summer • *noun* the season after spring and before autumn, from June to September in the northern hemisphere, and December to March in the southern hemisphere, the warmest season of the year. • *verb* spend the summer in a particular place.

Dear Reader,

This summer edition of Spindrift bridges the gap between a long, drupa-soaked spring and an autumn where all the idealistic promise of spring and drupa ought to be turned into reality.

In fact it's highly unlikely that we will see many of those drupa-dreams coming to fruition any time soon. There is still too much to be done to get the seriously clever ideas we saw on show into the hands of users. And traditionally, drupa has been more about the big ideas rather than the actual products.

This may be no bad thing. The printing and publishing industries are coming out of a lengthy doldrums, a period of stagnation and worse, which has seen many companies, disappear. But the forces that drove many printers and publishers out of business are also helping to create new markets. This is especially true for short run colour work, variable data printing, and bespoke publications, all areas which between them have attracted a storm of inkjet press and workflow management developments.

We hope this issue of Spindrift has enough to keep your brains ticking over as you lounge, snooze and dawdle your way through your summer holidays. If you're unfortunate enough not to be able to take a break, hopefully this issue will give you food for real thought instead of idle ponderings. Either way, our best wishes for a happy and restful summer and we'll be back in September.

Enjoy!

Laurel, Nessan, Paul and Todd

In This Issue

Making its digital mark

Laurel Brunner talks with Precision Printing, a UK-based company that started life as traditional offset printer, but has now developed a successful digital services business. Precision Printing is also a beta test site for HP, using both the SmartStream Production Pro Print Server and the new Indigo 7000 printer.

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Newspaper business systems

Laurel Brunner looks at the importance of IT in the newspaper industry, differences between business information systems (BIS) and Enterprise Resource Planning (ERP), and ways in which newspapers can make best use of their IT resources.

see page 14

Hey big spender

Paul Lindström visited Elanders, one of the largest printers in Sweden, to see the steps that it has taken in its quest to reduce energy consumption and to be more environmentally-friendly.

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Regular Columns

News Focus

EskoArtwork is in the process of acquiring Mikkelsen Graphic Engineering. MGE makes vision controlled finishing solutions for cutting tables in the sign-making, screen-printing and digital printing marketplaces. Its i-script workflow has become the de-facto international standard through its integration into the RIPs of all major digital flatbed presses, and it has been a vital partner for EskoArtwork's Konigsberg cutting tables.

Xitron has begun shipping the Navigator GPS 8 workflow that it showed off at Drupa. This features the Harlequin RIP core, v8.0.5 with enhanced transparency support, native support for XPS and PDF files and a PDF soft proofing plug-in option. This last is a PDF of the actual RIP'd file which can be emailed to customers and rendered at 300 or 600dpi.

Global Graphics has appointed a new CEO, Gary Fry, formerly the managing director of Adobe Systems Benelux. He has a background in electronic engineering and had worked for Adobe since 2001, when it took over Accelio, a provider of web-enabled electronic forms, where he was the sales and marketing director.

He replaces Jim Freidah who steered the company through a series of strategic acquisitions to strengthen the product portfolio, and transformed the Company into a stream-lined organisation.

Extensis recently invested capital into Equilibrium, which makes automation software for rich media distribution. Now Extensis has announced a strategic technology partnership between its Portfolio digital asset management family and Equilibrium's MediaRich product line. This will see Extensis OEM Equilibrium's MediaRich engine for integration into a future release of Extensis Portfolio Server.

Extensis has also begun shipping its Universal Type Server, which works with both Mac and Windows and offers centralised control over the fonts in use throughout an organisation, including the tracking of font licenses.

Adobe has expanded its LiveCycle Enterprise Suite with Update 1 which adds new components for rapid development of content-rich applications, automated conversion of two- and three-dimensional CAD design data to PDF and new Adobe Solution Accelerators to help customers expedite deployment of enterprise applications.

Fujifilm has unveiled a new printer aimed at retailers who would like to add an ID passport service to their business. The FinePix IP-10 is a self-contained unit, with a compact size of 18x14x7cm. It's essentially a dye-sublimation printer with a 2.4 inch colour LCD screen and is compatible with most popular types of media cards. It uses Fujifilm's proprietary Image Intelligence software that is designed to make every photograph as close to perfect as possible, resulting in better prints and fewer rejects. The software automatically detects faces in the image data and then optimises face colouring to give quality, consistent results every time.

Sun Chemical Europe is increasing prices in the publication market by between 10 and 20 percent dependent upon the product, due to significant increases in raw material, energy and transportation costs. The increases cover Europe, Africa and the Middle East and will be implemented from August 1. David Meldram, president of Sun Chemical Europe, explained: "The considerable increases in the price of oil and natural gas combined with governmental policies in China and shortages in certain raw materials have had a dramatic impact on our costs." ▶

Océ's results for the second quarter of this year show that revenues have dropped, including operating income, down from €29.6m last year to €20.2m this year. Rokus van Iperen, chairman of the board, says that while sales fell in some sectors such as the financial and construction industries, the office and printroom markets continued to grow.

Océ has already announced an €80m cost cutting plan, including the loss of 350 jobs, and van Iperen commented: "In response to the economic situation and elaborating on the program of 2008, we have identified in the past period further possibilities for cost savings, which will lead to an additional decrease in costs of €50 million in 2009. As part of these savings about 600 extra jobs will be discontinued."

Despite these losses, Océ has acquired **Intersoft,** a French company which distributes printers, scanners and print media in the wide format graphic arts segment and which counts numerous large French retail chains among its customers. Intersoft develops and sells specialised workflow software for these customers, thereby guaranteeing the uniformity of all promotional material. Océ will be offering this software to customers outside France as well.

Enfocus has released version 8.0 of its Switch family for putting together automated workflows. New features include a more predictable job processing order, with the first job going through the workflow much faster. The top of the line PowerSwitch also gains support for database connectivity, SOAP and web services. This was developed by Gradual Software, which has now been absorbed into Enfocus, itself a subsidiary of EskoArtwork.

FFEI showed off at Drupa a server-based version of its RealVue 3D viewer, and now Transcontinental, the largest Canadian printer and sixth largest printer in North America, has become the first company in the world to implement RealVue3D Server Pro. The 3D print simulation software has been Integrated into Transcontinental's online print management system, The Job Assistant Premium. It is also enabling Transcontinental's internal production teams, publishers and customers, to eradicate time consuming folded dummies, significantly streamlining its workflow and reducing waste.

Iris, a specialist in Optical Character Recognition (OCR) technology has extended its licensing and co-operation agreement with HP. This includes the embedding of Iris OCR in the firmware of future HP devices as well as the use of Iris' new document compression iHQC technology, or intelligent High Quality Compression, a technology that allows for the compression of colour documents to an extremely small file size without a corresponding decrease in quality. Also, Iris' technology will be incorporated into fully-searchable PDF, PDF-A and XPS documents.

Quark has now started shipping QuarkXPress 8, which features a much easier to use interface, as well as better typography and integrated web and flash authoring tools. As part of the launch Quark is undertaking a 58 city blitz around the world to showcase it to users.

Meanwhile, **Global Graphics** has signed a multi-year agreement under which new features in forthcoming Quark products will be based on Global Graphics' eDocument Library, which allows software application developers to integrate file format conversion, manipulation, analysis and optimisation capability into their products. Quark already uses the Jaws PDF Library to provide direct PDF output as well as another Jaws component to provide full-resolution preview for EPS files
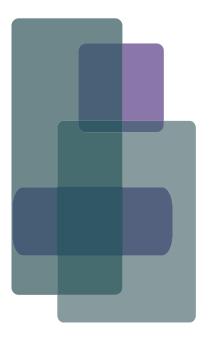
EFI has completed its strategic investment in Jettable, an Israeli-based inkjet technology company specialising in digital printing onto ceramic substrates. Jettable is currently working with Kornit (another EFI investment) to offer a modified platform for the speciality tile decoration market.

CGS has gained SWOP and GRACoL certification for the Canon imagePROGRAF iPF x100 series of printers. Certification has been granted for Grade #3 SWOP on Oris PearlProof Commercial, Grade #5 SWOP on Oris PearlProof Publication and Grade #1 GRACoL on Oris PearlProof Super and Oris PearlProof Select media. CGS claims that an exclusive ultra-fine grain nanoporous coating on this media gives double the surface area of common microporous papers leading to higher ink densities, uniform ink absorption, better shadow detail, larger colour gamut and faster drying.

GBC has launched a new Scuff-Free Matte laminating Film designed principally for book covers. This has a unique combination of polypropylene and an abrasion-resistant coating which GBC claims eliminates scuff and scratch marks without compromising the lustrous look and feel of traditional matte finishes.

▼

Epson has announced a new 170µm Backlit film, which is available with a matte finish. It has a neutral white point and evenly distributes the back light to display clear, sharp images in all colours, even matte black. It boasts a quick drying time with Epson UltraChrome inks and Epson claims that the durability and robustness of the substrate will withstand the elements.

Fespa has launched the Wide Network, an online forum dedicated to wide format users, which can be found at http://widenetwork.ning.com. The network already has 350 members signed up and provides users with a number of useful features, such as a digital events calendar, industry contacts, photos and videos, and a number of communication mediums to facilitate peer networking and interaction. Members have their own profile page which they can personalise with further details of themselves and their work.

GMG has revamped its website at gmgcolor.com, giving it a more user-friendly design and a much more clearly arranged structure. Customers and other interested visitors can subscribe to the online newsletter to receive regular information on the latest developments at GMG. In addition to the detailed product information sheets, there are links to online web demos which visitors can use with their own data to get a personal impression of the quality of the GMG products.

Expandocs

(Casting some extra light on a recent news story)

This month we've been playing with Streamtime, a business management system based on Filemaker Pro. As with Filemaker pro, Streamtime will run on both Windows and Macs.

It is quite effective as a customer relationship management tool and can cope with issuing quotations, monitoring staff timesheets and schedules as well as tracking jobs in progress. It also includes an address book, which keeps track of correspondence with a particular person or company. It does not include accounting, although it will integrate with popular accounts programs such as Sage.

It's aimed mainly at designers and marketing agencies. It can be set up to deal with companies split across several sites, and will allow you to break your company down into different departments, for more detailed performance statistics. But of course the amount of feedback it gives depends on the time users spend typing that information into the system in the first place.

The latest version now has interactive Gantt charting, which breaks jobs into tasks and then shows those tasks on a timeline, giving quite a good visual idea of ongoing projects.

It's based on FileMaker Pro 9, and has the look and feel common to FileMaker solutions, with lots of fields and tabs. This can be a little daunting at first glance, and a cleaner approach to interface design would make Streamtime much easier to get to grips with.

We must confess to being big fans of Filemaker Pro, which offers even journalists and non-developers like ourselves the ability to develop reasonably sophisticated database solutions, without costing a fortune. Filemaker comes with a number of solutions to help get you going, and there are literally thousand of plug-ins, and Filemaker based solutions that you can use or borrow from.

There are even several MIS aimed at the print industry which have been written with Filemaker. TimeHarvest, for example, has developed DigiQuote, an estimating system for digital printers. TimeHarvest has recently added a new product, MultiQuote, which can cater for those jobs which are made up of multiple items, such as producing CDs, as well as the printing. Another product, PrintCalc, is for calculating the ink or toner coverage needed for a job and how much this will cost.

Filemaker's latest project is Bento, an extremely inexpensive (€36) database that does away with most of the standard database terminology, like tables and records, for a system that is childishly easy to use. Bento only works with Mac OSX 10 Leopard, and this is because it works directly at the level of the databases that underpin the Leopard OS, rather than being a chip off the Filemaker block. This isn't really a surprise as Filemaker is a subsidiary of Apple. The real power of Bento is that it integrates seamlessly into Leopard features, such as Address book, iCal and iPhoto.

In fact, the only disappointment with Bento is that Filemaker has held off linking it with Filemaker Pro. This is a great shame as the ability to integrate data directly from a Filemaker Pro solution with other features like iCal would make for a really desirable product.

And we can't help thinking that Streamtime would have benefited from this kind of integration as well.

Streamtime is not cheap. The basic single-user version starts off at £1000. If you add training and some customised stationery then you can expect to pay upwards of £1500. Adding a second user will cost another £1000 and each additional user a further £500. For this sort of money you could buy a far more powerful SQL-based MIS with similar functions. Then again, given how easy it is to use Filemaker, you could always write your own management system.

Driftwood
(Useful stuff washin' up on our shores)

It's Advertising Jim, But Not As We Know It

We're all familiar with Google's advertising revenue model: place adverts that somehow relate to the content on a webpage or alongside search results. It's fairly innocuous, sometimes useful and only mildly annoying. Newspapers use the same idea to match ads to content on their web pages and to generic reader profiles. The relationship between context and ads is pretty loose and rarely is it so close a match as to give you the creeps.

Advances in data matching technology are starting to change that. The next generation of digital ad technology places ads, or delivers them direct to users, based on their web surfing patterns. So if you idle away your afternoons trawling racecourse websites to see who's horses are running where, you could expect your browser to be liberally sprinkled with adverts relating to thoroughbred horse racing and betting. It sounds quite useful, except for the creepiness of it.

Behavioural advertising works in tandem with an ISP's network and client management software. Software from specialist developers, such as Phorm, sits on an ISP's server and intercepts every page or search request made by subscribers to that ISP. The pages are scanned for keywords, which are then used as the basis on which ads are delivered to the reader. These ads can be incredibly specific, because they are based on patterns of behaviour: the ISP could end up knowing more about you than you know yourself. This is überknowledge that can be exploited to encourage you to spend money on goods or gradually, by stealth, confine you to working a limited range of websites and services. It sounds like the worst sort of coercion!

Aficionados, mostly the developers and some large ISPs, claim that this technology delivers accountable and highly relevant content to website audiences. They say it is a means of ensuring consumers aren't annoyed or hassled

with unwelcome solicitations. They say that it gives ISPs a new revenue stream and helps create a market for premium advertising. We still say it's sinister.

There are a number of technology developers trying to convince us that this stuff's just fine. One of these is Phorm which claims that it is acting in the interests of web users by: "designing and building a system that understands what people want – without ever knowing who they are or where they've been." Except that the technology does know where you've been because it's got the evidence to prove it. Without knowing where you've been, Phorm's technology can't do its job.

It works by assigning random numbers to individuals, which are then used to gather information about the pages visited as the user browses. That information can then be compared to specific topics in the Phorm database, and if there is a match a tag is added to the individual's number so tags are collected as the individual browses. As the individual's number arrives at a participating website, it is gathered into Phorm's Open Internet Exchange (OIX) format, which is used as the basis on which ads are delivered to the individual. Every ad is therefore personalised according to a person's search patterns.

Because Phorm discards tracked pages as soon as they have been searched for keywords, the company seems to think this means they are not invading privacy. The fact that what amounts to a constantly updated profile is stored for the number representing an individual, seems to us to presume otherwise. Phorm isn't keeping browsing histories or storing personal data, which ISPs do anyway, but it is keeping what's implied in an individual's browsing history, which is almost as bad. Phorm claims that it isn't possible for peoples' data to be accessed or vandalised. We reckon that access is part of the point of technology of this kind, so it's very unlikely that Phorm doesn't have the means to capture personal data.

This and competing technologies could have fascinating implications for the publishing industry, and for delivering advertising to on-demand applications. Whether or not it is an acceptable use of consumer data is another matter ▶

and whether or not consumers will respond positively to such an intimate relationship remains to be seen.

Boomerangs

(Your feedback fed back)

From: ronald.marien@agfa.com
Date: 16 June 2008 13:50:22 BST
To: lb@digitaldots.org
Subject: Spindrift article drupa

Dear Laurel,

Thanks a lot for your flattering comments about our drupa booth.

Though some remark/ question from my end on your article in Spindrift: in the third paragraph you mention reconsidering choice of uniforms for the "dolly birds" (I suppose you meant here our service personnel ;;-))

I have really no clue on what you mean with "tight white trousers" because our service personnel were dressed really wonderfully in black/red (colours were adapted to our general booth concept and our corporate branding). Are you really sure you found "white trousers dollies" at the Agfa Graphics booth?

Attached a picture of our 'service team' (delivered and trained by our contractor Melles & Stein). As you will see they all looked gorgeous in their professional outfits.

Best regards
Ronald

Dear Ronald,

I am abject with embarrassment!!!!! In looking back at my notes, I find that it is the Heidelberg lovelies that were all dressed in tight, white and uncomfortable looking trousers. My notes say "ouch" next to the comment...... and the comments about the Agfa stand follow, so I got the

two sets of notes confused. All those stands, all those colours! I really am very sorry for the error.

We'll publish this correction in the next issue, along with the photograph of Team Agfa. They do indeed look extremely elegant, with not the slightest hint of ouch.

Best regards,
Laurel.

Summer Quiz

(Where the summer gets spun!)

In case the summer is starting to leave you feeling faded, here is another in our occasional series of quizzes. You might be dreaming wistfully of drupa, or not, but just how much can you remember of those halcyon days, where the world was so much smaller and your life so dutifully bound?

1. Which company had the largest presence at drupa?
(a) Heidelberg
(b) Xerox

▶

(c) Messe Düsseldorf

(d) Canon

2. What is the difference in the average price of a Düsseldorf hotel room pre and during drupa?

(a) 100%

(b) 400%

(c) 800%

(d) 1000%

3. How many visitors went to drupa?

(a) 200,000

(b) 390,000

(c) 410,000

(d) 500,000

4. What was the drupa cube?

(a) something between a nightclub and a seminar room

(b) a strange building full of Germans in the middle of the Messe

(c) a concept that will be better next time around

(d) all of the above

5. drupa 2008 was:

(a) the inkjet drupa

(b) the green drupa

(c) the JDF drupa

6. When does drupa 2012 take place

(a) 22nd May to 6th June

(b) 24th May to 8th June

(c) 7th to 21st May

(d) 3rd to 16th May

7. Which company introduced the most tangible new inkjet technology?

(a) Xerox

(b) Screen

(c) Fujifilm

(d) HP

8. What is the staple diet of most drupa visitors?

(a) sausages

(b) asparagus

(c) alcohol

(d) all of the above

9. Where do journalists spend most of their time at drupa?

(a) in the press centre filing stories

(b) in CCD Sud listening to press conferences

(c) at the Irish Bar in the Altstad

(d) all of the above depending on the weather

10. Which trade show competes most closely with drupa?

(a) IPEX

(b) Print '09

(c) Ifra

(d) none of the above … there's only one drupa!

Now it's time to see how well or otherwise, you did. Each correct answer gets you four points for a maximum of 40.

A score of 0-10 suggests that you didn't go to drupa and that you are seriously out of touch with your industry. Time to move on.

11-20 suggests you were probably there, but that you were preoccupied with finding your way around and were probably wearing unsuitable footware. Next time take comfy shoes, plan your route around the show and try to pay attention to the material being shoveled at you by the organisers, visitors and journalists filing stories frantically throughout the show.

21-30 says you have been to drupa and spend a considerable amount of time trawling the halls. You obviously put in the effort to plan your visit in advance and were purposeful in your visits to the exhibitors.

If you've scored 31-40 you've probably cheated, but we aren't sure how. Either that or you really are a person with no life but the graphic arts and industry events, in which case you need to take up a hobby or try to make some new friends. Hats off to you for your dedication to the industry and your commitment to your work.

Answers

1. - c

2. - b

3. - b

4. - d

5. - a

6. - d

7. - d

8. - d

9. - d

10. - d

Making its Digital Mark

Precision Printing is a family-owned printing company founded in 1966 in the UK. Today it has an annual turnover of £10m, with £1.6m coming from digital printing and related services. For most of its life, Precision Printing has been a Heidelberg customer and wedded to offset lithography. That all changed a couple of years ago with investment into an HP Indigo digital press, a decision which lead to Precision Printing becoming a beta test site for the HP SmartStream Production Pro Print Server and the HP Indigo 7000, a 120 page per minute digital press. The company has since purchased the 7000 outright.

All About the Customers

Precision Printing is a traditional printer that recently embraced digital printing, and plans to develop its hybrid workflow capacity. It is a full service printing operation with around 100 employees. It provides complete print management services, working closely with customers on all aspects of print media production, from artwork through to final delivery.

The company is one of the UK's few fully ISO 12647 compliant printers. This international standard outlines process controls for the production of colour print, for superior colour reproduction. This, together with excellent service, helps Precision Printing provide customers with added value. To do this consistently the company requires technology with the flexibility to achieve the results their customers need. For Precision Printing, investment into HP Indigo technology is a means of adding value for its customers.

Investing for the Customer

Precision Printing has always invested for its customers. The company was one of the first in the UK to install a Heidelberg two-colour GTO 52, for example, and over the years has been a steadfast Heidelberg customer. Precision Printing bought five colour Heidelberg presses in 1997 and in 1999 installed its first B2 press, the Heidelberg SpeedMaster 74. Precision Printing's close relationship with its blue chip clients, which include such companies as American Express, Deutsche Bank and Dewynters, helps it to plan equipment purchases in anticipation of customers' changing needs. This way capital equipment installed is immediately productive, generating the revenue necessary to cover its cost.

Cautious Steps into Digital Printing

The company recognised the opportunities short run four-colour printing technology could provide for its customers and, as it had a long and close relationship with Heidelberg, a Nexpress digital press was the obvious place to start. However Precision Printing felt that this technol-

> **Precision Printing has always invested for its customers. The company was one of the first in the UK to install a Heidelberg two-colour GTO 52, for example, and over the years has been a steadfast Heidelberg customer.**

ogy's output quality was inadequate for its clients, who expect high quality colour lithography. Instead of taking the digital colour plunge, Precision Printing invested into another two-colour SpeedMaster 74 and a Heidelberg Digimaster monochrome engine, both of which are still in operation.

Shortly after this investment, Precision Printing moved to a new factory which allowed it to streamline operations and improve overall efficiency. And with more room there was the opportunity to purchase additional presses and take another look at what advancing digital press technologies might offer. During a visit to a UK trade show Andy Skarpellis, the company's Production Director and Managing Director, Gary Peeling got their first chance to see HP Indigo digital press technology in action.

Taking the HP Indigo Step

Having arrived at the HP stand without particularly high hopes, it was clear that the latest Indigo technology offered Precision Printing a better proposition than the competing digital press technologies that Skarpellis and his colleagues had seen. During the visit, they ran test files on the HP Indigo machines as well as the competitors, before choosing an HP Indigo press. The machine provided the best throughput and quality, and had an operator interface with extremely simple job management, even for work on a range of substrates. Training took only one week and Skarpellis remembers: "The guy that was printing at the time had no colour experience, so this was important".

Precision Printing invested in the HP Indigo 5000 to serve its fast-growing short run colour market and soon the press was operating at capacity. This was excellent for the business, but Skarpellis says he and his co-directors "found ourselves extremely vulnerable, because in every other area of the business we have more than one of everything. We decided to go for another machine on this basis, and the fact that the digital concept was selling very well". The market for short run four-colour work was growing rapidly, and the second machine made it possible for Precision Printing to switch even more work from the Heidelberg offset presses.

Most of this was high quality, low volume work but the added capacity meant much more for Precision Printing than simple load balancing. As Skarpellis explains: "We could use the versatility of the machine to decide how we wanted to run our business", a fact that's easily forgotten when printers consider investing in a digital press. At Precision Printing Skarpellis has made sure that "everyone understands the difference between digital and litho and so can direct jobs to the right output path".

SmartStream's Hybrid Dimension

Although Precision Printing is a relatively recent convert to digital printing technology, the company has extremely sophisticated job management and prepress production for conventional and digital press production. The SmartStream Production Pro Print Server co-located with the HP Indigo 7000 press, automatically manages jobs delivered to it ▶

Andy Skarpellis, Precision Printing's Production Director.

from Precision Printing's workflow management system, Agfa Graphics' Apogee. A single prepress department with the Apogee workflow system does all Precision Printing's studio work, including production tasks and colour management, to produce fully imposed and colour managed, press-ready PDFs. These are either imaged to Agfa processless plates for the offset presses, or delivered to the SmartStream Production Pro Print Server for output on the HP Indigo 7000.

Skarpellis explains: "PDFs are created and interpreted for soft proofing, prior to rasterising for output on the HP Indigo 7000". Press operators rely on SmartStream's support for hybrid workflows, with direct output to the HP Indigo 7000. Skarpellis elaborates: "One of the problems we've had in the past is the RIP'ing of large format work, but the SmartStream can feed the HP Indigo 7000 at rated speed". Six weeks into beta testing, Precision Printing had printed 227,550 full colour A4 page impressions with rising volumes as the test progressed. Customers have no concerns about whether jobs are printed litho or digital because the quality is equivalent. Skarpellis adds: "I can't see the difference anymore between offset litho and digital output. Now that we've the confidence in the machine and we know it can do the job it's going to be taking more work from the litho presses".

The Digital Connection

Virtually all jobs come into the plant digitally, often via the web. Although Precision Printing doesn't believe it produces much variable data work, its volumes are relatively high for a commercial printer, accounting for around 25% of digital work. According to Skarpellis: "It's getting warmer now. We are seeing a definite upturn in variable data output, without a doubt". The SmartStream Production Pro Print Server is helping Precision Printing because as Skarpellis explains: "We can push variable data more because the RIP is so much faster".

In combination with SmartStream, output from the HP Indigo 7000 is faster and costs less to produce, which Skarpellis says is taking the company to "a whole new level of business because the machine runs so much faster". Precision Printing is also enthusiastic about the HP Indigo Indichrome range of inks, which add violet and orange to the basic CMYK ink set. For Skarpellis: "Indichrome is something I feel quite strongly about. We use it on both the Indigo 5000 and the 7000 and we've seen huge benefit in transferring litho jobs to digital because we can achieve so much more of the spectrum with the Indichrome range. We're giving our customers much higher value jobs and that's fundamentally been the basis of the success of our business".

Next Steps

Precision Printing's beta testing experience has boosted the company's confidence. Skarpellis expects: "We will draw more of the litho work onto the 7000 because of the cost control in terms of waste". The company is also investing to do more of its own mailing instead of depending on outside services. The HP Indigo technology is helping Precision Print-

Managing Director, Gary Peeling.

ing offer customers new options and as Skarpellis says, it is "a market requirement so we're developing the whole department". The company also intends to install a SmartStream Production Pro Print Server to drive its HP Indigo 5000 to run it at rated speed. Skarpellis notes: "The 5000 gave us the edge over the competition". But SmartStream is doing much more, helping Precision Printing widen that edge into a competitive chasm.

– **Laurel Brunner**

Newspaper Business Systems

We tend to think that the heart and soul of a newspaper lies in its editorial, advertising and circulation systems, and in life or death terms they are indeed vital organs. Without them the newspaper would soon perish, but these systems aren't the only contributors to a newspaper's commercial well-being. Digital technology is also helping the more mundane aspects of newspaper publishing to thrive.

It all comes down to Information Technology and the where's and how's of its deployment. Just as front end systems for newspaper production have become heavily IT dependent, so have the business systems operating behind the scenes. A newspaper publisher can choose to go it alone, and most do, with mission critical systems such as editorial, advertising and circulation, and business information systems all managed in-house. Or they can take a different route. It all depends on the business's preference for running their own show or outsourcing the less exotic aspects of data management.

What does it all mean?

Business management is a pretty vague term. It refers to anything to do with the running of a company, which obviously varies depending on the type of business. A retail chain, for example, will have very different business information management requirements than, say, a farming cooperative. Newspapers share much in common with both in that all businesses need to manage their accounting, facilities and plant, telecommunications, personnel, data centres, bespoke projects, contacts, archives and customer relations.

The problem all of them face is that nothing is ever fixed in a growing business. The IT, including networks, hardware and software, needs to be able to support applications as they grow and as their functions evolve. The infrastructure and software must also keep up with technological advances or run the risk of creeping obsolescence. Obviously, more data storage and state-of-the-art hardware and software are constantly required, however, business growth is rarely linear or homogenous.

Virtually all newspapers rely on digital technologies to provide the infrastructure necessary to manage their business information. For the most part this involves client server architectures, with robust networking, data storage, back up and redundancy. The scope of these systems depends on the data volumes involved, and on the levels of automation and overall sophistication of the system, so they are based on scaleable, fail-safe hardware.

The data processing needs of companies such as Google or Yahoo! demand huge computing clouds, data centres equipped with thousands

> **Just as front end systems for newspaper production have become heavily IT dependent, so have the business systems operating behind the scenes.**

of computers and storage. For most newspapers, however, the number of servers needed to run the business is more likely to be in the tens and hundreds of servers, rather than the thousands.

Newspapers can take one of three approaches to managing their IT infrastructure and the business functions they support. They can work with technology provided by suppliers such as Lufthansa Systems, IBM or EDS, and use these to manage their own processes. Alternatively, they can outsource the lot, or they can work with an outside services provider to create a system that functions in-house but that is overseen by subcontracted specialists. This is what Johnston Press in the UK has done.

Johnston Press publishes 318 local newspapers and has a contract with Thus, a specialist communications company, which manages all its IT, network and VOIP services. Johnston Press recently announced that this contract is being extended to provide a single infrastructure throughout the organisation, including advertising, editorial and production. This will help the company as it moves to provide common systems across all aspects of its business, with everything running on a central network.

Companies such as Thus provide products and services customised to a given client's needs. They offer support for system planning, deployment and management, structuring the deal according to the customer's requirements. That could be dedicated systems with no customisation and a one-off fee, or comprehensive service level agreements and support. Alternatively it could be simple application services, such as those provided by SAP, which hosts applications on behalf of its customers, or companies offering SAS (Software As a Service), or the kit to build one's own system, which is what companies such as Microsoft, Sun Microsystems, HP, Dell and Citrix do. For example, Microsoft Dynamics is a collection of business information management tools for improving financial operations and customer relations. The suite is based on Microsoft components, which has the advantage of being familiar to operators and easily integrated into existing applications.

The IT foundation and the software supporting different business applications must be flexible enough to allow different parts of the business information systems to develop at different rates. This is one good reason for outsourcing or subcontracting IT infrastructure maintenance. However the outsourcing question is one that many newspapers face with some ambivalence.

The Nordjyske regional newspaper group in Denmark, for example, has based all its systems on a fleet of Citrix servers, for which it is a qualified reseller with extensive Citrix-certified expertise for managing Citrix systems. Even here though the outsourcing question isn't clear-cut, because the line marking the boundary between core and necessary competences is constantly shifting. The newspaper handles most of its support in-house, but has Service Level Agreements to cover areas where technology moves too quickly to justify the in-house manpower to keep

The IT, including networks, hardware and software, needs to be able to support applications as they grow and as their functions evolve. The infrastructure and software must also keep up with technological advances or run the risk of creeping obsolescence.

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current with such things as database and networking technologies. According to Jørgen La Cour-Harbo, responsible for IT and production technologies at Nordjyske: "There is a constant dialogue because maybe it would be better to have a little less in-house … because support isn't cheap".

The difficulty is compounded by the need to be sure that SLAs include everything the newspaper wants and at the price they want to pay. At the very least SLAs should include provisions for upgrades or specifications for when and how upgrades should be effected, and what additional costs a newspaper should expect to pay to ensure comprehensive upgrades compatible across all systems. Unfortunately there is no clear-cut formula for ensuring parity for all parties.

Despite the conundrums, outsourcing and partial outsourcing can be more efficient than trying to do everything in-house, which carries the not insubstantial burden of the organisation having to keep up with the IT industry, as well as meeting the business's needs. It's a question of whether or not the business's focus on core skills has to be absolute or not. Software is constantly changing and licensing deals need to be maintained, new technology needs testing and implementation such that no business activities are compromised. In large operations, keeping the IT function lean and mean can start to take over the purpose for which it was originally intended.

The flexibility of these services is obviously considerable, however there is always a risk that the only people who understand how the system works is the subcontracted supplier. Many newspapers prefer to work with a dedicated supplier, such as Lufthansa Systems, to make sure that at least some of the essential IT systems knowledge is developed in-house. Lufthansa Systems plans and operates complex IT infrastructures for newspapers as well as airlines. Its services include consulting and network management, plus IT systems. The company boasts one of Europe's largest and most sophisticated data centres.

BIS or ERP?

What's the difference between Business Information Systems, or BIS, and Enterprise Resource Planning, or ERP? Loosely defined, ERP systems bring together collections of different data sources into a unified whole. The differentiator between BIS and ERP is ERP's reliance on a common database, combined with modular software components. BIS or MIS technologies are generally dedicated systems that can share data between them, but that do not necessarily function using a single database.

BIS and MIS also incorporate people into their models, for example by defining professional relationships, management hierarchies and support responsibilities. They also tend to measure current and past events, providing an analysis of implications for the future. ERP systems deal more with taking business information and using it to plan future activities

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and resource management, bringing together multiple data sources into a common whole.

The database is arguably the most important foundation for any business management and it is increasingly obvious that its efficiency and athleticism can provide a fundamental business advantage. Google for instance, is able to develop so many new applications and commercial initiatives, largely because of the power of its database. The company has even recognised the power that inheres to its computing cloud, the collection of servers used to drive its business. Google offers applications services, such as spreadsheets, word processing and email, because it wants to keep customers within the Google realm and therefore more likely to be exposed to Google advertising. Google is constantly looking for new ways of exploiting its data management skills to leverage what it knows about usage patterns and to create new channels to which advertising can be added. It is not alone in this.

Amazon is also offering cloud computing services to customers, with over 370,000 signed up including the New York Times. The New York Times company stores its newspaper archives on Amazon's Web Services, a suite of open source technologies. TimesMachine is a collection of the New York Times company's public domain archives, including 405,000 TIFF images and 3.3 million SGML articles. Amazon's technology leverages its own cloud computing to provide online delivery for the New York Times, and thus an additional revenue source.

How much do they cost?

It is impossible to put a price on business intelligence; it is however certain that without some modicum of performance data any business's lifespan is likely to be short. For newspapers the traditional barometers of success, circulation and ad ratios, are no longer a reliable measure of commercial success. This means that other metrics must come into the picture, and many of these will be intangible in conventional accounting terms. We care nowadays about website page views, click-throughs, staff churn, technological obsolescence and so on. Business management tools must therefore provide a means of capturing information about the business, and its value needs in some way to be measured.

Working with open source tools there is no technology cost, but the people costs are obviously likely to be substantial. Vendors tend to prefer fixed contracts, but this model is recidivist at best. Far better is to establish contracts based on variable cost models, where costs vary with data volumes, for instance, or the criticality and complexity of the system, or the balance between in-house and subcontractor service provision.

Moving Forward

Implementing business information management technologies or ERP systems rarely starts with a clean sheet of paper. Most process management changes happen incrementally. But in order to get the most out of an investment into this technology, it is essential to start off with a

> **It is impossible to put a price on business intelligence; it is however certain that without some modicum of performance data any business's lifespan is likely to be short.**

clean slate, and to be very specific about the objectives of the project, the technology and supplier selection process, expectations for return on investment, key milestones, measures of success (or not), budget ownerships and roles, risk analysis, possible alternative options, compliance regulations and so on. Forward planning is the cornerstone of a successful implementation, which can only take place once an equally rigorous analysis of existing technologies, process flows and tasks has been undertaken.

Competitive Advantage

Given the pervasiveness of digital technology it obviously makes sense to leverage IT assets as much as possible. Swifter responses to management reporting needs, their comprehensiveness, and the ability to look at different data sets and contexts all aid decision making. Managing data effectively is only part of the tale, because effective business information is about just that: turning data into information that can provide the foundation for future planning or validates an advancing strategy.

Working with seriously slick IT also has another benefit: it keeps the business engaged with developments beyond the newspaper industry. This is especially urgent in a web-driven world where audiences are fickle and competition fierce.

– **Laurel Brunner**

Environmentally aware – Elanders Malmö, Sweden

The growing awareness of the need for action against unnecessary use of energy, chemicals and fuel, has spurred both vendors and individual printers within the graphic arts industry to take real action.

With around 1500 employees and a turnover of €210m, Elanders is one of the largest printers in Sweden. The company has production centres in the UK, China, Hungary and Germany in addition to the six centres in Sweden. Elander's push into more environmentally benign production methods started in the late nineties and several of the company's production centres have achieved ISO 14001 certification since then.

The ISO 14000 family of standards deal with Environmental Management Systems (EMS). According to ISO an EMS meeting the requirements of ISO 14001 is a management tool enabling an organisation of any size or type to:

• identify and control the environmental impact of its activities, products or services

• improve its environmental performance continually

• implement a systematic approach to setting environmental objectives and targets, to achieving these and to demonstrating that they have been achieved.

Beyond this (and as part of the work within the ISO 14000 activities), the Elanders production site in Malmö, southern Sweden, set up a special project together with the city council. This came about when the Respect Climate organisation, a consulting company which helps businesses become responsible corporate citizens, invited Elanders to set a goal for the site to reach carbon neutral production. In essence this is about trying to lower the emission of carbon dioxide locally, as well as supporting work on emissions reduction internationally, especially in developing countries.

Elanders Malmö managed to cut its own emission levels by close to 45% and then, through Respect Climate, bought shares in a project in India to extract energy out of farming waste, to make up for the remaining emission caused in its print production. This is known as carbon trading and is in line with Europe's Emissions-Trading Scheme (EMS). Under this scheme organisations in member states receive permits to emit carbon dioxide, and if they need to produce more than the permit allows, the organisation can buy more. The idea is that the cost of the additional permits is high enough to act as a disincentive to excess emissions.

However companies who want to declare themselves as being carbon neutral can't just buy themselves that title. Rather, they need to make tangible efforts to reduce their own energy consumption. This is supervised and audited by Respect Climate, and the assessment procedure follows the GHG Protocol closely, set up by the Greenhouse Gas Protocol Initiative using methodologies approved by the CDM Executive Board. The applicant must make the case that the carbon project would not have happened anyway, and must establish a baseline estimating the future emissions in absence of the registered project. The case is then validated by a third party agency, to ensure the project results in real, measurable, and long-term emission reductions.

Respect Climate is a privately owned consulting company working with issues relating to sustainability and environmentally friendly production. The head office is located in Swed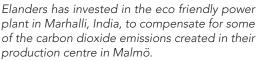en, but amongst the owners is The Body Shop, founded by Gordon Roddick and the late Dame Anita Roddick. The Body Shop is a cosmetics company based in the UK that has been active in environmentally sustainable work for many years, not only within production of cosmetic products. Respect Climate in turn cooperates with a network of organisations and governmental bodies to further spread knowledge and share experiences about sustainability and reduction of greenhouse gases.

Robert Gilderson, coordinator of environmental issues at Elanders Malmö explains: "We accepted the invitation from Respect Climate and Malmö city council to participate in a project to analyse how and if we could reduce the level of carbon dioxide in our total production process. We soon found that the largest contribution came from our power consumption, and switched to only buy electricity produced in hydroelectric power plants."

Elanders has invested in the eco friendly power plant in Marhalli, India, to compensate for some of the carbon dioxide emissions created in their production centre in Malmö.

He continues: "Other sources of greenhouse gas emission is transportation, both for deliveries, but also transportation of people involved in the production. We decided to replace two company cars with more environmental friendly models, as well as switching the delivery van into a new diesel-based model with less emissions than the old one. All in all we reduced the amount of CO_2 by 45.4% thanks to those steps."

This is where Respect Climate steps in, with suggestions of investments into projects that can help reduce CO_2 emissions in other parts of the world, in order to reach a climate neutral production status. This way of buying into projects to compensate for emissions caused by daily production, and that can't be avoided for the moment, follows the Clean Development Mechanism (CDM) protocol, supervised by the UN, as part of the Kyoto protocol.

For Elanders this meant investing in a small scale project in the village Marhalli, in the southern Indian province of Karnataka. In the project, biomass fuel in the region is used to generate clean power, instead of being handled as waste.

Robert Gilderson at Elanders comments: "It feels good to support a project which not only contributes to a lower overall greenhouse gas emission, but also creates job opportunities, as well as helping farmers to get paid for what used to be regarded as waste."

But Elanders activities for more environmentally-friendly production do not stop there. To help print buyers choose among paper qualities recommended by the Forest Stewardship Council (FSC), Elanders have two production centres that are certified by the FSC. Elanders also has production sites certified according to the Nordic eco labelling system, with the right to use the Swan logo in printed matters.

For Elanders the cost of working with environmental issues is well motivated. Robert Gilderson concludes: "The work invested in finding ways to reduce energy consumption pays back with lower power costs in the overall production. We are also confident that showing that we are serious in our work with issues related to environmentally-friendly and sustainable production, attracts new customers as well as strengthens our goodwill, including in the eyes of our employees."

– **Paul Lindström**

Robert Gilderson, Elanders Malmö, Sweden, is responsible for the recent environmental project together with the organisation Respect Climate.
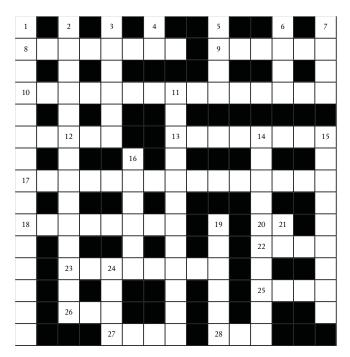
Graphic Arts Crossword Puzzle   Number 10

If you get stuck, go to the **IGAEF** website for some hints. For those of you that really get lost, answers will be in the next issue of Spindrift. **The answers for the previous puzzle are on the next page.**

Across

8. To begin in IT and the rest. (8)

9. Part of a method for getting ink to a flexo plate. (6)

10. Combined web or print contents? (10, 5)

12. Needed to dry ink and for life. (3)

13. Helped. (8)

17. The addition of an individual's details to a medium. (15)

18. In a play, it's on with no ability to act. (8)

20. Los Angeles. (2)

22. Let's investigate and refer untruthful person. (4)

23. Whole numbers. (8)

25. Vegetarian staple to follow up in Asia? (4)

26. The word we should hear more of. (3)

27. Opposite of false. (4)

28. The beginning for Mr. Gates. (3)

Down

1. The art of imaging pages direct to press. (7, 8)

2. A digital world where nothing really exists. (7, 7)

3. The real meaning of digit? For instance, pointer, calculator? (6)

4. Information Technology (2)

5. Redundant Array of Independent Discs (4)

6. Use this to highlight errors, or wave one for luck and gaiety. (4)

7. These tools cut deep; he removes excess. (4)

11. The side of the page that comes behind, before turning. (8, 4)

14. Orbiting multiple units on a web press. (10)

15. Not safe. (9)

16. Not offline or nearline? (6)

19. Off target, forgotten and remembered. (6)

21. Artificial Intelligence. (2)

24. What we must do to prove technology? (4)

Answers for Graphic Arts Crossword Puzzle Number 9

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

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