gorgeous content in a single package. No other industry, with the exception of Thoroughbred racing, even comes close.

It's About Commerce

Commercial viability lay at the heart of some of Drupa's most ambitious technology demonstrations. Print City's Nasty Beast project is a fictitious cosmetics company for which Print City orchestrated a complete marketing campaign, from packaging to signage. The project was designed to provide an umbrella for all that was going on at Print City. Though crass looking, the project demonstrated clearly two key points about JDF: it works, and with tight control and coordination it works very effectively.

Another example of potentially lucrative digital applications, though not loudly touted, was Print City's Connections glossy tabloid newspaper. This concept brand included digital newsprint inserts from various national dailies and was a great example for newspapers of what can be done with the technology and also, for marketers, what can be overdone. Like that of the Drupa and NGP dailies most of the Connections content was unlikely to have been widely read. Yet the only bit that stood a chance of competing for brainshare, the national newspaper digitally printed inserts, was hardly given profile at all. The concurrence of JDF and newspapers on demand offers mouthwatering possibilities for custom advertising, yet the opportunity got lost in a swamp of conventional marketing practice. More than a lost opportunity, it was a great pity not to test the market of show visitors for digital newsprint response.

Colour & Proofing

We can expect to see a lot more closed loop technologies this year for colour management. Press control system

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▼ specialist AVT (Advanced Vision Technology) has entered the commercial market with an inline colour measurement technology for sheet fed presses. It provides real time colour verification on press.

Esko-Graphics Kaleidoscope colour management engine has been incorporated into all of the company's systems, making Esko-Graphics the only company to fully support both spectral and colorimetric colour workflows. As a standalone solution Kaleidoscope now incorporates all Esko-Graphics colour technologies into a single package.

As the foundation for its Digital Master concept for RGB images, Fujifilm's FACE (Fuji Advanced Colour Engine) is based on a perceptual rendering intent colour management engine called C-Fit. This hybrid derives from the ICCs standard perceptual and saturation intents. It will eventually include Colourkit, the company's scanner control and colour management software.

KPG's Colour Fidelity System incorporates an image mapper that can bring images captured with any digital camera, even cheap ones, into a common profile. At the show KPG took two images, one with and one without flash, using two different digital cameras. They processed the images with the image mapper to truly astounding effect.

Oris launched Certified Proof, a system for verifying and tracking the proof quality, throughout the workflow. Coupled with a small label printer, the set-up of the proof and the tolerances travels with the print.

CTP

ECRM's CTP product line has been reengineered to use 60mW violet lasers, with products starting at \$55,000 for a semi-automatic 2-up device.

Esko-Graphics' new Espresso uses the Texas Instruments DMD array as does Basysprint, but Espresso has XY scanning with control mechanics derived from the Eskoscan line of copydot scanners, and a special filter over the conventional light source to increase UV intensity. Due Q1/05 it will cost €99,000 including a TIFF one bit interface, but no RIP.

Heidelberg's Suprasetter should mark the company's reentry into the development business. The new modular thermal head will be used in Heidelberg's direct imaging Speedmaster 74 DI press, and be available Q2/05. It has to be said that on recent form it's hard to take Heidelberg seriously as a developer and manufacturer of CTP technology, but the Suprasetter incorporates some refreshing innovations. An integrated cooling system keeps both drum and laser modules gently chilled so that the device can operate in sweaty environments. More on this next month!



Esko-Graphics' new Espresso.

Besides its new 5000 dpi engine, Lüscher also previewed the FlexPose, a flexographic platesetter due for introduction this autumn. This device images a newly developed plate from Toyobo that Lüscher co-developed and will sell under its own name. Unlike conventional plates this one needs only water and brushes to prepare it for press. The debris is filtered in the processor and thrown out with the rubbish! It is possible to image any flexo format, from tiny labels to the maximum size of the drum. Price is to be set.

MAN Roland will sell the Esko-Graphics platesetter line in the Nordic region. Should be interesting. Maybe Esko-Graphics will start selling presses too?

Gravure imaging using lasers could bring the cost of entry down from around runs of one million to about a tenth of that, and two companies are now offering solutions. The engineers from Hell have developed a monster laser engraver for gravure cylinders. The 1,000,000,000 Watt IR laser cuts through a copper or chromium cylinder surface like butter. Who knows how they control the heat conduction. Creo has an arrangement with Acigraf to build the new Exactus using Creo thermal Squarespot heads. Cylinders are coated with a thermal emulsion and imaged at 3200 dpi at a rate of four per hour.

Creo also has a new waterless polyester plate for use on DI presses, imaging up to 30,000 impressions and with what Creo claims is the highest sensitivity on the market. There is also a Clarus PL switchable photopolymer aluminium based processless plate in the works, suitable for 50,000 impressions. Further information will be available at the end of the year.

Basysprint was among the first CTP suppliers to announce JDF compliancy for a plate imager. The company said it can process JDF job input from PPI Media Printnet and send back JMF status information. ▶

▼ Krause Biagosch showed a new 100 mW laser diode that can be used in all Krause platesetter and image silver and photopolymer plates. The unit has a life expectancy of 10,000 hours.

Digital Printing

True digital

HP is to standardise on the Global Graphics Harlequin RIP. Given the depth and cleverness of the Harlequin RIP, this is probably the most sensible and bravest thing the company has done since it acquired Indigo.

If HP Indigo doesn't succeed in the graphic arts industry it won't be because they are a shrinking violet – the press conference at Drupa was more like a fundamentalist rally than a sharing of information. At the other end of the noise spectrum is a quiet giant, Canon. Most of its competitors in the digital colour press market dismiss this Japanese company because its top colour machine, the CLC 5100, prints 51 A4 pages a minute rather than 70 or 100. However Canon has a 43% global market share of colour printers running at 24 ppm and faster. It also has the corporate clout to fund serious development in this area, which it is currently working on. For the last five years Canon has been number one, two or three in the world in terms of registered patents. None of its digital colour competitors, including the mighty Xerox, are in the top ten.

According to Dr Luca Miraglia, European Product Marketing Manager for colour printers, Canon will be launching the next generation of digital colour press within a few years, certainly before the next Drupa. This product is being developed as a true competitor to offset in terms of productivity, quality, stability, flexibility etc. Canon is certainly in a financial position to be able to make a serious impact: its total global turnover for 2003 was €24 billion, an 8.7% increase on the previous year. Perhaps more importantly, 2003 saw a 31% increase in profit over 2002. The company spends 8% of its global turnover on R&D, although obviously not all of that in digital colour printers. At Drupa the company also announced broader cooperation with Kodak company Nexpress, the aim of which is to develop a broad range of digital colour solutions that will bridge office document workflows and commercial printing workflows, making the transition to the latter seamless from the users point of view. Canon and Kodak joining forces – watch this space.

Lyson/Tiara introduced a low priced large format printer, the Toumaline. Built by an unnamed Chinese manufacturer it uses a Xaar array inkjet print head. Riso have a new 105 ppm colour printer, the Qrphis HC 5000, built in cooperation with Olympus, also using a Xaar array inkjet printhead. Part of this cooperation is Agfa, providers of the embedded colour management.

That's the way to do it Mr. Punch! According to Xeikon, "We are because we dare" – a sentiment that Descartes would surely have shared. Xeikon customers are apparently anticipating a six to 13 percent rise in variable data printing this year and although Xeikon focuses on cooperative and niche markets, their 1200 plus users are likely to be representative of the wider market.

Through its cooperative agreement with Stora Enso Xeikon demonstrated digital printing of paper CD cases with folding and other contortions conducted by the DBS Packmaster. This devilishly clever machine takes a printed flat and turns it into a CD case for all those personalised playlists, wedding CDs and "Best of Bing Crosby [who? – Ed.]" collections. Digital printing coming together with packaging for efficiency, short runs and lead times, and of course, variable content. Wonderful!

In inkjet, another engine appeared which uses an array of fixed, rather than moving, inkjet heads. This idea originated at Dotrix and is used in their industrial inkjet press the.factory (read the dot factory – we had a word with Dotrix marketing manager Stijn Simoens, who didn't entirely disagree it's a bit of an unfortunate name. We hope for a change.) The new inkjet device, developed by Sun Chemical and Inca Digital, is called the Fastjet and is aimed solely at corrugated sheet board printing for packaging. The Fastjet has a print width of 520 mm, prints at 200 x 300 dpi at speeds of 100 metres/minute.

Monochrome

Although most digital colour suppliers are talking about a convergence between colour and monochrome devices, it does not appear to be imminent. On the contrary, while virtually all new colour devices had been pre-launched, several black-and-white machines saw the light of day at Drupa.

Nipson, the monochrome half of "old" Xeikon, now a completely separate company based in France, introduced two new high-speed presses, Varypress 200 and Varypress 400. Both presses (which vary in maximum speeds: 70 m/min compared to 125 m/min) print at 600 dpi using Nipson's unique technology combination of magnetographic imaging and cold flash fusion. Magnetography is faster than electrophotography, the technology used in most colour devices, because it does not rely on a build-up of charge in the capacitor – magnetism is immediate. The technology requires special toners, similar to those used in electrophotography, but which contain ingredients which can be magnetised. The new Varypress 200 and 400 incorporate a new generation of magnetographic imaging technology, including newly designed write heads, enhanced performance print drums and a new toner formulation.

Océ launched the Varioprint 2110, aimed at answering the mid production market demands as far as reliability,

▼ quality, ease of use, throughput and applications. Océ handed out fancy diagrams to illustrate where the press fits in. We understand that it's in the high mid market (as opposed to the light, high or ultra high markets), but there are no numbers to explain what volumes each segment relates to. Anyway, the Varioprint 2110 is designed to produce short runs of complex jobs (book covers, mailing inserts etc) and long runs of simple jobs (copying, stapling, stacking) and has a production speed of 105 images/minute.

Xerox introduced the Nuvera 100 and 120 digital production systems based on the Xerox platform introduced in January, for corporate and quick print reprographics.

On the colour side, Xerox will also introduce the Docucolor 8080 later this year, but no word was spoken or even acknowledged on the iGen5.

Direct Imaging presses

Screen's processless Truepress 344 is the only machine of its kind on the market in that it's a DI press using water (most of them are waterless), which means you can use conventional inks. Well before the end of the show seven of these engines had been sold, including one to a customer in Baghdad.

JDF

We're not going to give you all the JDF because JDF shimmered across the Drupa landscape about as obstinately as the spring rain in the opening week. Interoperability, albeit basic, was demonstrated everywhere from Heidelberg, where PrintReady 2 and Signastation 2 are pure JDF to the CIP4 JDF Parc where more than 90 interoperability connections were shown. Clearly there's no lack of resources or developer support for JDF or its implementation. Now it's up to printers to embrace it and for publishers to trust it.

A couple of examples illustrate the breadth of development:

KPG's Matchflow Composer works with JDF based job templates, to be a kind of Swiss army knife for prepress workflows. Based on a Global Graphics Harlequin RIP, it converts PDF into any other format needed including PDF X-1a and X-3.

MAN Roland's Printnet integrates the complete order processing cycle with JDF in a closed loop environment incorporating both press and prepress, via Agfa's Delano project management system. The result is a comprehensive and flexible workflow, with JDF linking disparate interfaces and devices into a single production environment.

NGP

There isn't any point to singling out NGP developments for special comment, since they all now come under the umbrella of CIP4. Think of NGP as a temporary aberration that put a fire under CIP4 and got JDF interoperability demonstrations underway. Interoperability is now up and running apace, so thanks to NGP for that, if nothing else.

Newspapers

The most talked about development within the newspaper sector during the show came from an unexpected quarter. Newspaper press manufacturer Goss International, which experienced a shaky financial period a few years ago, has come back strong and presented a rather ingenious new press concept. While competitors such as MAN Roland and Wifag are concentrating their efforts on developing new technologies such as plate imaging on-press, Goss has designed a press construction that uses only existing and proven technologies. The new press, which is yet to be formally named but is currently called the Flexible Press System, looks like it could solve, among other things, the issue of being able to print different formats on the same press.



Goss' new flexible printing system features colour units which slide away from the central cylinder tower, in turn allowing the latter to be moved out of the press and exchanged for one with cylinders of a different circumference. This means you can print several different formats on the same press.

Existing newspaper presses have fixed product format sizes related to their cut-off. The cut-offs tend to be the same within a geographical region; in the Nordic region it's generally 560 mm, in the UK 580 mm is common and in central Europe the Berliner format with a 470 mm cut-off is popular. The cut-off of a press defines the length of the broadsheet newspaper and the width of the tabloid pages (these are half the size of the broadsheet pages, much like the relationship of an A5 sheet to an A4

one). If a newspaper decides to reduce the length of its broadsheet (which would currently require changing the press), it has the unfortunate effect of also reducing the width of any tabloid pages printed on the same press.

Goss has designed a modular press system whereby the inking units can slide open from the printing cylinders. The 4-high tower essentially comprises of a central cylinder stack with a set of inking units on either side. When the inkers are open (by being slid away) this gives access to the cylinder stack for plating up or maintenance. Anyone familiar with newspaper presses will wonder how this solves the flexible format issue. Well, rather than the press towers being placed in a row one after the other, they are placed at 90 degrees, next to each other. This means that as the inker modules are slid open from the central cylinder stacks, the latter can be slid out of the press, along the rail, to be replaced with cylinder units of a different cut-off, in addition to allowing a change between one or two around cylinders. The 90 degree configuration also means the plate changing mechanisms can be moved along rails above the press in a straight line, which saves time.

Because the new press construction uses only existing technologies, such as Goss Digirail digital inkers, the company is confident that installations will be up and running sooner rather than later. According to Shane Lancaster, managing director of Goss' UK Preston facility, which has developed the flexible printing system, the first press will be in production in about 24 months, although he did not say where that may be. The new press will be priced in line with Goss' other double width two around press, the Colorliner, for the basic configuration with one set of cylinder towers. Having seen the presentation of the flexible printing system you were almost left wondering why no-one has thought of this type of construction before – simple but eminently practical and flexible. It puts Goss, which is still ironing out the details of the take-over of Heidelberg Web, ahead of the competition as far as industrialised thinking is concerned. (At the Drupa presentation we were shown useful illustrations of the press configuration, but Goss, in their matchless marketing wisdom, has decided these are not for publication, so you'll have to try and picture the set-up in your head.)

Basysprint's new device for newspaper CTP is the DS12 with a new imaging array to expose the plate in swathes, rather than patches. There is more speed and less data to stitch together, but the 900 dpi resolution is not very high. Nonetheless Basysprint is looking to also put this technology into commercial applications within the next year. It's tricky because of the imaging demands necessary for higher resolutions and for getting sufficient data to the head. The DS12 outputs 150 pph @ 900 dpi Berliner format and will cost €275,000. It will be available in October.

Fujifilm is developing a version of its new Taffeta screening for newspapers. Fujifilm Taffeta screen reduce ink usage and enhance image quality and is an exclusively Fujifilm development. In the UK Fuji will offer another screening technology (of course) called Liso and based on Harlequin Balanced Screen technology from Global Graphics, though not necessarily for newspapers.

Preflighting & Workflow

Adobe Albion is a work in progress JDF job ticket editing tool. This plugin to Indesign and Acrobat adds JDF tickets to a file at the point of creation, with the job ticket on screen like just another Indesign palette. The job ticket has its own export function, converting the job to PDF and packaging job ticket and PDF into a single MIME packet for export. It doesn't work if the user uses Indesign's exports which is a bit silly, but this could well change.

Agfa's Delano is finally starting to look more sleek than stumbling with an underlying SQL database and a JDF 1.2 driven user interface. Delano sits on top of any project to manage all components of the workflow, plus associated tasks and people. It's now a database driven subsystem controller with JDF managing anything that can produce output in JDF. Both Agfa Apogee X 2.1 and Delano are fully JMF level 4 compliant. This means that they support fully bidirectional data interchange, opening both up for integration with MIS and automated workflows.

Apogee X 3.0 is also looking pretty solid. The beta version adds status information where there are multiple outputs, faster rendering to screen for soft proofing, TIFF input, JDF import, a colour normaliser for colour managing PDFs, and the ability to import production workflow chains from other systems such as Heidelberg Prinance.

With its Synapse suite of technologies Creo has one of the best established JDF workflows on the market, as well as comprehensive experience working with it in live production. There are now fully bidirectional interactions between Prinergy and Synapse Link, with JMF handling the links via disc or directly. According to Creo the only proprietary tags in Synapse are there to support things not possible within the JDF specification such as job ticket templates that use a proprietary format, in other words proprietary tags for proprietary functions. Prinergy 3, when released, will have the same user interface as Synapse Director and is due in Q1/05.

Dalim's Twist has been totally rebuilt to support JDF, with preflighting available at Drupa. This is one of the most comprehensive tool-sets on the market for media production applications.

Efi demonstrated for the first time in public its cooperative efforts between the former Print Café

technologies and Efi technologies. There are still too many of the former, however it does mean that Efi can put together just about any workflow possible, from basic MIS with Printsmith, through to full variable data printing within the Xerox Freeflow environment.

Besides previewing Instant PDF 3.0, Enfocus showed an interesting plugin for Xpress. The plugin makes it possible to create PDFs to spec as an export function, so that Xpress can write PDFs in the same way as their Indesign colleagues. Is this a turning point perhaps?

Esko-Graphics takes a prize for the biggest WOW at Drupa with its Web Centre tool. Ostensibly for managing packaging supply chains and workflows, this is project management on steroids. Based on a web server, Web Centre manages projects and all associated content within a single system. It's the sort of thing you want for your life, as well as your work. Relevant far more broadly than just for packaging, Web Centre has huge potential.

Fujifilm's Celebrant now has native support for PDF X-3, with C-Fit to convert files for print bridging RGB and CMYK workflows without skipping a beat. It can also fix bad PDFs for colour accuracy. And Colourkit has been integrated into Acrobat as a companion application, linked and accessed bidirectionally.

Heidelberg's PDF Printready has a new content manager based on Oracle to replace Jetbase. The next generation JDF technology for complete prepress, press and finishing control is expected to be ready within 12 to 18 months.

Markzware gets the prize for the most likely to be welcomed piece of software. XMLazarus is a tool for turning native files into fully marked-up XML. It will be a godsend for anyone working with a flock of ageing legacy files, from Xpress 3.2 and Pagemaker 3.0 to date, through to feckless Microsoft Word and Publisher files. In a similar vein Swedish vendor Optiteam has developed an XML middleware tool that puts the Optiteam interface in front of Quark Xpress to convert documents to XML.

Screen's Trueflownet is about the most complete JDF integration we have seen, with the capacity to scale up or down to whatever the application demands. The system is MIS agnostic and Screen has successfully tested numerous bidirectional connectivity pairs.

Xeikon's wonderfully named Swift front-end has been renamed the infinitely less wonderful X-800. Conversations were underway at Drupa with at least one supplier to OEM the technology.

Xerox Freeflow now has 31 certified partners, so someone ought to be able to make it work. Early sightings do indeed look pretty good.

Xinet has upgraded the RIP in Fullpress to be PDF 1.5 capable and have added more automation functions to Web Native 6 Venture.

Other Bits & Blusters

Océ aims to be in the top three suppliers to the digital printing business. They didn't say when though ...

According to Xerox, CAP Ventures has found that 85 percent of costs in print production are workflow related. Is this really a surprise for anyone working at the pointy end of publishing?

A quote from someone who ought to be better advised:

"Printing is a service business driven by the customers".

This sentence works just as well with a number of other -ing words:

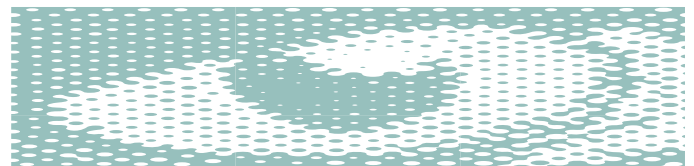
"Catering is a service business driven by the customers"

"Holidaying is a service business driven by the customers"

"Plumbing is a service business driven by the customers".

"Banking is a service business driven by the customers"

[That's enough sniping – Ed.]



Spindocs

(Where the spinner gets spun!)

We are still waiting for more entries to our slogan competition in the last issue. Meanwhile, here's an entertaining contribution from David Howes, director of Tera UK:

"A few slogans that they could display if they still existed:

Linotype – we came, we saw, we disappeared

Compugraphic – we nearly made it

Itek – we never quite made it

Crosfield – Postscript is for amateurs

Berthold – Postscript is for DTP

Xenotron – bloody Macs

Hyphen – red and green do not go together

Cascade – green on its own is not much better

Plus:

IFRA – Germans really do know best"

Letter From... Düsseldorf

Schpindrift Lieblings,

Ich bin just come home von die Drupa und ich bin everso schattered. Das Drupa show ist so yuckylich lang und tiringischistichilich. Meine fooschens sind ganz geblistered und meine back ist completely gepflucked.

Aber ich wanted to frage a bit uber diese obschession mit letters in die graphic artishes geschäfts. Ich bin die designer mit eine kleine kompanie in Düsseldorf und über all in die Drupa show find ich drei letter words, zum example JDF (Just Don't Fear), NGP (JDF), ICT (Ich Can't Talk), USO (Und Zo On).

Kann we nicht focus jetzmore an diese letters? Ist es reallich so ganz importantische? Es ist besserer to fokus on die business für unser kustomers, ja?

Ich dinke das business matters mehr than die technology, especialich wenn, dieses tags das technology ist so much von ein muchness. Was dinkst du?

Mit herzlichen schtuppelheimen.

Lily von Schnitzengrüben

Acrobites

(Something to get your teeth into)

RFID

Radio Frequency Identification is set to become an issue for publishers, if not sometime soon, then sometime later. RFID is a form of tagging that is basically an electronic barcode. Add this to developments such as Flint Inks conductive inks and it's not such a leap to see that in the printing and publishing businesses, RFID could have far reaching ramifications. Packaging is the obvious candidate and RFID is already in use for some pharmaceuticals labelling applications. RFID could be relevant elsewhere for example in book and newspaper distribution, inventory management and monitoring sales in a two-way system.

Although several major retailers throughout Europe have requested suppliers to adopt RFID tags by 2005, it is unrealistic to believe that the technology and associated infrastructures will be in place to meet this schedule. Many IT managers in the UK are piloting tagging projects this year, however their use requires substantial investment and process reengineering, which, although underway, isn't happening very fast. RFID is being used in diverse applications from car assembly to ticket security, so it's definitely one to watch.

BI

Business Intelligence is one of those trendy little acronyms that computing types like to throw at innocent prepressers in order to confuse them. It's a bit where MIS and IT were a few years ago. Just as MIS is about operations management and IT is about the computing infrastructure, so BI is about common sense. All three technology categories are about helping to manage vast amounts of data without having periodic nervous breakdowns. BI has a lot in common with MIS but tends to operate on a much larger scale, incorporating process IT, plus business organisation and method.

BI systems are designed to improve business knowledge, so in this respect they share common goals with many JDF implementations. However there is no equivalent standard to JDF within the IT sector so most BI systems tend to be end to end solutions, proprietary to a single

▼ enormous supplier. Absent JDF, heterogeneity comes at a price, so the media business ought to have an edge when it comes to data management, manipulation and delivery. So much that is possible, so little that is probable. Somewhere in between the two lies a path to shimmering success.

Say What?

(Iffy Writing Award Presented in the Ether for Obfuscation, Confusion, Misinformation or All Out Pretentiousness)

This is an Iffy Speaking Award, rather than a writing one. It goes to show how (not) seriously even some of the really big suppliers take JDF. Of course the standard was mentioned at all press conferences at Drupa, but only reluctantly by some. This particular statement, by KBA director marketing/corporate communications Klaus Schmidt, was not the only one showing a surprising lack of understanding of what JDF is about:

"There is not one complete JDF solution on the market, there are many different solutions."

Well, duh.

Driftwood

(Useful stuff washin' in on our shores)

The wireless future (with some background thrown in)

In Europe we are currently in the early stages of a generation shift in mobile telephone technology, although the move to third generation, 3G, networks and phones looks set to take longer than was predicted just a couple of years ago. The first generation mobile telephony consisted of analogue networks and phones, usually specific to each country/region. The current second generation GSM (Global System for Mobile Communications) networks are digital, and this technology was originally a European standard which has spread throughout the world.

The next step in the mobile evolutionary chain is what's known as 2,5G. Basically this uses the existing GSM physical networks, together with a software upgrade called GPRS (General Packet Radio Service). With basic GSM you pay per time unit and because of the method of transfer, networks have a fairly low performance. 2,5G (GPRS) on the other hand, uses a different technology which means the network capacity is utilised much more efficiently for data transfer. For the consumer this means he can be constantly online while only being charged for downloaded data, i.e. he pays per Kb. Transfer speed for

GSM is currently 9,6 kbit/s, with GPRS you get a theoretical speed of about 115 Kbit/s, although in practice speeds are between a third and half of that. Third generation mobile telephony, 3G, is basically mobile broadband.

The rate of increase for mobile telephone calls (i.e. time based use) is flattening out. Mobile operators are therefore looking for ways to increase data traffic instead (i.e. Kb based use) and indeed this is happening. During 2002 French mobile operator Bouygues increased the revenue from data by 8.5% to 14.0% of ARPU (Annual Revenue Per User). In the same year O2 Netherlands increased data revenue by 6.8% to 16%. O2 Germany leads in Europe with almost 20% data revenue as percentage of ARPU. Of course, in order for data transfers to continue to increase, there has to be data available that consumers want to access, and this is where so called content providers – some of them newspapers – come in. There are ample business opportunities for newspapers within mobile services, currently particularly for SMS, but also WAP. (This is another story, which we won't go into here.)

There is one major and fundamental difference between the static Internet and mobile networks. While the Internet is freely available and network and operator independent, mobile communications are tied to the frameworks of the mobile operators who actually own the networks. In order to use a mobile phone you have to install a SIM-card, which is controlled by the operator, and gives you access to their network and possibly some additional services.

Each mobile network operator completely controls their network. While everyone now takes for granted that you can send an SMS to any other user, irrespective of what network he is on, that was not always so. SMS only really took off when mobile operators agreed on interoperability between networks. In a similar fashion one of the issues with GPRS services is lack of interoperability, and this limits the opportunities for content providers to address entire markets.

So mobile operators and content providers (and all the players that sit between the two) are currently shuffling to get into position for the expanding 2,5G and 3G markets. Meanwhile, there is a whole new wireless world in the making worth taking notice of.

This wireless world is based on the Internet being available here, there and everywhere, through so called hot-spots which permit wireless connections to the Internet via a radio transmitter which reaches about 100 metres at most. This type of communication is built around a two-way radio technology called wi-fi (wireless fidelity). It is growing fast, especially in the US, and could mean a move away from the mobile networks of today. In fact, some analysts think that today's model

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with operator-owned networks may become obsolete and be replaced by infrastructure-free communication where you don't need a physical network – your phone/PDA/laptop can communicate directly with others or the Internet.

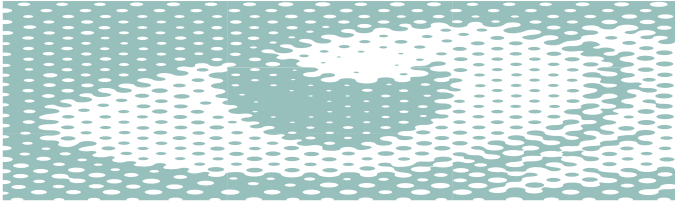
However, the technology has major obstacles to overcome before it can in any way threaten the existing mobile networks, not to mention the 3G networks to come. One issue is how to pay for access, another security. Yet to be resolved is also how to locate hot-spots; for wi-fi to take over it has to reach some sort of critical mass.

For more information on wi-fi, visit:

www.wi-fi.org

www.wi-fiplanet.com

www.wifinetnews.com



Making the Move to JDF

The Job Definition Format, JDF, was designed to simplify information interchange so that systems, subsystems and processes could share data. Any move to a system that uses JDF has to begin with ideas about how further digitisation and automation might improve a production workflow. JDF manages the sending and receiving of messages across devices and processes, wherever they happen to be. In simple terms JDF is a sort of electronic courier, capable of delivering and receiving files and information about them. JDF is also able to instruct other activities as well as, but this characteristic is perhaps JDF's greatest strength. It takes print's manufacturing metaphor and applies it to prepress and process management.

Why Bother with JDF?

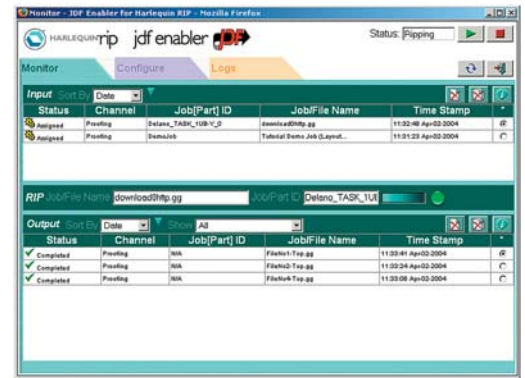
Advances in the pressroom have automated most of the mechanics of print production. JDF extends this highly sophisticated manufacturing model to prepress, press and post-press activities, and beyond. JDF joins together production, business and MIS (Management Information Systems), bringing process management to all parts of the digital production workflow. JDF is about automation for media production.

In a highly competitive and dynamic market environment process automation is a dominant priority for prepress, printing and publishing professionals. Automation can help remove cost from the workflow and improve return on capital investments by maximising usage. It can help optimise a system's capacity and improve throughput, but automation is about more than getting the most out of hardware. Digital information systems can gather and analyse the information about usage. Working with metadata – the data about the data – such information analysis can help to provide the knowledge required to continuously improve processes. Process analysis highlights areas of weakness in the workflow, such as potential bottlenecks, or areas of high cost such as proofing. JDF has the power and flexibility to gather this information, but using it effectively depends very much on understanding what JDF can do and how best to do it.

Know what you want

The transition to JDF and total automation begins with a thorough system audit, which is not necessarily as simple as it sounds. A system audit starts with defining the production system's boundaries, plus those of all contributing or related systems. JDF can bridge to other digital systems such as MIS or sales, so the system audit should include any related business systems as well.

One of JDF's greatest strengths is its ability to use the outputs of one process or processes as the inputs to other processes. This means that where tasks overlap or depend upon one another – such as processing files for proof and platesetter output – JDF can add extra information or manage subsidiary tasks, perhaps monitoring the time taken for plates to output, or measuring the delay between producing a proof and getting a response from the customer in an approval process. JDF could improve efficiencies in such situations but only if there is an understanding of precisely what happens when and where, prior to JDF implementation. The more complete a system analysis, the greater the opportunity for effective use of the JDF standard, and so for improvement.



The user interface for Global Graphics' JDF enabler for managing task configurations.

Define the borders

A system's borders could be anything from the walls around a print works and a handful of operators, to a digitally linked global enterprise involving hundreds of users and processes. JDF has scope to support both scenarios and everything in between. Successful implementation for any situation however depends entirely on comprehensive workflow analysis, quantification and process description. It all sounds pretty complex, but often a thorough evaluation and understanding of tasks in the production chain provides the starting point for what is yet to come. Knowing what needs doing is often harder than deciding how to do it. The process analysis should also consider how the production workflow is likely to evolve over time. Ideally this part of the analysis should incorporate customers' intentions, perhaps with some sort of customer requirements survey.

Involve the customer

The second phase of any JDF implementation has to involve customers along with process descriptions of their workflows, identifying any links to the production workflow. Customer involvement in the JDF development plans can yield more than raw data for the JDF implementation plan. Customer contacts add ideas for future business directions and can highlight areas where JDF could be of benefit not just to individual clients but to the business in general. Some issues to consider during the customer analysis include knowing the population of users contributing the workflow and a measure of how involved those users are, particularly where approval cycles are complex. It is also important to understand where subsidiary or parallel systems, such as MIS, data management or archiving come into the picture. Consider preflighting, HTML generation for the web, colour control, proofing, RIP functions, creating separations for print, output management, and a swarm of other application specific concerns. They all have to be addressed and somehow resolved so that their requirements and interdependencies can be taken into account within the system. Once the numerous procedures involved in production are defined, it is possible to see where data sharing might be useful. These are the points in the workflow where JDF could play a part.

Market Adoption of JDF

It is partly due to the massive scope of the format that JDF implementation appears to be slow. However a number of printers and developers are making some progress. For the most part implementations have been in highly controlled environments at large printing companies. These test sites are not yet truly representative of what the majority of printers will experience with JDF, however the good news is that rapid progress is being made. Implementation is still somewhat limited by the fact that the development community needs to ensure interoperability across systems, and this requires extensive and thorough testing. In many respects JDF is about supply chain management, so it takes rather more than a single system's JDF compliance to really see how it can benefit a workflow involving several players.

Because of this enormous scope, developers are faced with a huge task when it comes to building JDF compliance into their software. Not only do developers have their own technologies to contend with, they must also implement the JDF specification in such a way that it works properly with systems beyond their control. This is basically about using the correct expressions in the JDF specification, but as with using any



Screen's Rite Online is a web-based and JDF-driven print ordering system.

language for the first time, working out the best expression to achieve a given result takes practise. As any tourist in a foreign land knows, getting a sensible response usually takes several attempts. The need to somehow restrict the vocabulary is part of the rationale behind vendor cooperations such as the Networked Graphic Production consortium. NGP developers are working together to use a common lexicon within the JDF specification.

JDF for specific applications

The other difficulty developers face is working out how JDF compliance will actually benefit a particular application. What information can it add and how will that be useful to the business? Some applications such as RIP and workflow systems inevitably take priority over others, such as paper inventory management where the manual equivalent is already efficient. Once again the issue is one of supply chain management so the task of developing JDF compliance is much simplified, if a developer knows everything there is to know about all the links in the chain. A company such as Heidelberg has a huge task to make all Heidelberg technologies JDF compliant. Fortunately for Heidelberg once it has achieved compliance, the company's engineers will have developed considerable expertise in JDF.

Essentially a digital version of the traditional printer's job bag, JDF has an unprecedented capacity to reshape the media industry. The industry is shifting from production to process management, but this transition depends on having a fully digital workflow to begin with. Steady uptake of computer to plate production and growth in digital printing together increase the spread of digital production and the need for data sharing. As the industry moves from mechanical to digital dominance, management rather than production processes are the means of leveraging technology investments and improving business organisation and method.

JDF is giving the humble printer's job bag a digital makeover, turning it from a useful filing method into a digital management tool at a single stroke. JDF is more than just a data format. It brings together all parts of a content creation, production and management into a single cooperative environment. There are no boundaries and no limits to what can be produced and how it can be produced. JDF is the most important technology to emerge from the digital ether since PostScript. Wherever a business is going, JDF can provide the digital fuel to drive the machine. It begins with digitisation and understanding what one wants to do. So what are you waiting for?

– Laurel Brunner



The more complete the system analysis, the greater the opportunity for effective use of JDF, and so for improvement.

Neidhart & Schön Group and the Zen of JDF

It's easy to associate JDF with high volume, high ticket print production. It's harder to think of it in the context of more conventional print businesses. Most printing companies are small to medium sized, producing a wide range of work for a wide range of customers. JDF is just as relevant for them as it is for printing giants.

Neidhart + Schön Group in Switzerland is a relatively small business of sixty people and is implementing JDF. The company is unusual in that it has been building its tightly integrated business management and cross media production system for nearly ten years. Daniel Schnyder who is responsible for technology and overall production explains: "Seven years ago we invested in computer to film with a Purup [device]. One year later this technology was replaced with a Creo engine and that was replaced with Creo's Lotem 800 Quantum with a Prinergy digital workflow for computer to plate [output]. The JDF compliant Hiflex technology pulls the business together."

Neidhart + Schön is a cross media service provider with a heavy focus on integrated production. Most employees work in the offset printing division and as Daniel points out in "the whole group ... there isn't anyone who is not connected to the network. At each workplace in the company there is a network connection and a PC. Through this arrangement around fifty percent of places in business administration could be set up to manage daily, postproduction work reports."

Key to Neidhart + Schön's strategy was the move into business automation in 1992. At this time the Hiflex MIS was installed to provide statistical information and to streamline general administrative operations. Using digital technology to assist in this way established an important precedent for the company: work digitally. For many companies, particularly in sectors where there has been a heavy emphasis on craft skills, trusting digital technology to do the job can be hard. Neidhart + Schön started early and its strong foundation is now easing JDF implementation. Daniel believes that: "The functioning of a JDF compliant network stands and falls on the MIS. It needs a clear workflow and good information technology collaboration. Collaborations are inevitably dependent on up to date PCs and sound knowledge. If the output from the MIS is available, the fit is appropriate [and] the workflow is under control, one can then start to undertake implementation at more points in the workflow."

There hasn't been a particularly obvious cost saving yet through JDF, but as Daniel explains: "At the beginning this investment had no effect – we don't produce any cheaper because of it! The personnel costs were reduced by 50% from the cessation of [conventional] platemaking and improved client workflows. The makeready time was considerably reduced. Today, through JDF material costs such as plates and proofing papers are more precisely controlled and flow automatically into costing." Tighter control over the business has made a substantial contribution to revenue growth. Turnover has doubled in the last ten years and now for Daniel "The biggest budget concern is software updating. In this company we hardly invest in anything else. In percentage terms around two to three percent of the company's annual turnover is reinvested." ▶

Company:

Neidhart + Schön Group in Zürich

Type of work:

Printing and multimedia

Equipment:

Creo Prinergy workflow and Lotem 800 CTP

Time of installation:

2003

Top advice:

One cannot oneself purchase JDF. One must achieve JDF compliance independently, and this needs a good leader and a focal point for the [JDF] framework.

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The digital habit had already reached the prepress department at Neidhart & Schön. The production department has long been familiar with concepts of data sharing, single keying and of using the business system to assist production planning. What's changed with JDF is that new jobs are created directly from the Hiflex MIS. This system creates Prinergy job tickets so that the 15 prepress employees involved in typesetting, image editing and digital platemaking don't also need to create customer and job information. There is no need to input the data a second time and once the job is complete, Prinergy supplies the MIS system with job related data using the Creo JDF interface. This happens in real time so that invoices and estimates for new jobs are always based on the most up to date information. According to Daniel "Using JDF saves us up to two minutes per order in prepress alone. With ten to fifteen jobs a day, the overall saving is 20 to 30 minutes, and the effect is even more pronounced on the print floor". Annually this ought to equate to savings of between 300 and 400 man hours, just through single keying.

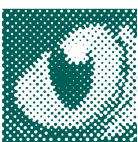
Daniel adds that: "Since the installation of JDF, workflow processes have improved the precision of materials handling and no petty errors are visible in either production and technical activities or customer services. The included costs are a single entity. The cost savings do not lend themselves to precise identification, but daily savings in postproduction are assessed to be running at around one hour for every workstation. The savings through the precise time spent for example in materials handling doesn't lend itself to calculation."

The next steps for Neidhart & Schön are to have fully automated, JDF-supported imposition of orders, based on the parameters defined in the Hiflex administration module for production planning. There is also considerable interest in automating the existing system of just-in-time paper supply. Daniel explains that "Space is a very expensive commodity here in Zürich. What we want is to trigger a paper acquisition at the same time as an order receives the OK to print from the customer. That would allow us to make significant reductions in our direct and indirect storage and logistics costs." Eventually the JDF workflow will have to reach the clients, but currently as Daniel says: "There is no opportunity for the JDF workflow to [reach] clients. But naturally with the very high use by clients of digital delivery (image data, PDFs and so on) today, all participants can now encourage the environment to grow."

Most printers are experiencing increased competitive pressures and the need to further streamline their workflows. Digital systems are the obvious place to go, but with JDF it is wise to work with a partner on the implementation. As Daniel puts it: "Such a project is impossible to pull off alone, very strong and knowledgeable partners such as Hiflex, Creo and MAN are mandatory. For sure one needs beforehand a clear presentation and clear ideas about what's needed, [and] to not lose track of the objective. One cannot oneself purchase JDF. One must achieve JDF compliance independently, and this needs a good leader and a focal point for the [JDF] framework."

– Laurel Brunner

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A Special Message

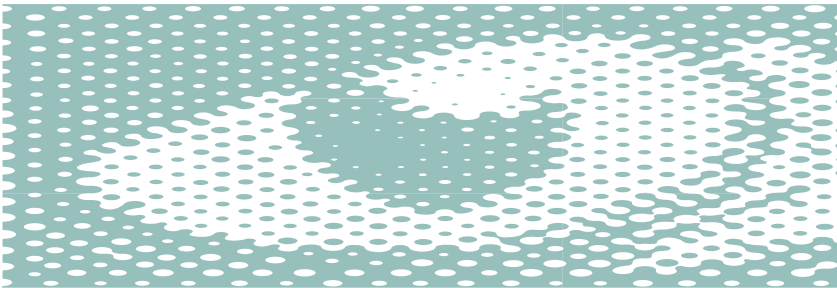
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