Digital Dots

Spindrift

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

Volume 8, Number 4• July-August, 2010

...Intoxicating The Graphic Arts Industry Since April 2003

Facts are stupid things.

– Ronald Reagan, *speaking at the 1988 Republican National Convention*

Dear Reader,

There have been some fascinating stats coming out of the newspaper business of late. Axel Springer, one of Germany's largest publishers, has a profit ratio of about 27%. News International's net profit margin is almost 17%. Time Inc's People magazine reaches over 45 million American adults and regularly tops the advertising industry's lists of consumer titles. None of these companies has abandoned print, and yet we are still hearing that newspapers are not long for this world.

Yet print is gently resurging in local newspapers, new information titles and especially in the signage and exhibition graphics markets. Why is this? Maybe it's because what we think we know, we really can't be sure of anymore. The world is awash with misleading information and confusing facts, most of which can be concocted into all manner of deceits on a website. Perhaps this is inclining people back to print, which is more often seen as being static, quiet and reliable (-ish).

According to a world renowned chemist, for every single tonne of coal burned, three tonnes of carbon dioxide are produced. And according to my mum, every tin of Coca Cola contains 72 spoonfuls of sugar. They must be very small spoons. The fact is, we just don't know. But if we see this fact in print, maybe we are inclined to believe it?

In any case, something to ponder, so have a brilliant time wherever you find yourselves. We'll be back in September. And that's a fact.

As ever,

Laurel, Nessan, Paul and Todd

In This Issue

Regular & Special

News Focus

Quark has teamed up with NewsGator, a leading social computing provider, to help publishers and other content creators deliver digital content to the iPhone, iPod Touch, and iPad. The partnership allows Quark Publishing System users to instantly publish newsfeed content to the Apple devices through a newsreader application that can easily be created using NewsGator's TapLynx Framework.

HP Scitex has launched a new printer, the FB700, a versatile 2.5-metre flatbed printing solution that can load, print and collect up to six sheets of media simultaneously and offers an optional White Ink Upgrade Kit for specialty applications.

Grapo Technologies has demonstrated its new flatbed Gemini X10/1080UV, capable of producing up to 90 sqm/hr. Printing is four colour plus white, with eight levels of greyscale. It should be available in August this year.

Durst has launched its Rhotex 320 textile printer for the soft signage market. This uses water-based inks that will last outdoors for up to two years. It can print up to 70sqm/hour in 600 dpi resolution in six colours. It can also print two 1.6m rolls from different print queues simultaneously.

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Durst has also demonstrated its Sol-Gel UV inks designed for printing direct to glass without the need for priming, which has long been a problem for UV printers. In addition Durst has unveiled the Rho 750 UV flatbed, which can be easily upgraded by adding extra printheads for greater productivity.

Mutoh has introduced a printer specifically for the production of traffic signs. The 1651mm-wide Zephyr TS will print directly onto retro-reflective sheeting, using specially formulated UV inks. The combination of printer, UV inks, retro-reflective sheeting and UV protection overlay film fulfills the European standard for fixed vertical road traffic signs (EN 12899-1:2007).

Mutoh has also released its Viper TX 100, a 2.6 metre wide direct-to-fabric printer which incorporates a built-in switchable and rotatable print bed, enabling both direct-to-fabric printing and transfer paper printing (sublimation) in one machine. It uses Mutoh's proprietary Intelligent Interweaving print technology, and can print at production speeds up to 36 m^2/h.

EFI's Rastek T1000 made its European debut at the Fespa show. This is a CMYK flatbed UV machine with up to 1200dpi resolution with eight-level greyscale.

EFI also used Fespa to introduce its MediaMaster system to the European market. MediaMaster is a fully-automated material handling system that drives the economics of superwide printing even further for greater profitability. Equipped to handle full-size 1.5 x 3 metre boards at up to 50 beds per hour and also master as many as 3-up smaller boards across the width of the printer, for over 150 boards per hour.

ixPressia has launched ixPressionist, a standalone VDP package which enables individual and versioned elements, such as text, images and barcodes, to be incorporated automatically into wide-format applications as well as for a host of smaller jobs, such as labels, stickers and decals. It is designed to work off-line and is not reliant on a specific RIP or printer to generate data.

Japs-Olson, one of the largest commercial printing and direct mail production companies in the United States,

has bought 24 of Kodak's S10 Prosper inkjet printheads for high-speed inline digital printing on its web offset presses. These operate at speeds of up to 305 mpm with a resolution of 600 dpi, saving time and money over a traditional, two-step variable data process that combines offset pre-printed forms and offline laser imprinting.

Fujifilm Dimatix has launched the third in a series of Spectra Polaris 512-jet printheads based on the company's advanced Q-Class platform. The new Polaris PQ-512/85 AAA expands the Polaris PQ-512 product line with a high performance 512-jet printhead capable of supporting aqueous, UV-curable and solvent ink formulations at drop sizes from 85 to 150 picoliters.

The Danwood Group, Europe's largest independent supplier of document and imaging solutions, has bought AXSA Document Solutions, based in Florida, USA, as part of its expansion into the US market.

Océ has released its figures for the second quarter of this year, which show that revenue has remained the same as for the corresponding period last year at €676m. Chairman Rokus van Iperen pointed out: "Océ absorbed substantial one-off items in the second quarter, following completion of the offer by Canon. These one-off items amounted to €103 million on reported net income and €48 million on free cash flow."

EskoArtwork has extended the strategic partnership it has with HP's Graphics Solutions Business to include HP's Scitex Large Format Division. This covers integrated workflow solutions, particularly EskoArtwork's i-cut Suite, a collection of pre-production design-to-finish software to streamline the entire production workflow.

EskoArtwork has also joined forces with EFI for co-marketing of large format display solutions around the i-cut suite.

InfoPrint has finally become a wholly owned subsidiary of Ricoh, following the completion of the three-year joint venture with IBM. This leaves Ricoh with a new challenge – how to integrate an enterprise level printing and mail handling company into its mainly office-based product line-up.

EFI has completed its acquisition of Radius Solutions, which is primarily involved in MIS for the packaging industry. Radius will now become part of the Advanced Professional Print Software (APPS) division of EFI and will be integrated with other EFI products including Digital StoreFront, PrintFlow and Auto-Count. The main product has changed its name from Pecas Vision to EFI Radius.

CGS has released the latest version of its ORIS Press Matcher, which now features an intuitive browser-based user interface and a revolutionary technology for print optimization. The new Press Matcher// Web aligns all presses to one common repeatable standard, whether an international standard such as ISO coated V2 or GRACoL, or a customer's own house standard. All presses can be managed from a central server, and jobs can be soft proofed from anywhere in the world.

Integrated Color Solutions, better known as ICS, has launched a new training initiative, the rather grandly named ICS University. This offers free online 30-minute courses that cover a wide range of industry topics, including colour management, monitor proofing, an overview of ICS' RemoteDirector.net and introduction to Press Director.

Colour Confidence, a UK-based colour management specialist, has developed ProfileWriter for the Epson Stylus Pro 7900S and 9900S large format printers. These include the Epson SpectroProofer for built-in colour verification and calibration, which ProfileWriter uses for producing ICC profiles.

Four Pees has combined its PrintFactory solution, which is used for creating and outputting banner, sign and super wide format printing, with Barbieri's Spectro LFP spectrophotometer.

Africa Print 2010, the largest commercial digital print show for the African continent has confirmed that over 90% of available floor space has been sold. It covers the entire digital print process, from sheetfed A3 machines up to grand format digital equipment and will include both suppliers and manufacturers of digital printers, finishing equipment, software, media and consumables. Africa Print will take place from 8 - 10 September 2010 at

the Sandton Convention Centre in Johannesburg, South Africa.

Kodak has launched the third generation of its four-up Magnus 400 thermal platesetter. It boasts support for up to seven language options, an auto-recovery mechanism, and Gigabit Ethernet communication as well as having modern, efficient electronic components and a power saving feature for when the device is idle.

HiFlex has added to its web2print solution by bundling a number of additional software licenses with the standard HiFlex Webshop. Callas pdfToolbox, PDFlib, Kroppr and PageFlip are now all standard modules of the Webshop package.

Finch Papers has brought out an uncoated inkjet paper, the Finch Inkjet Pi, for high speed pigmented ink applications. Finch claims rapid drying and minimal show through and increased colour density and gamut.

Meanwhile, Finch is running another of its 'Finch is in the house' contests looking for samples of projects produced on Finch paper. Designers can win a trip on an Adirondack creative retreat.

Goss has launched a 4x2 format version of its Universal XL web offset press. These presses are designed for applications requiring web widths up to 1220 mm and speeds of up to 75,000 copies per hour. Both models can be equipped with dryers and can be configured with reelstands under the towers or at right angles to the press in the Goss T90 arrangement.

FESPA has confirmed that it will run an American event, next February 24-26 in Orlando, Florida. FESPA Americas 2011 will be a pan-regional event, targeting audiences from the commercial and wide format print community in the United States, the Caribbean, and Central and South America, and will include visitor programmes in English and Spanish.

Picture This

Heavy metal

This picture shows the base that will eventually be transformed into a HP Scitex FB7500 flatbed UV-curable printer, sitting on the production line at the HP facility in Israel. The FB7500 was the first product completely

designed by HP, including the printheads. Essentially it uses the same technology as the proven TurboJet but in a flatbed design – however it's the printhead gantry that moves while the media stays stationary. Once it's built, it's then disassembled into seven boxes for shipping to a customer.

News Analysis

Quark launches digital publishing 2.0

Quark has launched a new platform-independent strategy aimed at what it rather grandly terms digital publishing 2.0. We're not really sure what digital publishing 2.0 might be, but apparently it "capitalises on the proliferation of more powerful devices with large colour displays to deliver design-rich and interactive content to consumers" as opposed to simple, black-and-white electronic books.

Not surprisingly, Quark's solution is based on its QuarkXPress, Quark Publishing System, and Quark XML Author products, together with some technology from its partners. Those partners include K-NFB Reading Technology, creator of the Blio e-reader application; and Baker & Taylor, the world's largest distributor of physical and digital media products.

Together these companies have put together a solution that sees a product start off as a QuarkXPress project that can then be exported to the Blio e-reader and sold through the Baker & Taylor network.

We're not really sure that there's anything new in this as people have long talked about cross media publishing, and Quark itself has had web and interactive tools for exactly that purpose for some years. Quark characterises its approach as a "content first" alternative to the "design first" approach seen elsewhere – presumably a dig at Adobe's Creative Suite workflow.

PG Bartlett, Senior Vice President of Product Management of Quark, commented: "The alternative options today in the form of apps are expensive stopgap measures that force publishers to become technology developers. We are focused on providing publishers with a smart Digital Publishing 2.0 strategy that insulates them from technology churn and prepares them for future changes in consumer expectations."

No word from Quark as to whether or not digital publishing 2.0 includes Flash or will be suitable for use on the Apple iPad.

Green Shoots

Agfa's new Antura fount solution plus the company's Thermofuse digital plate technology together provide alcohol-free printing on sheetfed presses, without compromising quality. According to Agfa, Antura is optimised for its plates and is designed to help sheetfed printers to reduce Isopropyl alcohol usage. Reduced alcohol usage means less chemicals and the elimination of VOCs on press. It's also safer for press operators.

Google has set up a new subsidiary called Google Energy L.L.C. as part of its efforts to reduce its environmental footprint. Data centres consume huge amounts of power and in order to keep on the right side of the green lobby Google is investing in renewable energy. Its first effort is to put money into two wind farms with a combined capacity of 169.5 MW. These are being developed by NextEra Energy Resources in North Dakota, USA.

Along the same lines a UK data centre company called *Next Generation Data* has a series of energy efficiency initiatives, which are expected to reduce the data centre's carbon footprint. They include: waste and equipment recycling; using Energy Star equipment throughout the facility; installing motion sensitive lighting; using biomass and sustainable energy sources; buying green products including power; and buying locally.

Global engineering group *Trelleborg* is making briefcases out of old printing blankets. The Swedish company assessed various ways of recycling some of its products before commissioning a designer to come up with the bag. More ideas are expected.

The *PEFC* has concluded the global public consultation phase of its standards revision. Over 65% of the world's certified forests are managed according to the organisation's sustainability benchmarks, which are likely to be modified and probably tightened following the review's completion. The revised standards are expected to be presented to the PEFC General Assembly in November 2010.

For more green news, check out *The Verdigris Project:*

Verdigris

http://verdigrisproject.com

A Review

Brightest shining monitor ever

One of the most impressive and exciting news stories from IPEX earlier this year regarding colour management was the new monitor from Quato, the Proof View 700. It has, as the name indicates, a maximum brightness level of 700 cd/m2, which in practice means that it can be placed next to, or even inside, a viewing booth, and still have a contrast ratio between the black point and whitepoint high enough for high end softproofing.

The Quato Proof View 700 has in all 12 CCFL lamps (Cold Cathode Fluorescent Lamps) to generate the luminance level required to match that of the brightness of around 2000 lux in a viewing booth. Most competing monitors in the graphic arts high end category have around 350 cd/m2 as their maximum brightness level, which forces many users to reduce the brightness level in the viewing booth in order to be able to make a side-by-side comparison with the print or hardcopy proof against the document viewed on the monitor. This in turn means using a brightness setting in the viewing box that doesn't comply to the ISO standard for viewing booths, ISO 3664, and this is of course a compromise that should be avoided.

We have tested the Quato Proof View 700, and we must say it lives up to expectations. This is the first time since we have been testing monitors that what is viewed on the softproof fully matches what is viewed as a hardcopy

The Quato monitor Proof View 700 is a high end LCD-monitor with a brightness of 700 cd/m2, and a colour gamut large enough for accurate softproofing of both gravure printing and quality offset on coated papers.

When comparing documents, typically PDFs, viewed on a monitor, side by side with hardcopy proofs placed in a viewing booth, many users feel forced to reduce the brightness of the viewing booth to match the softproof. Not so with the Quato Proof View 700, which has the brightness to match.

proof placed in a viewing booth. This is the visual evaluation, but how about a numeric evaluation, using a spectrophotometer and verifying test software?

We used U-DACT (Ugra Display Analysis and Certification Test) for this part of the test, and the PV 700 passed the test with a margin to spare. The extended part of the U-DACT test, to check if the monitor has a large enough gamut to include most of the spot colours, revealed that Quato seem to have been forced to sacrifice colour gamut for brightness in the PV 700. The colour gamut of 865,000 colours is somewhere between that of sRGB and Adobe RGB, and means that the monitor can be used to softproof both high quality gravure printing and offset on coated paper, but not multicolour printing, such as spot colour printing.

The Proof View 700 should be a welcome companion to the viewing booth at the side of many press control systems, when hardcopy proofs aren't provided. The switch to softproofing, leaving out the hardcopy proofs, seems to be a growing trend at the moment. A reliable softproofing system is then an important part of the quality management, and the Quato PV 700 is a good fit into this.

Boomerangs

From: Paul Sherfield
Date: 2 June 2010 09:34
Subject: Re: Spindrift
To: Todd Brunner

Hi Spindrift

Thanks for the new IPEX edition. Just one thing, re the Fuji Jet Press 720, I thought it was coated paper it could print on at present, with uncoated to follow at some time in the future?

Regards
Paul Sherfield

Paul,
Yes, you're right, the JetPress does indeed use coated paper for now. If you don't mind, we'll use your email as a boomerang in the next issue to correct this.
Nessan

From: Bill Baxter
Subject: Shome mishtake surely?
Date: 18 June 2010 15:28:14 GMT+01:00
To: Nessan Cleary

Hello Nessan

From your article on http://www.graphicrepro.co.za/defaultart.asp?art=9213

"Following feedback from its Drupa outing, it has now become a duplex machine though the speed halves for duplexing, *meaning that it can run at 108 A4 simplex pages per hour, but only 54 duplex pages per hour.* As such, this is not really aimed at the high volume markets of the other inkjet presses but is instead competing against the established electrophotographic digital printers. It is very expensive, at €1.24 million, though will print to cheaper media than the laser printers, although Screen hasn't yet determined the ink prices."

I think you mean 108 A4 simplex pages per minute etc., not 108 A4 simplex pages per hour!

But otherwise an excellent roundup - thanks!

Best regards from Cambridge

Bill

Bill
Obviously journalists like myself never make mistakes - it's not my fault if you guys built a really slow press. You're right of course - it should have been per minute and not per hour - I'll have myself shot later.

If you don't mind, I'll use your email in the Boomerangs section of the next issue of Spindrift to run a correction. It was good to see you at Ipex. I thought it was an excellent show with many good and innovative things to see. If you ever find yourself on a train to London, stop off at Bishop's Stortford and we can have a beer together.

Hope you're keeping well. Take care.
Nessan

On 2 Jun 2010, at 14:07,
rudi.lamproye@agfa.com wrote:

Dear Mrs Laurel Brunner,

I just received the article in spindrift on the Top 10 products at IPEX. I'm Rudi Lamproye, colleague of Erik Peeters. You spoke to Erik about Apogee on Ipex. As Erik is not in the office this week, I'm taking up the responsibility to respond. I'm head of Apogee R&D.

I was very pleased to see that you picked out the number one feature in our Apogee 7.0 release, especially as this

was one of the only software products in your list. It's really an honor to be in this shortlist. It's also nice for the whole development team to get this kind of comments in the press. This message has already been passed to the team and gives us an extra impulse to finish our work by Oct. With your permission, we would like to refer to this article on our brand new Apogee Network site (apogee.agfa.net).

Thank you for your continued support.

Vriendelijke groeten, Meilleures salutations, Kind regards

Rudi Lamproye | Agfa Graphics
R&D Manager Commercial Software | GS Software

Dear Rudi,
Thank you very much for your kind email. It's always nice to hear from our readers.

You are very welcome to use the article on your new site.

Kind regards,
Laurel.

Heroes & Zeros

Heroes

Our hero this month is Rupert Murdoch, for actually erecting a paywall for his more serious minded UK titles. Both the Times and the Sunday Times now sit behind a wall that begs around €1.75 per week or €1.20 per day. Although Herr Murdoch is doing this in order to maximise profit, it's a move that acknowledges the value of journalism. Yes, people can rely on blogs and oxymoronic citizen journalism, but no, they don't value it. They value articulate comment, original insights and ideas, and editorial process, all of which costs money and for all of which people will indeed pay.

Zeroes

Facebook is building a 147,000-square foot data centre in Oregon powered by electricity largely sourced from coal. Data centres consume huge quantities of electricity to keep computers going and to provide backup power and cooling. Pacificorp, a utility company that gets over eighty percent of its power from coal, gas and geothermal sources, is providing the power for the new data centre. What a pity that Facebook isn't using its position of considerable strength to encourage its energy supplier to use renewable options.

Video killed the radio star

Welcome back to the second half of our Creative Suite 5 review. In this part we're going to venture into new territory with a look at some of the video production tools, but first it's time to dive into Flash.

One of the themes that emerged in the first part of our review was a greater use of interactive Flash content for traditionally static areas such as InDesign and Illustrator. The biggest change in the Flash line-up is the addition of two new programs, Flash Catalyst and Flash Builder, which leave Flash Professional for producing web content.

Flash Catalyst has been specifically designed as an easy to use space for developing interactive projects. All the coding happens automatically in the background and although you can see the coding in the Code View, you can't edit it. Files are saved in FXG format, which can also be opened in Illustrator and Photoshop. There's a limited set of tools, with the idea being that you create objects in those other

programs, and then use Catalyst to add interactivity to them. However, although you can use Flash Catalyst to turn an image, for example, into an interactive button, you will still need to pass it to Flash Builder to connect the button to the intended action. All the actual Flash coding has been moved into Flash Builder 4, which was previously known as Flex Builder, presumably in an effort to encourage more people to have a go at Flash.

Flash Professional itself gains a new file format, XFL, an uncompressed format that splits the file into a directory of assets and XML information about the project, which makes it easier to manage different assets such as images.

Aside from that there are a number of useful additions to Flash Pro, chief of which is a new physics engine added to the inverse kinematics feature which makes animations of people and animals much more realistic as it allows bones to be given spring and damping, so that things can bounce and wobble as they move.

There are new patterns for the Deco brushes, which now let you add buildings and trees to populate an animated background. Flash Pro now gains support for the Text Layout Framework built into Flash Player 10 and incorporating some of the typographic controls associated with printed media such as kerning, tracking and ligature control. You can also link text fields together so that they appear to flow from one column to another.

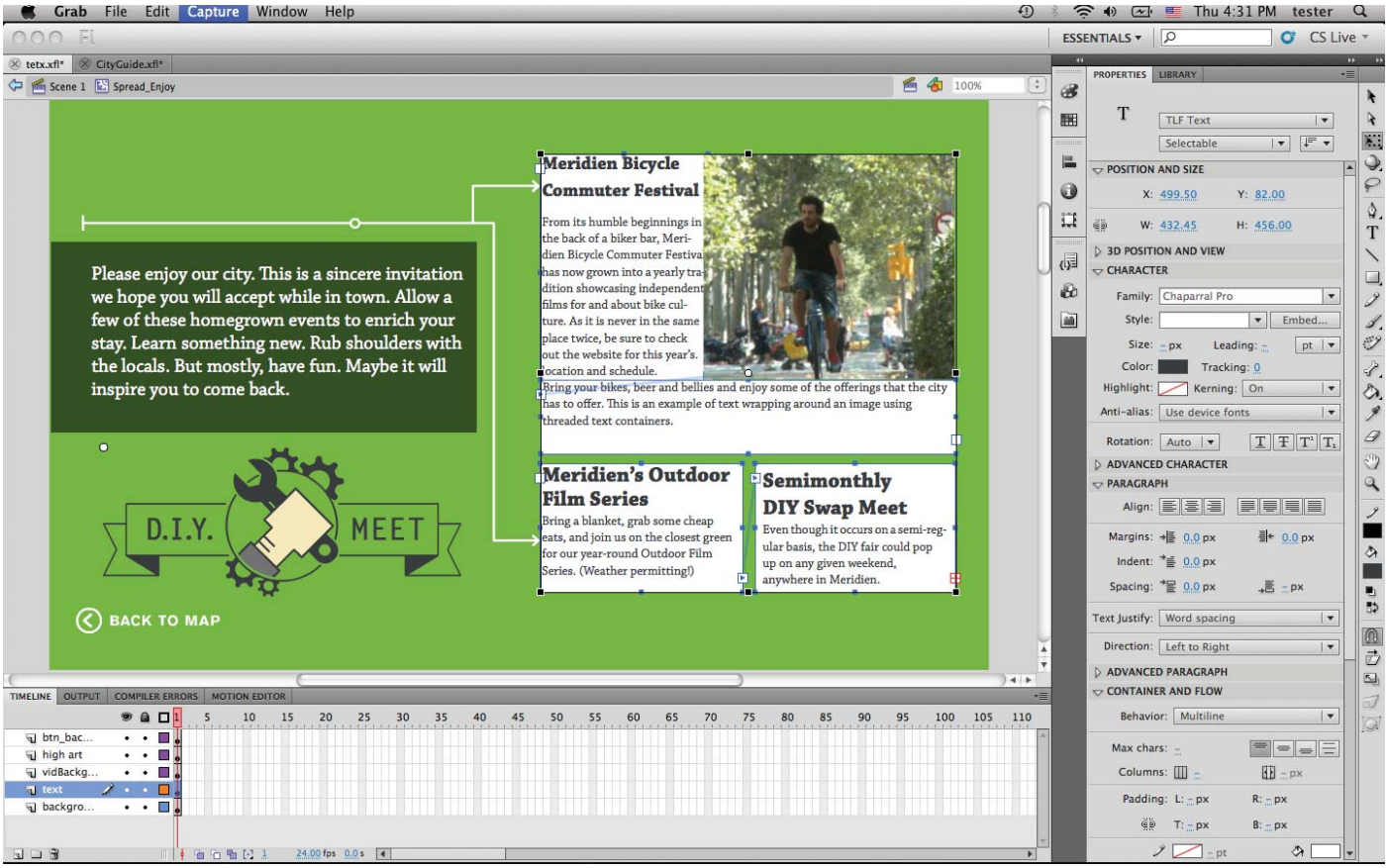
On the Flash video front, there are a number of useful features, such as being able to set points in a video's timeline to trigger ActionScript events. You can also export Flash elements as HTML5-ready Canvas animations. Another new feature is the Code Snippets panel – essentially small pre-written action scripts for things such as playing back videos.

Flash also includes a new tool called Adobe Packager for iPhone, designed to recompile Flash code to let applications developed in Flash run on the Apple iPhone. Apple responded to this by explicitly banning apps developed with such cross-compilers for its iPhone and iPad platform, somewhat raining on Adobe's parade. Adobe has since said that it won't develop this any further and will refocus the technology for the Google Android platform.

Web production

Fireworks started life as a program for editing images for use on websites, and it can still be used for this. A couple of years back Adobe refocused it as a tool for prototyping websites and interface designs, giving it a new lease of life. The CS5 release is more of a general tidy-up than radical overhaul.

So, for example, you can constrain object proportions and snap objects to the nearest pixel, with the Snap to pixel command, to avoid anti-aliasing. Also, you can navigate from page to page via thumbnails. New compound shape tools make it easier to create vector shapes, even if, like me, you're not very good at drawing. Adobe has also



Flash Professional gains support for the Text Layout Framework built into Flash Player 10 and you can link text fields so that they appear to flow from one column to another.

added better templates to Fireworks and these are a good place to start if you're not familiar with the program.

There's better integration with Device Central, which you can use to start templates before moving to Fireworks. There's also integration with Flash Catalyst through the enhanced FXG 2 output, which includes support for layers, live filters and multiple pages.

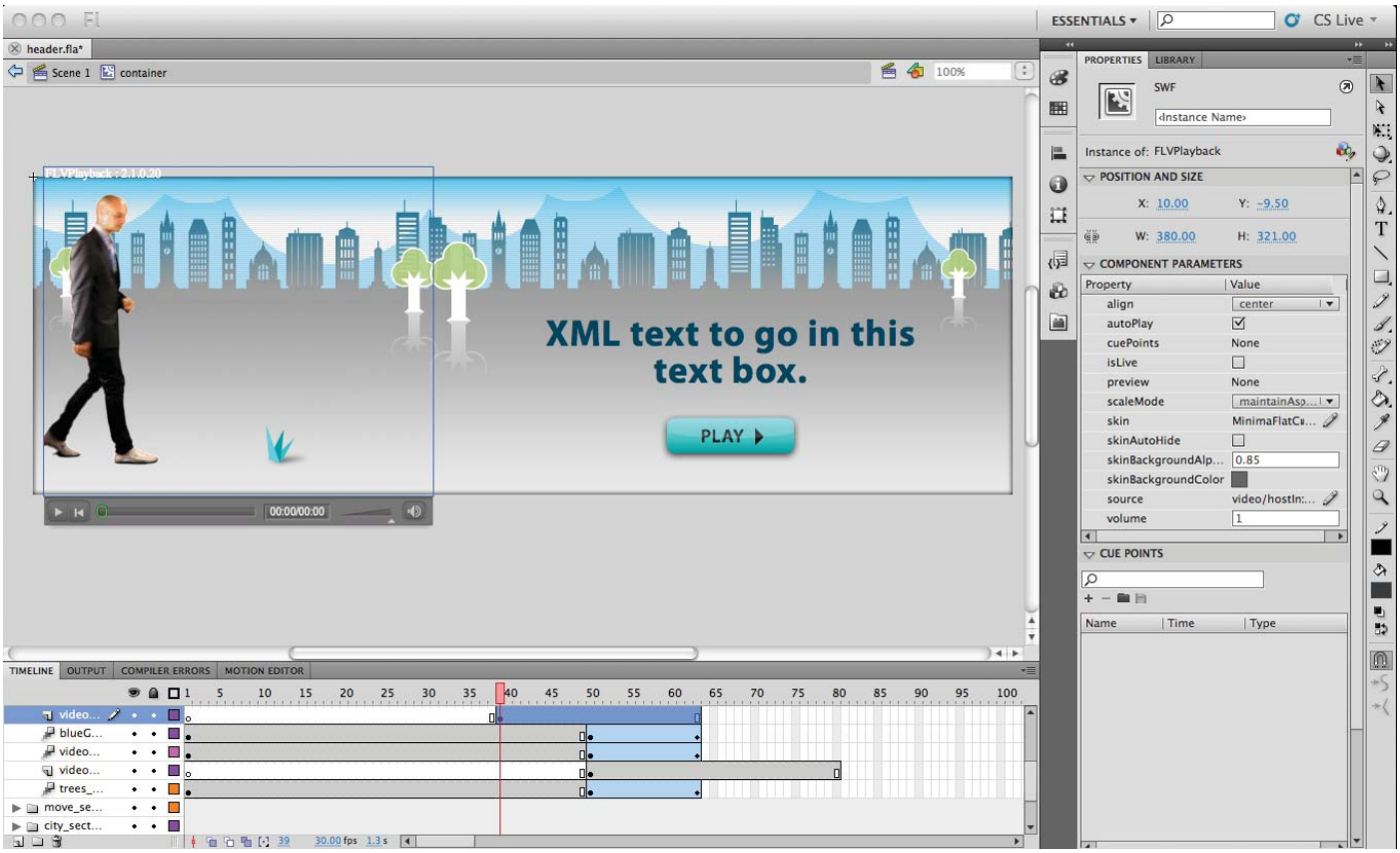
Device Central lets designers test that their products will run on a wide variety of different devices, which is becoming particularly difficult given the proliferation of mobile platforms. Device Central will work with both Flash and HTML content, and can preview Flash content that is embedded within HTML pages, as supported by the current Flash Player 10.1. There's an online device library where you can download profiles for different devices. You can also debug ActionScript code.

Contribute is a website management tool that lets you do a number of useful things, such as choosing templates so that users can add their own content without having to access the underlying code of the website. (Naturally, you need Dreamweaver to build the actual site and the templates themselves.) It also includes a tool for editing XML content, and another for editing spry widgets – handy shortcuts used in Dreamweaver for setting up things such as tabbed pages. It also lets you check which browsers the site is compatible with

Video production

Adobe first merged its Video Collection bundle into the Creative Suite back in 2007 with CS3, much to the bafflement of those of us that come from the print production side of the creative world. But of course, as media production becomes ever more integrated we have all had to learn to cope with new disciplines, and that's part of what makes this life so enjoyable. Sometimes.

The biggest change to most of the video programs is that Premiere Pro, After Effects and the Media Encoder have become 64-bit programs, giving them a considerable performance boost. Premiere Pro is the main video editing



You can now set points in a video's timeline to trigger ActionScript events.

program, and this gains a new Mercury playback engine, which gives a software boost to the way that video is rendered for playback. This is significantly improved if it's matched to the right hardware but there are only a couple of qualified GPUs available.

You can also alter the paused and playback resolution settings so that you can trade performance for speed if you need to. Adobe supports a huge range of formats, including most of the new DSLR video formats that are starting to appear. Apart from this, there are a number of small enhancements, including the new Go to Gap command to find and remove gaps. Also worth mentioning is the new Ultra Key, which basically lets you colour key different bits of footage together.

After Effects, which is used for adding creative effects, generally goes hand in hand with Premiere Pro. The 64-bit revamp allows After Effects to play back much longer previews than was previously possible, simply because you can now use more RAM. The more RAM that you have at your disposal, the longer the previews that you can run, up from just a few seconds to 30 seconds or more.

There's a new Roto Brush tool that lets you select a foreground object, and define the background. It's not as intuitive as Photoshop's selection tools, but it will work over several frames, and you can make adjustments to the selection frame by frame as you need to. Adobe's also added a new Refine Matte effect for edge smoothness, feathering and chatter, which can be used separately or together with the Roto Brush tool.

After Effects now has better support for tapeless workflows, reading native AVC-Intra files and RED cam footage. Included in the box are a number of other tools from other vendors. So, there's Digieffects Freeform, a set of tools for bending and warping layers in 3D space. There's also a new version of Mocha for After Effects included which makes it easier to apply tracking to hand drawn masks.

Apart from After Effects and Premiere Pro there are several other video production tools but these have had little more than a general tidy up for the CS5 release. When it comes to editing audio, the Creative Suite still includes SoundBooth, though not much has changed

The new Roto Brush masking in After Effects should save a lot of time and money in post-production.

here, other than that it is easier to focus in on particular tracks, handy if you work with a lot of audio layers. There's also a new library of sound effects and scores which can be downloaded from Resource Central, most of which are free to use.

The most significant aspect of OnLocation is the way that it now works with a new online service, Adobe Story, to generate a shot list. This means that any metadata from the script can be automatically added to the corresponding shots, making it a great deal easier to organise the material when you come to edit it.

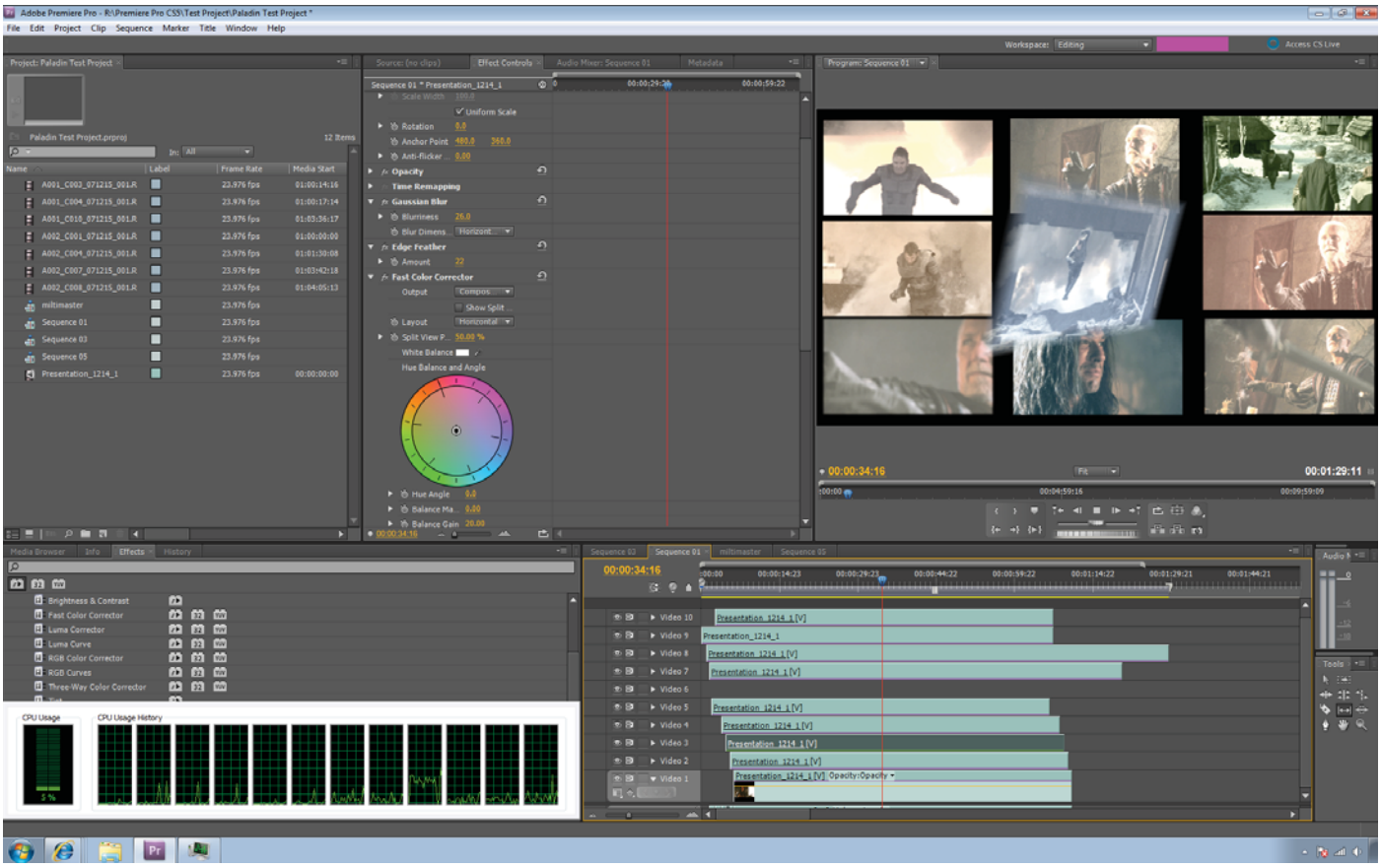
Encore, which is mainly for authoring DVDs and Blu-ray discs, can now also be used for creating Web DVDs – which can be searched for additional information from a web server. Adobe has also added the ability to create multi-page menus which use the same background music so that you can flick from one page to another without a jarring change to the accompanying sound track.

Online services

Aside from the products in the box, Adobe also has a number of online services, known collectively as CS Live, which can be accessed from the Creative Suite programs and should really be seen as an integral part of this huge bundle. There's a short complementary period and then you have to take out a subscription.

We've already mentioned Adobe Story, which is designed to help scriptwriters collaborate by allowing multiple people to add to and comment on a script, with tags to show who's done what. You can also import scripts from other script writing programs, and then make use of Adobe's metadata, which of course flows through to other CS5 programs.

For web designers, BrowserLab is a simple yet incredibly useful service that lets you test a website by simulating how it will look in different browsers and platforms. You can



Premiere Pro gains a huge performance boost with the move to 64-bit helped along with the new Mercury playback engine.

view your site in different browsers side-by-side or even one on top of the other to see if there are any differences.

Another service is CS Review, which allows designers and agencies to post their work so that colleagues or clients can add comments without themselves having the same design programs installed.

There are several other services including Acrobat.com for file sharing and web conferencing, and SiteCatalyst NetAverages for feedback on Internet usage.

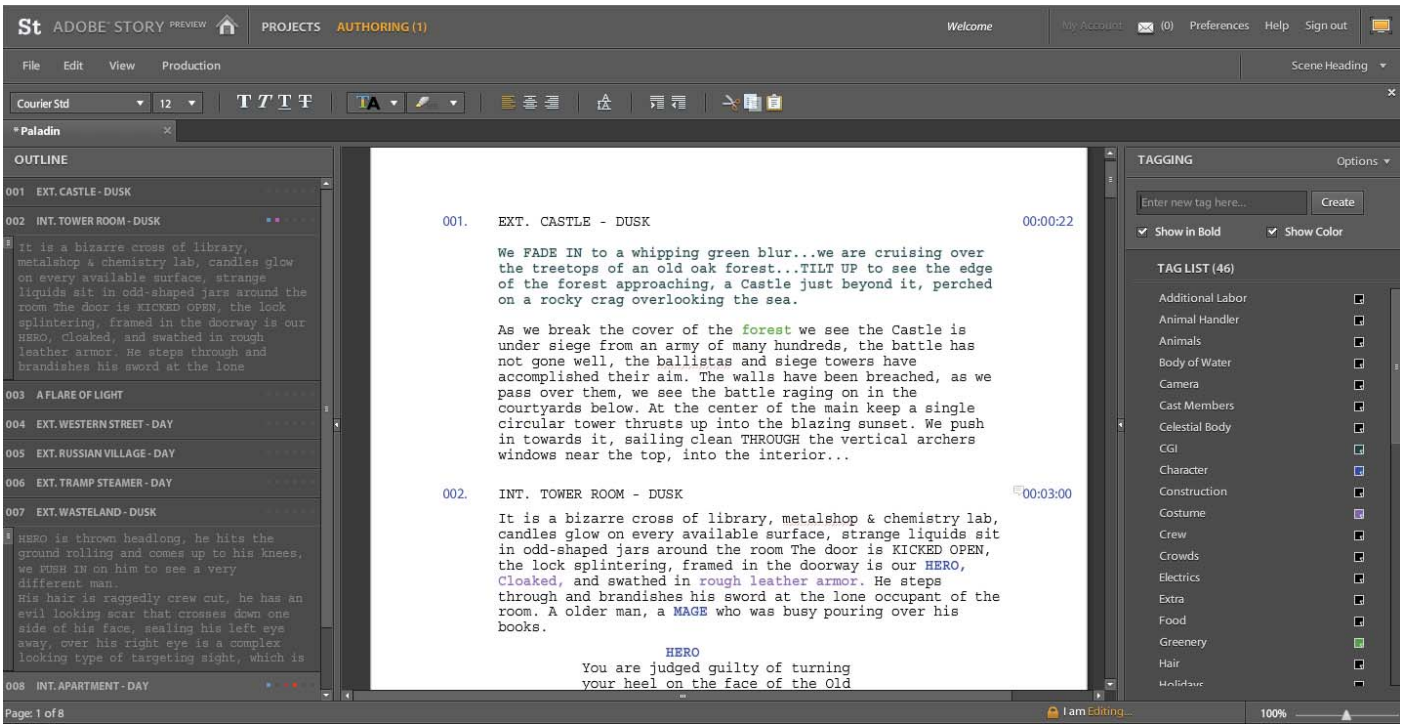
Conclusion

In the first part of this review we looked at Photoshop, Illustrator, InDesign, Dreamweaver and Bridge, all programs that seem to fit naturally together. We're not really sure why Adobe has mixed the video production tools in with the rest of the Creative Suite. While it is true that some companies will be involved in print, web and video production, it is highly unlikely that the same person will be doing all of these. Video editing is so highly specialised and surely merits a separate bundle all of its own?

Also, why is video included in the Creative Suite, while Acrobat is not? Acrobat may be included in the box but it's not part of the creative suite development process and a fresh version of Acrobat is long overdue. At the same time, some of the designated CS5 programs have had little more than a polish, not nearly enough to justify a full-blown upgrade.

Indeed, one of the most obvious issues with the Creative Suite is that there is a lack of consistency between the various programs with several different approaches to interface design. This means that you are always aware that you are using several different programs rather than a single collection.

Adobe has always said that the point of the Creative Suite was to allow designers, agencies and so on to manage their investments in software by buying everything in



The Adobe Live online services are an integral part of CS5, including Adobe Story as seen here, a useful tool for writing scripts which links back to the post-production workflow.

one go, rather than in incremental stages throughout the year. However, the advent of the online services rather undermines this. Then again, one could argue that the Creative Suite has already achieved its main purpose, persuading people to sign up for the full Adobe line-up, disregarding other alternatives such as QuarkXPress. So perhaps it is time now for Adobe to consider another business model, such as splitting the bundle up or offering it as software as a service (SaaS).

Ultimately there's no real question about the Creative Suite, because anyone involved in design will probably have to use it. So many of the programs, including Photoshop, Illustrator, Dreamweaver and After Effects, are not just leaders in their field, but the only realistic choice for professionals. Adobe has ensured that there are enough new features in these programs to justify the upgrade to CS5 for most people, particularly given the fairly generous upgrade prices that Adobe has levied. The move to 64-bit code on its own should give a performance boost, provided you can also upgrade your hardware to take advantage of this.

- Nessan Cleary

Setting Workflow free

The Danish softproof- and workflow system vendor WebProof has taken a rather radical stance by offering its workflow solution WebFlow for free.

Yes, that's right, a fully working automation and scripting solution completely free of charge. With WebFlow you can direct incoming emails and attached files to assigned hotfolders, which can then perform a multitude of tasks such as split multipage PDFs into single page documents, convert, rename, zip, unzip, add prefix, change prefix et cetera. The Adobe Creative Suite can be remotely controlled, including Distiller, for correct creation of classical PDF/X-1a and PDF/X-3 print ready PDFs. If you have more advanced preflighting software at hand, this too can be scripted and automated by WebFlow.

Father and son outside the famous cathedral in Roskilde, Denmark, where WebProof has its headquarters. Jakob Adeltoft, to the left, is the majority owner and managing director of the company, while his father Jan Adeltoft, to the right, is marketing manager.

So, what's the catch? Surely there is some limitation with this free WebFlow package? According to WebProof, actually no, it's not a 'Lite' version that later has to be replaced with a 'Pro' version if you decide to upgrade.

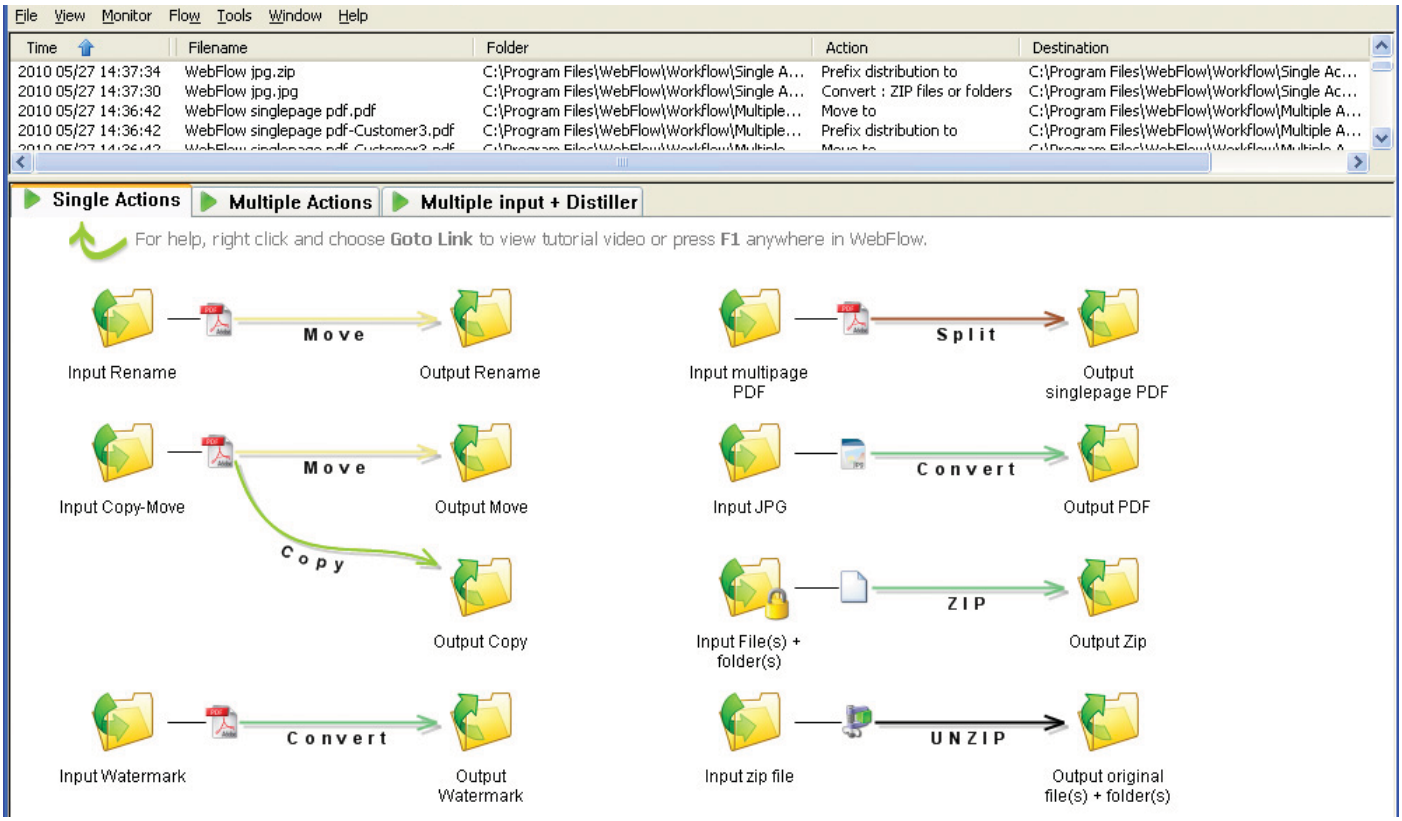
The new 3D PageFlip presentation mode gives a natural look to the documents when flipped through. A quite unique feature is that the function can trace reader usage, so the editorial staff can trace which pages are the most popular, if published, for example, on the Internet!

What is missing is the link to the flagship product for WebProof, the sofproofing solution that has given its name to the whole company.

As Jan Adeltoft, marketing manager at WebFlow, put it: "We of course like to attract users to our main solution, WebProof, but any user that is happy with the free WebFlow product, can continue to use it at no cost whatsoever. And you get a long way with it in terms of automation and scripting".

So what is WebProof, and how do WebFlow and WebProof interact? WebProof is actually one of the first softproofing solutions on the market, launched around 10 years ago. It means it's a mature and stable product with a wide range of tools and options for advanced, server-based, softproofing. Users can be split up into different categories with different levels of privileges. The web interface can be customised to your corporate identity, it has version control and version comparisons.

New modules include a quick translate function as well as support for time zones. Other new functions are freehand



The user interface for WebFlow is very simple in appearance, but right-clicking on icons and nodes brings up a rich range of options and scripting possibilities.

drawing, expanded proofing marks and pointer icons. The new 3D 'Flip pages'-function is quite neat and finally the "Management Benchmark Report" is fairly unique.

While WebProof on its own is very useful when editorial teams share the work of proofing, the full benefit of the system comes when WebProof and WebFlow are set up to work in tandem. This is called the Platin version of WebProof, and WebFlow is then opened up to add a whole range of added functionality to WebProof.

One of the latest additions to WebFlow, when connected to WebProof Platin, is the capacity to make corrections directly to InDesign documents. And this is without needing InDesign Server! Another highly useful option is the Email Connector to create automated routing of emails and attached documents to assigned queues and workflows. Other connectors available are the Images Database Connector and the general XML Connector. Other special modules for specific needs are connectors for Medienet, MPress, AdBase, FileMaker et cetera.

One of the more important modules is the Mirror/Synchronize function which creates an identical back-up that (mirrors) the server and database continuously. In intense workflows with large amounts of documents and users involved, this is a must-have to avoid the danger of losing time and data in a server crash or network failure!

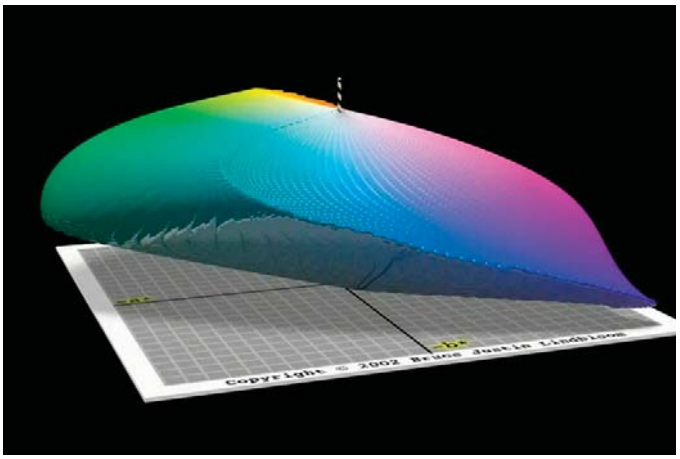
While WebFlow is free, and the base version of WebProof is an ASP-solution for €199 per month, the Platin version of Webproof is priced on request depending on how many of the options and extra modules are needed. Anyone wanting to make the proofing cycles shorter and automate the document creation stage including preflighting, should have a good look at the WebProof and WebFlow system.

– Paul Lindström

Digital Dots UV-curable printer test – a snapshot

The market for large format printers is booming, and much of the focus is on the printers using UV-curable ink.

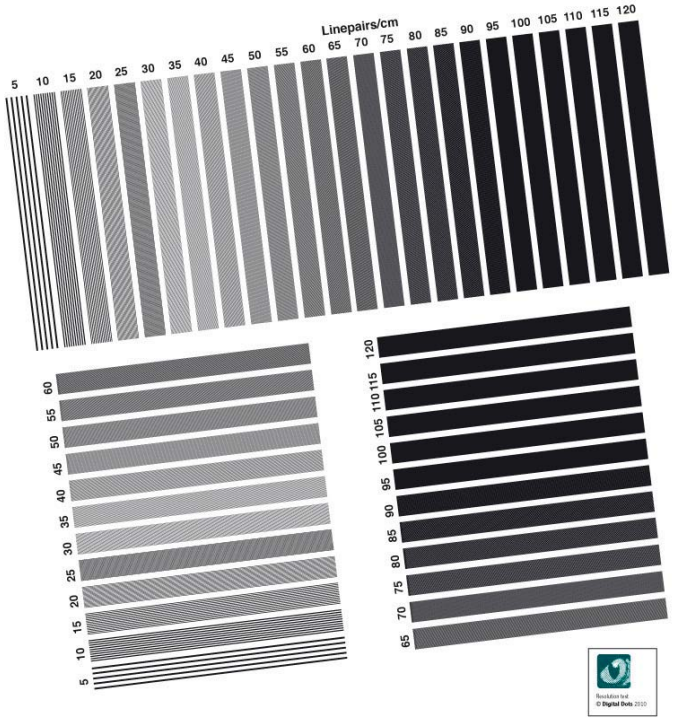
We at Digital Dots have designed a test to evaluate some of the aspects of large format printing, and the test is about to be concluded. We would like to introduce you to some of the challenges for the technologies involved, and share some of the initial findings from the test.



The number of single visible colours for humans is about 2.4 million, according to colour scientist Bruce Lindbloom.

While there are many aspects of large format printing, the test evaluates two specific concerns – colour gamut and resolution. Both are crucial for a pleasing and satisfactory end result, and both are subject to some confusion as they are presented slightly differently by the vendors, both in technical specification sheets and in press releases.

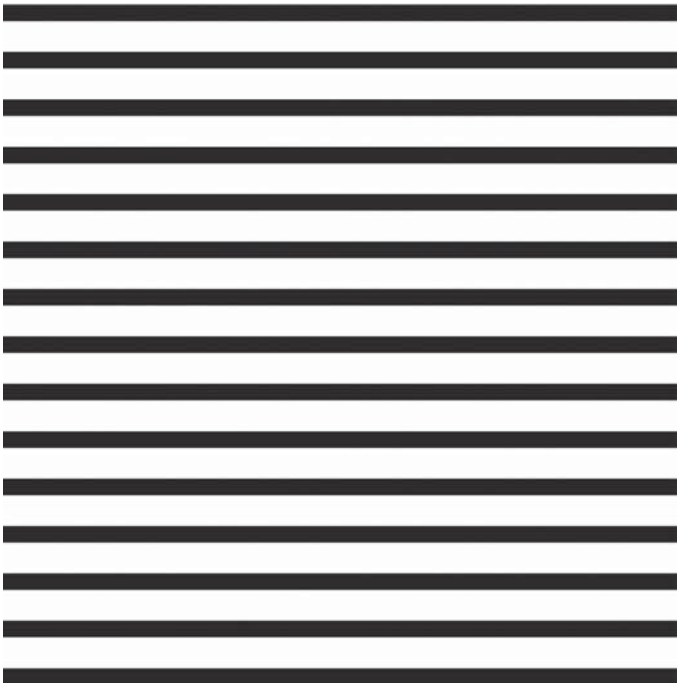
Starting with colour gamut there is no agreed unit of measurements to specify the size of a colour gamut in a consistent way at the moment. We suggest applying the methodology from the colour scientist Bruce Lindbloom, who measures the colour gamut analysing the ICC profile for a certain device, and counts the total number of colours that have a colour difference between them of Delta E 1 (calculating ΔE using the original formula from 1976).



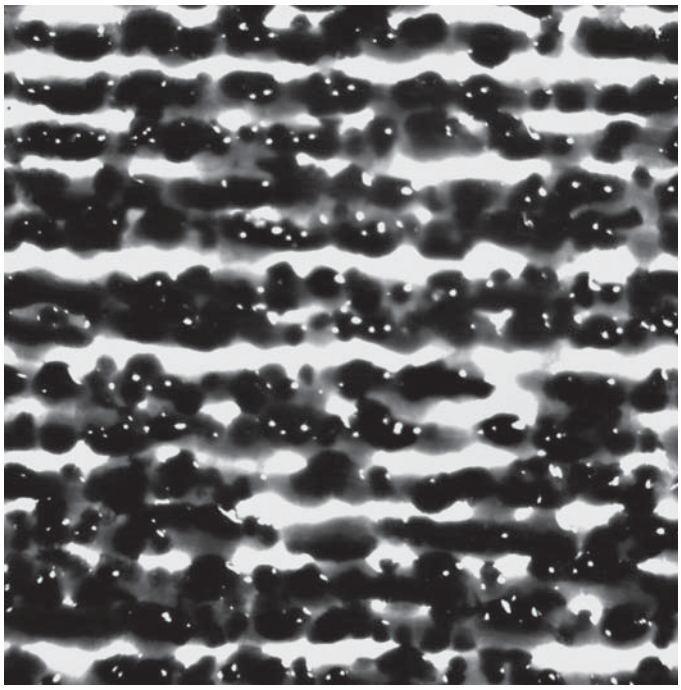
The resolution test chart has line pairs at a wide range of spacings, from 5 line pairs/cm up to 120 line pairs. This can then be calculated to the equivalent resolution in dpi.

So instead of referring to, for example, an RGB-gamut for 8-bit data as being 256 x 256 x 256 = 16.777 millions of addressable colours, we look at a particular colour gamut of an RGB device, analysing the ICC profile. This could be, for example, the well-known sRGB colour space that many LCD monitors can reproduce. After applying this math we conclude that sRGB has a colour gamut of about 830,000 colours. If we accept the suggestion from Bruce Lindbloom that human vision can distinguish between about 2.4 million unique colours, we have a more reasonable and understandable unit to relate colours to.

In this way we get away from having the situation that 8-bit CMYK data appears to have 256 x 256 x 256 x 256 addressable colours, since it's a four channel encoding system, which would result in 4.2 billion colours, which of course doesn't make sense. Instead we can analyse a typical and well known CMYK colour gamut, such as that of sheetfed offset on high quality coated paper. If we use the FOGRA 39 colour data set, which is well known and often used for standard profiles, then analysing a



Our test form for resolution contains line pairs spaced increasingly closer to each other. Here the original at 65 line pairs per centimetre, and equivalent of 330 dpi. The zoom factor is approx 500x.



One of the printers tested so far is the Efi Vutek GS3200, and it shows distinct line pairs up to 65 lp/cm in the horizontal direction, which equates to 330 dpi. The zoom factor is approx 500x.

profile with this data we find that we are talking about approximately 400,000 unique colours – a far cry from the 4.2 billions of colours you get if you just look at the addressable colours.

We will apply this method in our test, and it will be interesting to see where the UV-curable printers are, on the scale between 400,000 colours for quality offset, general RGB represented by sRGB with its 830,000 colours, and human vision capable of detecting a gamut of 2.4 million colours.

Another aspect of colour gamut for the UV-curable printers is how they compare relative to printers using solvent-based ink. An often-repeated statement is that solvent-based inks offer a larger colour gamut than that of UV-curable ink. In the test we will analyse samples of the colour gamut of some solvent-based printing systems, and compare them to that of a range of UV-curable ink systems, and see if this statement holds true.

Resolution

While some would argue that you don't need very high resolution in large format printing, since the viewing distance is normally quite large, most people still want to know what the resolving power is when comparing systems to estimate what image quality can be expected from the system.

While you would think that this should be quite a straightforward way to present numbers, when you look into it, it's a fairly complex matter. First of all we need to look at the native resolution of the print head itself, which at first glance often seems to be relatively low compared to the resolution given in dpi (dots per inch) for a given system.

Then, the addressable resolution depends on how fast the print heads are instructed to move over the substrate, and this can be made at different speeds in the horizontal plane to the vertical. Also, the spot size varies for the different systems, and in some printing systems it can be varied for the same print head. In addition, the number of passes that are used to create the image can be set differently, which will affect the image quality.

Finally, some print heads can eject more than one ink droplet per imaging cycle, which affects the colour depth

for that imaged dot (which provides more than one level of bit depth).

For the test we simply asked the vendors to print a resolution test at the highest resolution stated or suggested for the system, and then we analysed what that means in actual resolving power. Combining a specially designed test chart containing line pairs spaced increasingly closer to each other with an analysis using a digital microscope, we can show how the ink droplets actually land on the substrate. The resolving power is then given by the resolution that the system reproduces image details with reasonable accuracy, which is where you can identify the single line pairs in a clear way.

As far as we know this kind of test hasn't been conducted on the market, at least not published officially, so we are very exited to finish this work and be able to publish the results this autumn, in October as the plans stand for now. We have about ten different manufacturers involved in the project, so we think it will be a good indicator for where the market stands at the moment in this fast moving area of digital print. Our hope is also that this test, together with case studies and technology descriptions, will be a good educational material for anyone interested in or already using large format printing technology.

– Paul Lindström

FESPA feast

Large format printing has been growing and expanding for several years now, and it's not only screen printers who see the opportunities in the technology with more and more commercial printers also realising that there are many interesting applications open for exploration.

The best place to get a look at the wide array of machines and additional features and functions is FESPA Digital, a tradeshow run by FESPA (the Federation of European Screen Printers Associations). This year printing on fabric was the main theme, and around 25,000 visitors flocked to Munich, Germany. FESPA Digital is the 'smaller' exhibition – the 'full blown' FESPA will be held 2013 in London.

This exhibition was spread over five halls of the Munich Messe and digital technologies filled three of them. Most commercial printers looking to invest in grand format engines probably do so for one of two reasons: they want a more economic technology for existing customers who want banners, backdrops, posters and the like; Or they want to tap into the market for web-driven single prints sold direct to consumers.

Owning a device dedicated to this type of work brings the work in-house, but of course it assumes that the rest of the business case is properly thought through. There are also opportunities to use this sort of investment to provide services to new sectors, such as advertising and direct to consumers.

Point of purchase displays for retail customers are just the tip of the iceberg of what's possible with grand format output. It seems as if it's only your imagination (again) that sets the limitation. At FESPA we saw giant helium balloons printed to look like bags of crisps! And how about customised product packaging such as variable data drink cans and the like for special one-off promotions? With a grand format digital press anything is possible: they can print onto virtually anything from wall coverings and pillows, through to flip-flops, beanbags, floor tiles and headscarves, so the possibilities are really infinite.

But this isn't cheap technology and although we're not talking the price of a printing press we are talking at least five figures and up. Fortunately there are some familiar names leading the market. EFI and HP have both invested heavily to establish a grand format portfolio and presence. EFI's Vutek machines are probably the most widely installed grand format engines on the market.

At FESPA EFI, which also designs, produces and manufactures its own inks, announced that the five metre GS 5000 roll-to-roll device introduced last year is now shipping. It's a highly versatile printer capable of

producing everything from small signs to billboards. In its most productive mode the GS5000 prints 288 square metres per hour and, according to EFI's president Fred Rosenzweig, is suitable "for virtually any environment the customer wants to sign up for". EFI also introduced a new media handling system for its GS3200, a 3.2m wide machine of which 80 units have been installed.

The theme of Fespa Digital was print on textile, and that suited Durst well as it introduced the Rhotex 320, a large format roll-fed textile printer.

HP Scitex has been attacking this market aggressively, largely through acquisition. Grand and wide format printers are now sold alongside the HP Indigo line of digital presses, and HP has very cleverly introduced a €5000 entry level Designjet to get commercial printers onside with wide and grand format printing. The new Z5200 is specifically designed for copyshops and sign printers, and prints eight colours at 9m²/hour at a decent level of quality.

HP introduced four other machines. The FB500, FB700, LX600 and LX800. The latter replaces the Designjet L65500 and is a 3.5 metre wide machine with a dual roll kit for printing two different width materials at the same time. It prints on all sorts of substrates, including textiles, at rates that range from 27 to 80 m²/hour.

The FB (flatbeds) print flexible media and have a roll-to-roll upgrade option. They use HP's famed latex inks, which are very flexible as well as being less hostile to the environment than solvent-based inks. The FB500 costs €85,000 and the FB700 which is more productive costs €120,000.

HP has also improved its TurboJet 8600 which has a top output speed of 480m²/hour and now has a gloss mode for all over or spot gloss.

Agfa has also been beavering away to develop its position, as have Dainippon Screen, Océ and Fujifilm. Agfa made an impressive array of introductions at FESPA, having fully integrated the Gandi technologies following its acquisition last year. The new M2050 takes the Anapurna into the two metre wide market. It costs €130,000 and includes white as standard, and with no loss of productivity. There is also a new Anapurna 2500 LED a €200,000 engine for 14 to

Not newcomers exactly, but still not well known, Grapo from the Czech Republic launched the Gemini flatbed large format printer, sold at only €80,000. Branislav Oravec, Marketing Director, is happy to inaugurate the first sold machine with some drops of champagne.

50 m²/hour high quality output, plus new UV inks for the whole Anapurna range.

Durst is another big name in this segment. The company introduced a new machine for printing straight onto

fabrics. The Rhotex 320 prints onto fabrics which Durst customers increasingly use for sign work instead of plastics. Fabric signs are light, easy to transport, sturdy, easy to mount and store, and are reusable because they are washable. This also makes them more environmentally friendly than PVC. Furthermore they don't irritate the skin and have a different look to conventional POP signs.

Durst's water-based inks are also cheaper than the more common solvent inks, and have a wider colour gamut. The lack of competition for the Rhotex 320 means that

Gerber took the opportunity at Fespa to launch the Cat UV – a flatbed UV curable ink printer using the Cold Fire Cure technology. According to Gary Feltham (pictured) it's now a mature technology that provides large colour gamut, low power consumption and no VOC.

printers can also charge more for fabric-based sign output, which improves margins. There are several models ranging from the 3.2 metre wide machine through to a five-metre model. The ink cost is around €0.50 per square metre. A more conventional new product is the Rho 750, a new modular UV-curing flatbed printer with three levels of upgradeability and performance.

In addition to these stalwarts, we ran into a host of less familiar names at FESPA. Grapo, from the Czech Republic, is a printing company that develops and sells its own grand format engines. Grapo is starting to raise its profile and has one of the lowest priced machines on the market. Gemini is only €80,000 and uses Xaar heads to print Fuji Sericol inks.

Gerber launched the Gerber Cat UV at FESPA – a flatbed UV curable ink printer using the Cold Fire Cure technology with low energy consumption and producing no ozone or VOC curing the cationic ink. It supports "double strike" and two-sided printing.

WP Digital from Switzerland is also trying to gain more attention for its machines. This company specialises in UV-curing printing engines and its line of Virtu printers is considered by many to be the best on the market.

Roland, Mimaki, Mutoh, Epson and Canon, also develop and supply machines for large format and grand format applications. In addition to the engine makers there is also a large community of ink and substrate providers. Obviously consumables play a significant role in output appearance, however, they are also important for some of the more outlandish applications, such as printing on skis and skateboards.

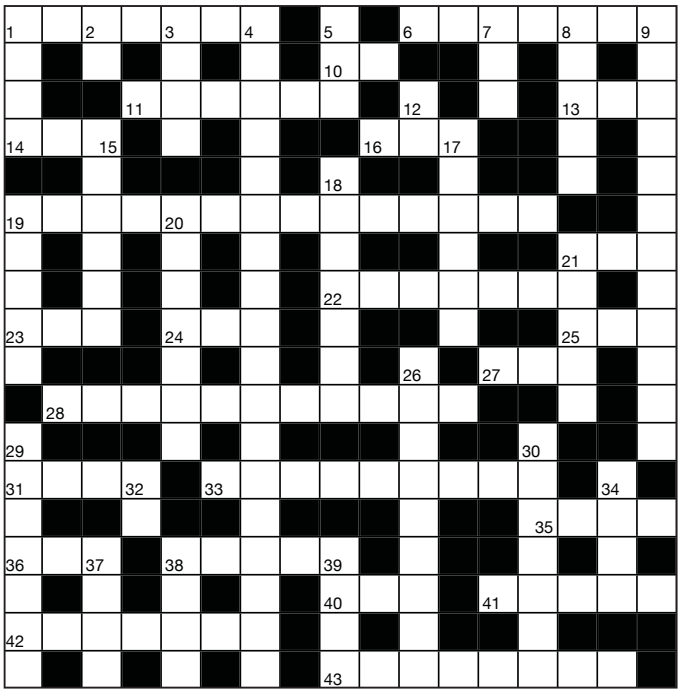
Screen printers are spoilt for choice when it comes to digital printing engines, but for commercial printers looking to invest in this technology understanding what's what is a bit like herding cats. Rarely are things what they seem and rarely does anything stay still long enough for you to get your head round it. We'll be looking more into this sector over the coming months.

– Laurel Brunner & Paul Lindström

X-word Puzzle

Number 24

(Answers at www.igaef.org)



Across

1. Take them throughout the print run in order to maintain tolerances. (7)

6. Each CMYK ink acts as one of these on the substrate. (1, 6)

10. Artificial Intelligence (2)

11. Blankets are made of this. (6)

13. Enterprise Resource Planning (3)

14. A Dutch disease that prefers this tree. (3)

16. Do It Yourself (3)

19. The only way to work out colour conversions is to do it like this. (14)

21. Supplier Known Unit (3)

22. Over? Done? Another preposition. (7)

23. This part of your anatomy makes no contribution to colour perception. (3)

24. Tone Value Increase (3)

25. No longer in. (3)

26. A small bite? (3)

28. The shape of light or measure of tides? (11)

31. On sheet or plate, the place for printers marks. (4)

33. A small part of a larger whole. (9)

35. Rather more than ready and willing. (4)

36. Slang for hurry, a sort of cylinder? Or maybe just see 26. (3)

38. A craftsman is nothing without them. (5)

40. Path, method or something extreme? (3)

41. It makes colours happen. (5)

42. Hold one in your hand to have a digital camera. (7)

43. Upfront variable data? (8)

Down

1. The first rule of data management. (4)

2. Modus Operandi (2)

3. Bass in the Mediterranean, close to a watchmaker's glass. (4)

4. CMYK and not additive. (11, 7)

5. Except for a place to hang out, or hang from. (3)

7. It's not known, but colours everything in print. (3)

8. Commonly repeats in templates. (5)

9. Another copy, endlessly reiterates. (12)

12. 3.14159265 (2)

15. Something dark, is it important? It's everywhere. (6)

17. Not cyan, magenta or black. (6)

18. Leaning over, yet a registration? (7)

19. The colour of this is what keeps the wheels turning. (5)

20. The kind of light we need for monitors. (7)

21. The place where trades take place (5)

26. It's economic way to lay down ink like this. (4, 5)

29. CIEL*a*b* represents this in the same axis as greenness. (7)

30. To wait, work or to position (7)

32. Slightly bigger than an en-dash. (2)

34. Just so much dreary noise. (4)

37. Without one of these, one's lost. (4)

38. This colour characteristic is vulnerable to changes in dot gain. (4)

39. An American alternative to ISO 12647. (4)

Number 23 – Answers

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