



If I could explain it to the average person, I wouldn't have been worth the Nobel Prize.

– Richard P. Feynman, Theoretical Physicist

## Dear Reader,

The latest awards season for the graphic arts is underway in various countries. Awards are a great way to recognise outstanding accomplishments, and for the prize winners they are excellent marketing tools. They are also handy proof points that confirm a company's boastful assertions. And they're great moneyspinners for the organisers. Winners all round!

Getting an entry right is not easy, but the better it is the greater the chance of getting through to the short list. Getting the entry right depends fundamentally on the award sponsors and organisers providing clear instructions about what they want. This can be very tricky as it requires an understanding of the awards category as well as an appreciation of the best criteria for the judging process. Too often this guidance isn't clear, which may put off some entrants. That might be why awards organisers have to extend their entry deadlines so often.

Awards are a great way to celebrate excellence, especially when they recognise real achievement. So to all of this season's print award entrants around the world, we wish you the best of luck. That goes with getting your entries right and for when the judges cast their beady eyes on your submissions.

Enjoy!

Laurel, Nessian, Paul and Todd



## In This Issue

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Laurel Brunner looks at the issue of deinking and finds that too often it is thought of as a production process for creating new products where really we should be thinking of it from the point of view of quality control of raw materials.

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### It's good to talk

Web-to-Print has proved to be an effective way to automate the sales and submission of print jobs, helping to cut costs and time and making many short run jobs profitable. But Nessian Cleary asks if printers are really getting the best out of it?

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### Adobe CC 2014 features

When Adobe launched the Creative Cloud, one of the selling points was the ease of keeping the sprawling Creative Suite up to date, with new features released when ready and not held back for a general release date. So Paul Lindström asks, why is there a need for a CC 2014 edition?

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## News Focus

**EFI** has bought cross media marketing company DirectSmile for an undisclosed sum. As with previous EFI acquisitions, DirectSmile employees, including co-founders and former principals Christoph Schacht and Christoph Clermont, are to stay with EFI, in this case joining the Productivity Software Web2Print Solutions Group. The DirectSmile products will still be sold and supported as standalone software for the agency, enterprise and print industry markets, while the technology will be integrated into EFI's web to print and eCommerce offerings.

**Kiian Digital** has bought JTeck3 for an undisclosed sum. Kiian Digital, which is owned by the venture capital companies Wise SGR and Alcedo SGR, has made a number of investments recently including a new facility in the USA last year and a state of the art production and development centre near Como which comes on stream later this year.

**Heidelberg** has completed its acquisition of Gallus Holding AG, which means that Heidelberg has now issued 23,000,000 new shares to Ferd. Ruesch AG, in exchange for its stake in Gallus. Thus Heidelberg's share capital

has now increased by €58,880,000 to €659,040,714.24, divided into 257,437,779 no-par value bearer shares. The deal paves the way for Heidelberg to develop its own digital label press.

Meanwhile, Heidelberg's figures for the first quarter of its 2014-15 year showed sales of €435m, a 14 percent drop on the same quarter in the previous year, where sales were €504m. Heidelberg attributed this to strong sales in the previous quarter. However the operating results for the first quarter have been improving over the last two years, up from €-20m to €-11m, and income before taxes improved so that the net result for the first quarter was €-34m, up from the €-38m from the same period last year.

**KBA's** latest half-year figures are cautiously optimistic, with sales having risen by 3.1 percent to €517.8m, though demand is mainly for sheetfed presses. Group pre-tax earnings were €-0.1m with a pre-tax profit of €12m in the second quarter cancelling out a pre-tax loss of €-12.1m in the first quarter.

**Manroland Web Systems**, which took over the web offset part of the former Manroland company, has established a French subsidiary that will sell newspaper presses and solutions for commercial and digital printing, along with spare parts, technical service and equipment upgrades for existing customers. The new company is based in Noisy le Sec.

**Tharstern**, developers of the MIS of the same name, has been through a management buy out that leaves managing director Keith McMurtrie, technical director Antony Lord and sales director Lee Ward in charge of the company though ownership is shared with Mobeus Equity Partners. The company, which was set up over 30 years ago, has a €5 million turnover.

**KBA** has teamed up with Air Motion Systems, a leading developer of UV LED curing systems, to offer a drying solution that can be integrated with KBA's VariDry system complete with full operational consolidation at the press console. It can be specified on new presses, from the B3 Genius all the way up to the large format 205. In the UK and Ireland the system can also be retrofitted, by KBA, to older presses of all makes.

### Spindrift

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▶ **Highcon** is to distribute, install and support the Esko CAD Digital Front End software alongside its Euclid digital cutting and creasing machine. As part of the deal Highcon has developed the Light Editor tool that allows Euclid operators to edit crease and cut lines in the structural design of the job at the point of production, including last-minute changes.

**Memjet** has introduced a new print engine, the Sirius-12G, that's mainly aimed at roll-to-roll printers. It sits on top of the substrates, which allows for a wider range of media regardless of its thickness and means that the media can be easily accessed without having to break the web to do so for maintenance. It works with Memjet's existing printhead and can be supplied as a complete solution or as a collection of parts that OEMs can put together themselves.

**Industrial Inkjet** has launched a range of iS printheads designed to be easily integrated into existing label production lines. The range includes mono and colour solutions. They all use the Konica Minolta printheads and run at speeds of up to 50 metres per minute in full colour printing or mono using 6 picolitre drop sizes, which is less than half the previous 14pl size.

**Xennia** has launched a range of dye sublimation inks, called Corundum, for proofing and production-scale decoration of polyester fabrics. The inks, which are available for both Kyocera and Epson printheads, will work with both coated and uncoated transfer papers. Xennia also sells its Amethyst reactive dye ink for printing cotton and cellulose and Moissanite UV curable ink for outdoor textile printing.

**Quark** has updated QuarkXPress to v10.2, said to be faster than the previous release. There's an option to set the Xenon Graphics Engine for maximum performance or highest image display quality. It's also possible to track changes with a new Redline feature, and users can store Notes in a project without affecting the actual content of the project by adding reminders and comments on the text content.

**Kodak** has updated its Prinergy workflow to v6.1. This includes Scenario Builder, a new production automation

tool that facilitates the creation of workflows from intent to output, and Job Intent Window, where users define high-level job specifications in one menu that describes the completed product. The Production tab also gains a Separation list, a simplified view that lets operators streamline output for separations.

**EFI** has launched Fiery ProServer v6 for its Vutek wide format printers. It boasts an EFI-developed acceleration technology that improves processing for the Adobe PDF Print Engine as well as the Adobe Post Script Interpreter (CPSI). A combination of file compression algorithms and efficient memory management redefines how complex images are analysed for faster PDF processing times. It also supports Fogra PSD Print Checks and much faster tiling.

**Onyx Graphics** has updated its Onyx RIP to v11.1, which now uses the latest Adobe PDF Print Engine (APPE) 3.2 for faster rendering. The colour profiling module includes an expanded gamut ink control and there's also simplified spot colour ink restriction. There's a new cut path previewing feature plus a new, cut-only workflow.

**Markzware** has released its latest preflighting software, FlightCheck 7.5 for Mac, which supports Adobe's 2014 Creative Cloud editions. It's a standalone program and supports most publishing programs including QuarkXPress. It's available as a one-off license or via an annual subscription. Markzware has also updated its Q2ID software that converts QuarkXPress pages to InDesign and now supports Indesign CC2014.

**Meadows** has released a free version of its 2D Bar Code Module for Adobe InDesign Creative Cloud, which can produce QR codes. Users can pay to upgrade this to also create Data Matrix and PDF417 codes. It supports Indesign CS5 and later versions.

**Agfa's** results for second quarter of this financial year show that revenue fell by 11.1 percent with a corresponding 1.9 percent drop in gross profit over the second quarter of last year. Christian Reinaudo, President and CEO of the Agfa-Gevaert Group has blamed this on weakness in emerging markets, adverse currency effects and difficulties competing in the US healthcare market.

▶ But Agfa has reduced its net debt to €-176 million, while increasing gross profit margin by three percent.

**QuadTech** has signed a deal to supply its closed-loop color control and color measurement systems to Gallus for its offset, flexo and gravure presses. The arrangement also includes Quadtech's SpectralCam system, which enables in-line monitoring of all packaging substrates.

Finally, our condolences to the family and friends of Kathy Woodward, Chief Executive of the **British Printing Industries Federation**, who passed away in August. Woodward had worked in print for over 20 years, leading the BPIF for the last three years. During this time the organisation gained £1.1 million of funding for management training in the print industry.



## News Analysis

Earlier this year Heidelberg signalled that it was downgrading the less profitable parts of its business and that there would be no new investments in its postpress operations as part of a general move to concentrate on higher margin products. But now the company has spelled out the details, with Heidelberg putting an end to production of its own postpress equipment having decided that this is no longer competitive in Germany. That said, Heidelberg will continue to produce folding machines at its Ludwigsburg site.

Instead, Heidelberg has partnered with Chinese company Masterwork Machinery Co which will produce the existing postpress equipment with Heidelberg retaining responsibility for sales and service activities.

In addition, Heidelberg is also scaling back its activities in the postpress commercial market and will now only sell its established folding machines and cutters. Instead,

Heidelberg has partnered with its arch-rival the Swiss company Müller Martini, which will take over the servicing for all the installed equipment that is now discontinued. However, Heidelberg will continue to market the Polar cutters and its own folding machines.

"We were able to win two renowned suppliers as partners for our realigned Postpress portfolio," said Stephan Plenz, Member of the Board, Heidelberg Equipment. "They will help us provide our customers with competitive products and ensure continuity in services and service parts."

This move will lead to the closure of Heidelberg's Leipzig site and a cut in staff at the Ludwigsburg and Wiesloch-Walldorf sites – a loss of some 650 jobs worldwide in total.

But it will save Heidelberg some €30m each year starting from next year. Heidelberg has already stated its intention to achieve a EBITDA [earnings before interest, taxes, depreciation, and amortisation] margin of at least eight percent in financial year 2015/2016.





## Say What?

*For this issue we decided to resurrect our old friend - Say What? - a dubious prize awarded to the worst of the many dodgy press releases that we have to wade through each month.*

Sadly, this month there were quite a few contenders but we felt that an Onyx Graphics release, announcing Onyx v11.1, was worthy of special mention. Apparently this adds

*"six new features to the 21 enhancements",*

which is quite disappointing because we were expecting at least eight new features and normally can't be bothered to write about anything that doesn't demonstrate at least 25 enhancements.

In the interests of journalistic accuracy we did try to count the new features but were confused by all the enhancements and lost interest. Which is a pity, because Onyx is quite a good RIP and some of these features will probably be quite useful to its users.

If you can find them - the press release is full of short, pithy sentences, such as this:

*'Known for providing innovation in colour, Onyx Graphics designed ONYX 11.1 software to offer users the ability to improve colour output quality by taking advantage of the new, expanded gamut ink control included in the colour profiling module.'*

We think this translates to: The colour profiling module now has control for expanded gamut ink.

We won't even start on the paragraphing, though we wish that the authors had - it might have made it easier to sort some of the features from the enhancements.

You wouldn't believe just how many people are involved in writing, proofing and signing off these press releases, but we've noticed that the more people involved, the worse the quality of the finished result. We're currently taking bets as to how long it will be before a Kodak press release makes an appearance here.





## Green Shoots

### Verdigris Update

Here is a précis of where our Verdigris blogs have taken us over the last few weeks. You can see them in full online at <http://verdigrisproject.com>, but this quick snapshot is faster!

### Value Add-ons for the Climate Change Debate

Is there a need for more climate change innovation to be presented at major trade shows? Would it be useful for markets to have a slice of an exhibition floor dedicated to environmental impact reduction technologies? Something worth considering perhaps, but this isn't a particularly original idea. It copies the underlying concept of the Sustainable Innovation Expo which took place recently in Kenya.

This Expo was run by Climate Action, an NGO working in partnership with the United Nations Environment Programme (UNEP). Just think what such an initiative could do for Graph Expo, Ifra Expo or drupa! It could expand the range of potential exhibitors and audiences, encourage printers and publishers to consider new ways of reducing their environmental footprints, and set an example for major international trade shows in other industries.

Such an initiative might also provide a standards and regulatory forum for the graphic arts industry. Regulations are getting tighter all over the world, from bans on dumping electronic waste through to the UN's Solve the E-waste Problem or StEP. This is a mighty world map that lists national policy guidance and environmental rules and regulations but this is not an easy database to navigate and its texts are legal policy documents and laws that ordinary business people will mostly struggle to understand. Having some sort of workshop to explain what the laws mean to normal folk would be a terrific boost to international trade, particularly for companies keen to polish the CSR credentials.

## Verdigris

The Verdigris project is supported by Agfa Graphics, Digital Dots, drupa, EFI, Fespa, HP, Kodak, Mondi, Pragati, Ricoh, Shimizu Printing, Splash PR, Unity Publishing, and Xeikon.

Understanding what laws apply when and how could also help businesses negotiating thickets of red tape, or how the legal landscape has changed. We hear loads about new laws that come in, but far less about regulations that get repealed or modifications to compliance requirements.

Regulation is a fact of life and for environmental lobbyists the more the better. And perhaps they have a point because without it there are no common best practice guidelines and no means of ensuring that everyone operates on a level playing field. Standards such as ISO TS14067 for calculating the carbon footprints of products and services can help. But there needs to be far more noise for companies to help them with implementation. In the case of ISO 16759, for calculating the carbon footprints of print media, companies such as Ricoh and Heidelberg are doing their bit.

Educational workshops, training materials and case studies explaining the gains for printers and their customers, can increase standards uptake and improve overall footprints. This brings us back to tradeshow innovation and expanding the profile of the printing and publishing industries, to reach their wider supply chains. Environmental awareness, education and economics, have long legs that can take industry events much further than their organisers might imagine.





# A Review

## DxO Optics Pro 9.5

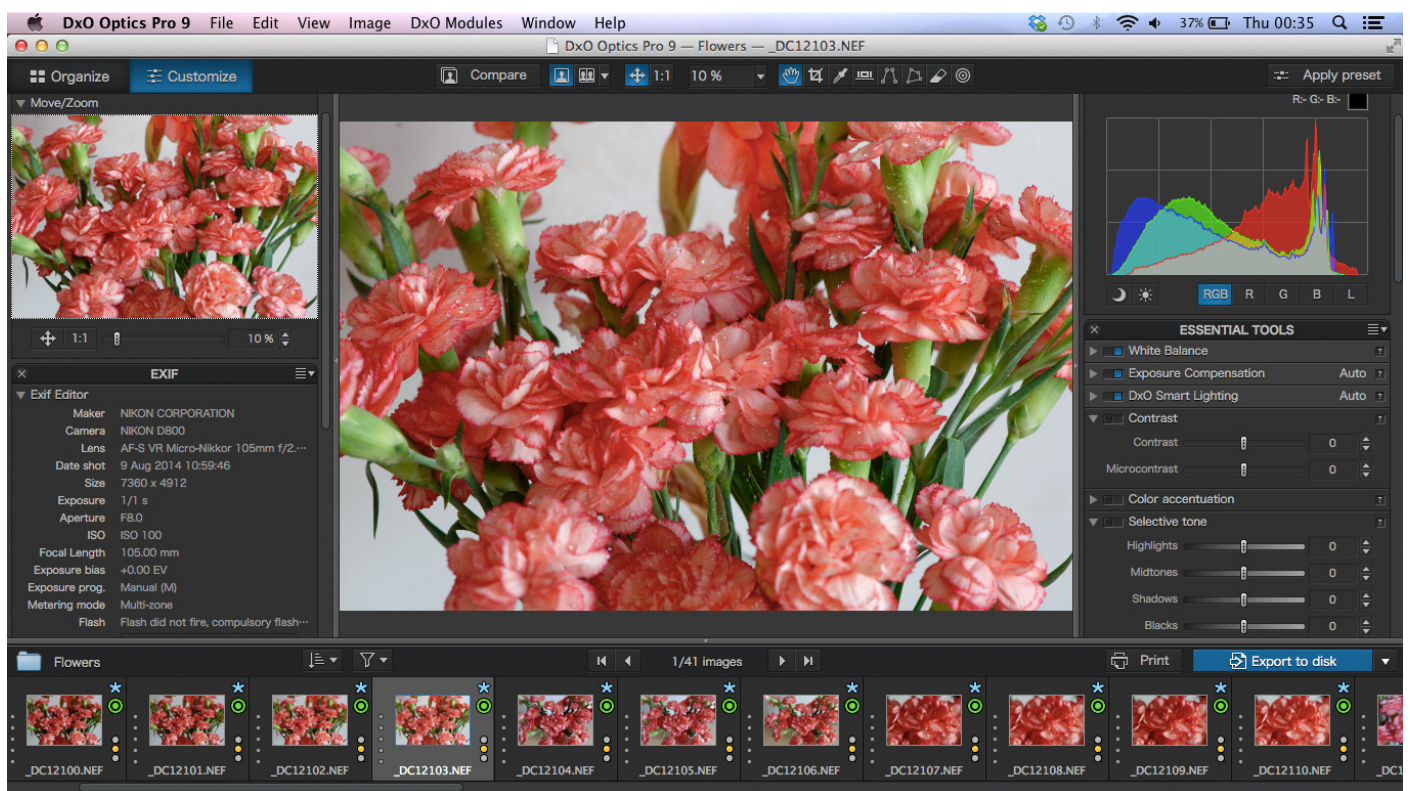
There are a number of programs around for editing Raw camera files but one of the most widely respected is DxO Optics Pro, now at version 9.5. This owes its fame to the quality of its Raw conversions, largely due to having a calibration for each and every camera available.

The program was developed by DxO Labs, a spin-off from Vision IQ, which developed computer vision technology.

Elite, which you'll need for high end cameras, mainly professional-grade DSLRs.

As well as having calibrations for individual cameras it also contains calibrations for various lens/ camera combinations for correcting lens distortions such as vignetting and chromatic aberrations. When you first upload a set of pictures it goes through the lenses that you've used and downloads an additional module for each lens.

This means that the calibrations really are tailored for a very tight fit which is an effective way of dealing with the many small imperfections that even professional-quality lenses exhibit. So, as an example, it did fairly well at



*Optics Pro has a fairly intuitive interface, with the metadata and presets on the right and the main tools on the left. Note the Selective Tone set of sliders, which gives a lot of control over the different elements.*

DxO specialises in solutions for digital imaging, mostly for vendors of digital cameras and camera phones, as well as imaging component suppliers. But DxO also develops software for photographers, and carries out testing of cameras, providing a DxO mark for most models (top of the table currently is Nikon's D810 with a score of 97).

When it comes to the Optics Pro software, there are two versions: Standard, which supports most cameras; and

dealing with the magenta fringing that the Nikon 50mm f1.4G sometimes (quite often) produces at wide apertures.

When it comes to the raw conversions, Optics Pro does a good job, with good colour rendition and clean whites. It is extremely efficient at eliminating noise, largely due to what DxO calls its Prime technology. This takes a while to process each image, but does give you a bit more confidence in using high ISOs.



It has to be said that this program is a real pleasure to use. It's designed to be as automated as possible so that you can get good results with a minimal amount of work. Yet, there is a lot of leeway to play with an image and get exactly the effect that you want.

But there are some drawbacks. Firstly, there is no masking or cloning facility or any way to select a small area of the image to process. Also, although it does pick up Exif data from the camera, it doesn't appear to allow you to add any further metadata.

This leads to the key feature of this update – Optics can now link to Lightroom, so that you can export a RAW file to Lightroom, edit it and then open the edited version in Lightroom, albeit converted to Adobe's Raw DNG format.

This gets around both of these problems but does mean that DxO is now dependent on Adobe to provide added functionality. Of course, Lightroom is a pretty good raw converter in its own right, though Optics Pro does edge it.

In some ways Optics offers a very purist approach – it's absolutely one of the best raw processors available, one of the three main processors used by professional photographers along with Lightroom and Capture One. The raw conversion is extremely good, the noise reduction very clean and there is a lot of control over tone mapping. If you're using Lightroom then it's worth considering Optics for the level of integration between the two.







## Smooth Operator

### Per Samuelson at Strålfors.

This month we've introduced a new, occasional feature – Smooth Operator. To qualify as a Smooth Operator you need to have a proven track record of leading a print or publishing company, or for that matter, a manufacturer of GA products, through challenges and changes into profit and growth.

These characteristics are definitely met by the Managing Director of the Swedish company Strålfors, Per Samuelson. When Samuelson took on the role of MD in 1999, Strålfors faced some serious challenges. At that point it was already a successful printing company, specialised in forms printing. But in 1999 the challenge from electronic forms handling and electronic media in general was a great threat to Strålfors' existing business model.

Samuelson, having been brought into the company without previous experience of the graphic arts industry, took a fresh look at the situation, and soon launched a new business model centred around the term Information Logistics. At that moment this was not a widely known or defined term, but Samuelson used it systematically to explain to his staff and customers where Strålfors was heading.

Today, this is an accepted area of research and studies, and still exists as a guide inside Strålfors as to where the focus should be for the company. However, the slogan for Strålfors today is "From one to many, in many ways". In other words – communication solutions with cross media production applied in a systematic and efficient way.

Strålfors develops and offers communication solutions giving companies with many customers new opportunities for more personal and stronger customer relations. As Strålfors puts it: "With the knowledge that everything communicates, we make it possible for all parts of a company to interact and speak the same language – the customer's language. When communicating, a focus on the receiver always pays off – whether it's done through



*Per Samuelson, Managing director of Strålfors, an international cross-media company selling communication solutions, that has its headquarters in Malmö, Sweden.*

direct mail, invoices, the web, telemarketing, customer service, repairs, or anything else."

In economical terms the company has grown (based on turnover) roughly five or six fold since 1999, and today has a turnover of about €325 million, and more than 1500 employees in Europe (only about half of them employed in Sweden). Interestingly enough, the actual turnover from conventional print is the same as in 1999, around €75 million, but other services have expanded and grown.

In 2006 Posten, the Swedish mail service, acquired Strålfors, and integrated Posten's existing digital printing division into the equivalent division inside Strålfors. Soon after, the Swedish mail service started a cooperation with the Danish mail service, and since 2009 the two have operated together under the PostNord name, with a turnover of more than €4 billion.

Strålfors, with Per Samuelson as Managing Director, plays an important role in the further development of services in PostNord. Next to, and in tandem with the



► company vision, Strålfors applies and integrates a series of ISO standards in the business processes. For quality management ISO 9001 is used, and for environmental issues the ISO 14001 standard, but other certificates, like ISO 22301, 27001, 18001, FSC and PEFC are also upheld and maintained.

Efficient communication and efficiency go hand-in-hand with a business model based on sustainability. Per Samuelson and Strålfors have shown that efficient communication of information uses a mix of media, in a sustainable way. We are duly impressed!



# The Deinking Challenge

**One of the most important characteristics that a piece of print must have is the adhesion of the ink to the substrate. Yet if we want to recycle paper, it must be easy to remove the ink.**

This poses a problem if old paper is to be turned into a new resource. Technology for deinking packaging paper and board is well-established to provide the raw material for recycled paper stocks, such as newsprint. But over the last 25 years more and more graphic papers printed with flexo and digital presses have entered the supply chain and these are more difficult to deink using established technologies.

But with new deinking technologies and methods it can be done, despite what old-guard deinkers think. The question isn't so much the method but the economic and environmental impacts of these new processes.

Deinking processes have to change in line with changes in the market. Higher volumes of graphic papers printed with flexo and digital technologies are entering the recycling supply chain, which in turn is processing ever more recovered paper. Like packaging paper and board, these materials are the raw material for recycled paper grades, so deinking processes for graphic papers are constantly improving.

Forward thinking players in global supply chains understand the need to take collective responsibility, including those that pulp and make paper, as well as ink and printing system manufacturers. The constant process of technological improvement must simultaneously maintain commercial engagement and keep recycling high on consumer and business agendas.

## Can We All Agree?

Even for packaging paper and board there is no global industry consensus on how to do deinking. Diverse variables and vested interests make it very difficult to get

agreement on methods for deinking, which tend to vary with geography. In Europe, for instance, powerful paper manufacturer associations have established a complex web of special interest groups and lobbyists to protect member interests. Inevitably it comes down to money and control, which is not necessarily best for the market or the environment.

Of course, keeping recycling and deinking costs down is, superficially at least, in everyone's interests. However, cost is only one criteria in the deinking conversation, which can easily be hijacked to become a conversation about deinking methods. A simple low cost deinking



*The deinking process starts here. Image courtesy of Voith Paper.*

method means that the value of the raw material is high, because its cost of production is low. If the method is more expensive, as is sometimes the case, the raw material's value is less and this affects the profitability of the material.

What really matters however is the outcome of deinking processes and the pulp they produce. Paper makers may be prepared to pay a premium for high-grade pulp, if they can still sell their products with sufficient margin. Our focus should therefore be on how we assess pulp relative to its fitness for purpose, not on the method used to produce it. Production of raw materials for recycled and recyclable graphic papers, has to combine economic considerations and market requirements with those of greater environmental impact, regardless of deinking methods.

## Ingede & Method 11

Probably the name most commonly associated with deinking is Ingede, founded as the Interessengemeinschaft

The European Paper Recovery Council set up by the Confederation of European Paper Industries, to which Ingede is a close confidant, states that: "The waste management industries as well as the recovered paper merchants contribute to raising the quantity and quality of recovered paper available for recycling. The consumers need to be informed about their role in closing the paper loop."

Deinking Technik (Association for Deinking Technology), and which now calls itself the International Deinking Association. Ingede represents a group of pulp and paper mills, mostly in Germany and specialised in newsprint production. Ingede's 33 members utilised nearly nine million tonnes of paper for recycling in 2013, down from almost eleven million in 2006. This fall is curious, given the rising rates of paper recycling in Europe over this period (from 62% in 2005 to 71.7% in 2013).

Ingede is a highly efficient lobbying organisation which pushes hard for its Method 11 deinking method to be the reference for deinking processes. Ingede considers it an industry standard but it is not widely used outside Europe. This is because all sorts of other deinking methods abound in line with local market requirements. This is good for the market because according to the EC Waste Framework Directive: "Recycling means any recovery operations by which waste materials are reprocessed into products, materials or substances whether for the original or other purpose."

There seems to be broad agreement across geographies that it should be possible to recycle paper to produce new papers of the same or different types. Most regulators and eco-labels require that it should be possible to repulp the recovered paper without clumping of fibres or the presence of foreign matter such as glue, but they do not specify the method preferring to leave markets to follow their own needs.

In Japan, for instance, a local standard is already established and is a condition for the government's green procurement law. The scheme covers all products and is designed to encourage recycling of all materials used in

printed products. It is based on the recycling capabilities of an average paper recycling facility in Japan and uses four rankings of deinkability set by the Japanese printers' federation. This is just one example of how deinking processes are managed locally according to local market constraints.

The objective for everyone is to have recycled pulp that can be used to create new paper products. Requiring pulp makers to use a single method for deinking restricts creativity and innovation in deinking technologies and constrains printers to use specific combinations of inks,

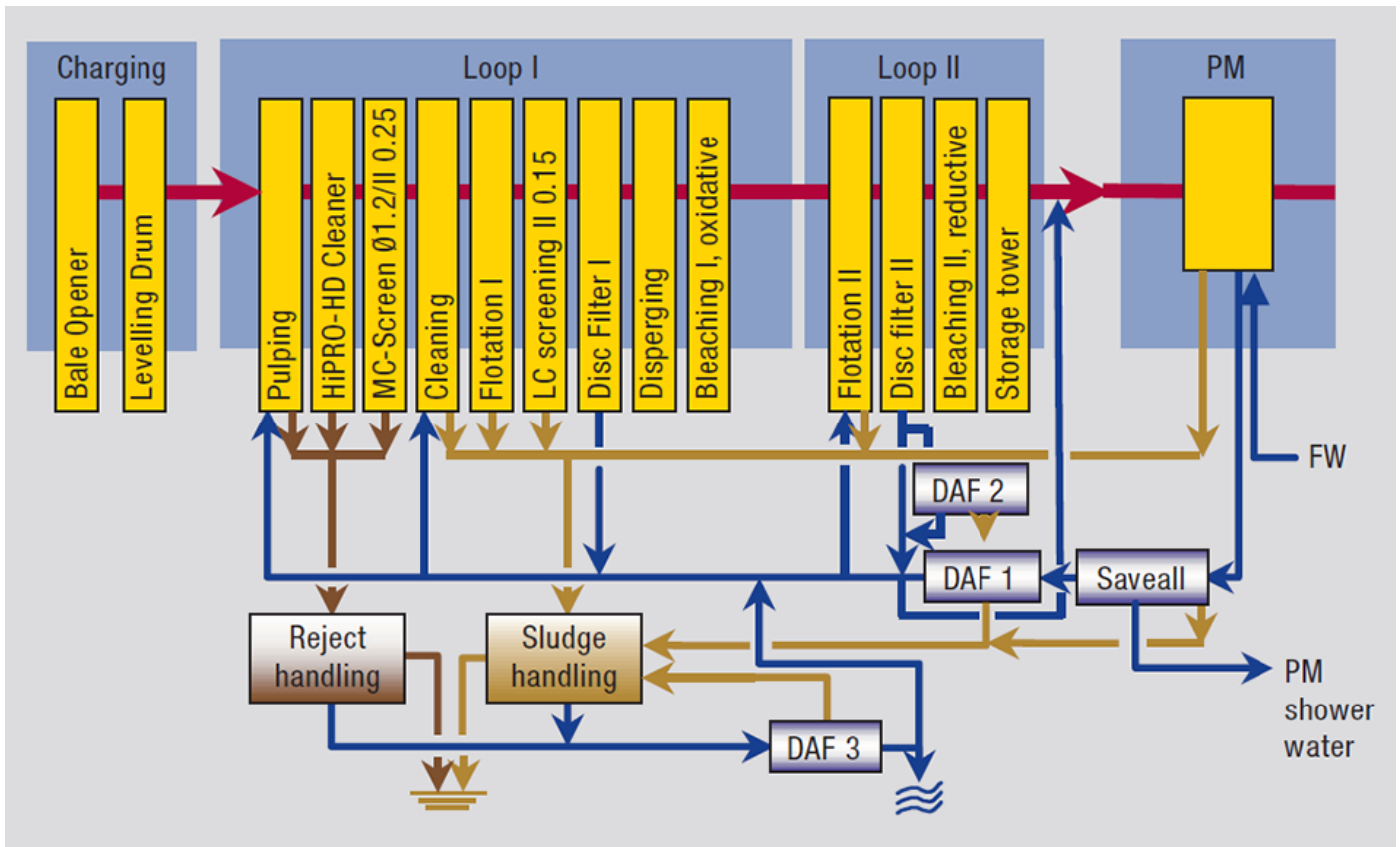


A typical flotation deinking machine. Image courtesy of Voith Paper.

substrates and printing technologies. This is not in the market's or the environment's interests, so it appears to make more sense to focus on standards that make it easier to characterise the pulp and its suitability for different applications. The method used to produce the raw material is thus irrelevant. The deinking discussion is really a discussion about quality control for raw materials used in papermaking.

## Deinking Processes

Some essential processes are, of course, common to all deinking methods: pulping to turn the old paper into mush; screening; flotation; dewatering; and thickening. Additional processes, such as bleaching and dispersing, plus repeats of different stages in the process and the use of different chemistries, ensure the pulp is fit for purpose for different applications.



An example of a recently installed, modern graphic paper deinking process. Image courtesy of Voith Paper.

Flotation deinking is the most commonly used means of removing ink from recovered paper. It involves adding surfactants and air to the pulp so that inks and toners, which are hydrophobic, float to the surface of the “wash” in foam that can be skimmed off and disposed of. This method works for newsprint, magazines, hygiene papers and graphic papers. Pulp can also be washed to remove mineral fillers but this only really works to remove small particle size inks and is not generally used to produce graphic papers because too many fibres are lost in the process. For some materials where the inks are particularly stubborn, processes may need to be repeated several times or otherwise adapted to achieve the desired result. This can include additional bleaching to destroy ink-borne colorants or the addition of Optical Brightening Agents to brighten the pulp.

Most graphic paper recyclers today use a two-loop flotation deinking method. Often involving the addition of bleaches, the process is most commonly used to produce pulp suitable for graphic papers. Some deinking processes are less complicated than others, but ultimately there is no question that paper can be deinked regardless

of how it was printed. The question is, to what extent the deinking can be done reliably, cost effectively and on an industrial and environmentally friendly scale?

Ingede has long and loudly criticised HP for the chemistry in its ElectroInk as used in the Indigo line of digital presses. This ink cannot be deinked using basic deinking methods such as Method 11, so Ingede claim that this ink cannot be removed from digitally printed papers. However, according to Voith Paper, which has done some trials, HP Indigo prints can indeed be deinked. Jürgen Dockal, product development engineer of the Voith Paper Ravensburg Fiber Systems Technology Center, says: “These pilot plant trials have convincingly demonstrated the deinking ability of HP Indigo prints using standard two-loop deinking processes. Proven equipment and standard deinking chemistry can be used, and parameters such as brightness development, ash content and yield are unaffected by the presence of up to 10 per cent Liquid ElectroPhotographic prints.”

The problem is what happens at over 10 percent, so if the volume of digitally printed papers entering recycling

streams rises, technology will have to improve, which of course it will do. HP has also had positive results working with Arjo Wiggins and a triple-loop deinking process, so this is all a matter of technology, economics, overall environmental impact and quality control. What is clear is that there is a window of time in which deinking methods and systems can evolve to provide the market with sufficient recycled pulp regardless of how the raw material was printed.

## An ISO Standard for Deinking?

Discussions have begun within ISO to develop standards for deinking, but without standardising input requirements or deinking methods. They are instead based on the idea of a series of standards to cover expectations for the final output, a means of assessing raw materials and providing quality guidelines for pulp. The appearance requirements for pulp used to produce tissue paper, for instance, will be very different compared to pulp produced to make newsprint. Different deinking methods will be used, but assessment models could be specific to requirements such as appearance, surface characteristics and strength, for each output type.

As the volume of digitally printed graphic papers entering the recovered paper supply chain rises, so does the importance of assessment and quality control. How can paper makers be sure that a particular pulp product is suitable for the papers they want to make? How can digital press manufacturers be sure that recycled papers made from recovered stocks will perform well on their presses and with their inks and toners? How can print buyers and consumers be confident that the paper in the prints they buy can be recovered as a raw material for new papers?

It is time to move this debate away from method towards assessment and to provide the market with guidance on paper products made from recovered materials. The conversation should encourage market confidence in digital printing, in recycling processes and in their positive environmental impact. We need to take heed of economics and to encourage vested interests to look forwards rather than clinging onto yesterday's reality.

Few consumers really care how different ice cream products are made, but ice cream manufacturers must know the characteristics of their raw materials in order to develop different products. So it is with paper making. The deinking conversation is a conversation about raw material quality control, not its production.

- **Laurel Brunner**



# It's good to talk

**For some years now the perceived wisdom has been that Web-to-Print systems help to streamline a print business and reduce costs. But some printers fear that reliance on Web-to-Print systems makes it harder for them to build a relationship with their customers.**

The basic idea behind Web-to-Print is to have customers place their orders online, with the job then passed directly to the production system without the need for human intervention. This reduces the cost and the time of processing jobs and can help to make small jobs profitable. Many printers also realised that with the software taking on the customer relationship management role they could reduce some of their staffing overheads.

However, many printers have now realised that it was the human intervention that provided the emotional engagement that kept those customers coming back. Naturally, most Web-to-Print vendors say that you have to strike the right balance.

Thus Danny Morris, regional sales director for EFI, says that Web-to-Print is “just a tool and you can use it badly or well.” He says that printers still need to contact their existing customers and can use Web-to-Print as part of a strategy for setting up a new brand to go after new customers, adding: “Customers should want to do business with you because they have a special relationship with you and Web-to-Print should just enhance that and not replace it.”

Morris says that essentially Web-to-Print is just an ecommerce system “but one that’s designed around print jobs with all their infinite variation of stocks, colours and finishing, but people can sell a lot more with it.”

Many vendors also make the point that people are used to all kinds of online transactions from buying music to booking hotels. So it’s hardly surprising that Web-to-Print has become part of the accepted sales process and that many customers now expect to be able to buy print through an online ecommerce system.



*Danny Morris, regional sales director for EFI.*

Tim Cox, managing director of Vpress, argues that this has had a profound impact on the way that print is sold, saying: “I think that traditional management of a print account has changed and the sales people that service those accounts have to change. The relationships are much more of an account management relationship now but a lot of traditional printers are still trying to engage their customers as they would a few years ago.”

Cox says that people want to streamline a lot of the communication that they used to have time for and would prefer to mainly deal with their printers online. However, he also points out that not every job can be sold through an online portal: “A lot of jobs need someone to advise customers on how best to produce the job so I think there will always be a need for an individual that can represent the printer.” But he also says that a lot of customers really want more of a business development approach rather than a straightforward sales person.

But Cox also says that the term Web-to-Print has itself become a bit outdated as the market has moved on,

noting: “Realistically it’s more about supply chain automation now.” For Vpress, this is certainly the case given that the press’s Coreprint technology is really aimed at larger companies. Cox explains: “We are now working with printers and print managers to supply a



*Tim Cox, managing director of Vpress.*

procurement platform that looks like their existing online platform so there’s no need for re-logging in, it’s just an automated click from one page to another within their own environment. We can then automate permissions for what they can do online and those orders can then go straight to a print queue.”

But there is also plenty of scope for a more straightforward Web-to-Print, sold directly to printers, and mainly concentrating on printed products. This is the market that Fujifilm is targeting for its XMF Print Centre. John Davies, Business Strategy & Marketing Manager Fujifilm Europe, says that adoption of Web-to-Print is “probably slower than everyone expected it to be.” He says this is partly due to the complexity of installing a Web-to-Print system, pointing out that companies need to have someone who understands ecommerce: “You need to do something

proactive to launch that to the market and you need to be quite clear as to what you are doing with Web-to-Print.” He says that those printers that don’t plan this properly tend to struggle with it.

Fujifilm will help customers set up the Web-to-Print system complete with an online web store with products and prices and enough training for customers to add further elements to this. He says that some customers get bogged down setting up a complete site but advises people to start with what they have and offer more products when they are ready.

Fujifilm’s XMF Print Centre is a standalone Web-to-Print offering though Davies says that most customers also use it with the XMF workflow.

The system is based in the cloud but customers have a small server that continuously checks the cloud and can download customer files as they come in. This can then be exported as XML data to other systems such as an MIS.

## Connectivity

Web-to-Print systems are generally bought as standalone systems and though all vendors claim that they can integrate their software with other systems, it clearly makes sense to test these claims first and ask to talk to other customers with a similar set up. Probably the most important of these is the MIS but the Web-to-Print will also need to connect with any stock management and invoicing system as well as the production workflow.

According to Cox: “A lot of technology providers have a big story about everything connecting together but they don’t really so we often help customers with an MIS that won’t speak to a Web-to-Print and in some cases people don’t realise that they are being forced back to the days of proprietary systems.”

It’s a point echoed by Steve Richardson, sales director at Optimus, who says that it’s often difficult to integrate a Web-to-Print with an MIS because you will end up with two different systems, and although they can share data, they may use completely different logic so that you always need to know which one has overall control.



The screenshot shows a web browser window with the address bar displaying 'you.myxmf.com/brochures'. The page features a navigation menu on the left with options like 'Upload your PDF', 'Posters', 'Banners', 'Point of display', 'Backlit', 'Business cards', 'Brochures' (highlighted), 'Stationery', 'Direct mail', 'Outdoor advertising', 'Promotional items', 'Shopping Basket' (1 items, £120.00), 'Help Centre', 'My Product Manager', 'Order Approval', 'Register new user', and 'Galleries'. Below the menu, there's a 'My Account' section showing the user is logged in as Vanessa Mace, with links for 'My Account', 'Order History', and 'Saved Shopping Baskets', and a 'Logout' button. The main content area is titled 'Start » Brochures' and displays three brochure options: 'personalised brochures' (from £1.92 each), 'winter 2012 brochure - stock' (£2.76), and 'winter 2012 brochure - mailing address on cover' (£1.44). Each option includes a thumbnail image and a 'Continue' button. The page is powered by FUJIFILM and has links for 'Home', 'Terms of Use', and 'Help' at the bottom.

Fujifilm's XMF Print Centre is primarily aimed at commercial printers.

Richardson says that many people concentrate on their Web-to-Print, adding: "MIS is more of a back office function and not quite as sexy though it's essential."

Optimus sells its own Web-to-Print cloud module for its MIS but will also partner with other Web-to-Print vendors. Richardson says that of those customers that use Web-to-Print there's roughly a 50/50 split between those using the Optimus module and a standalone system.

## Who's using Web-to-Print?

There are three main types of print that Web-to-Print systems can be used for. The most obvious is to allow customers to order from a set menu of items and Richardson estimates that 85 percent of the market is using Web-to-Print in exactly this way to order known items. But Web-to-Print can also be used for print-on-demand applications, which is quite common with

consumer facing businesses such as photo printing. The third area is to add variable data content, either from a template where part of the content is fixed, such as a business card, or through allowing customers to enter data in a more free-flowing method or from a database, usually with rules-based logic to control how the amount of content affects the layout.

Richardson says that it's mainly sold to larger print companies, mostly because printers tend to invest in Web-to-Print to manage a particular contract and it is usually the larger printers that win the sort of contracts that need to be managed through a Web-to-Print system.

Morris says that Web-to-Print is applicable to all types of printers, big and small, but notes that CRD and implants are growing as a result of the economic downturn. This is because they are competing more directly with commercial high street printers and have to at least

▶ show that they can recover their costs if not make a profit, something that Web-to-Print can be quite effective at.

Wide format digital printing has tended to lag behind commercial print when it comes to online sales. But Morris notes: “We are seeing wide format growing in commercial print and that’s driving Web-to-Print.” He adds that EFI is continuing to develop templates to help wide format users and says: “Things like on demand posters are driving it very quickly, especially where there’s not too much complexity to the finishing.”

Most system vendors believe that the growth in Web-to-Print will come from supporting cross media campaigns, if only because many printers see it as a way to transform themselves into marketing service agencies. But all of the vendors are agreed that while Web-to-Print can be an effective way of managing print jobs, this is not necessarily the same as managing customers. As Richardson puts it: “You can give them a portal but still go and see them, that’s just good old fashioned business ethics!”

- **Nessan Cleary**



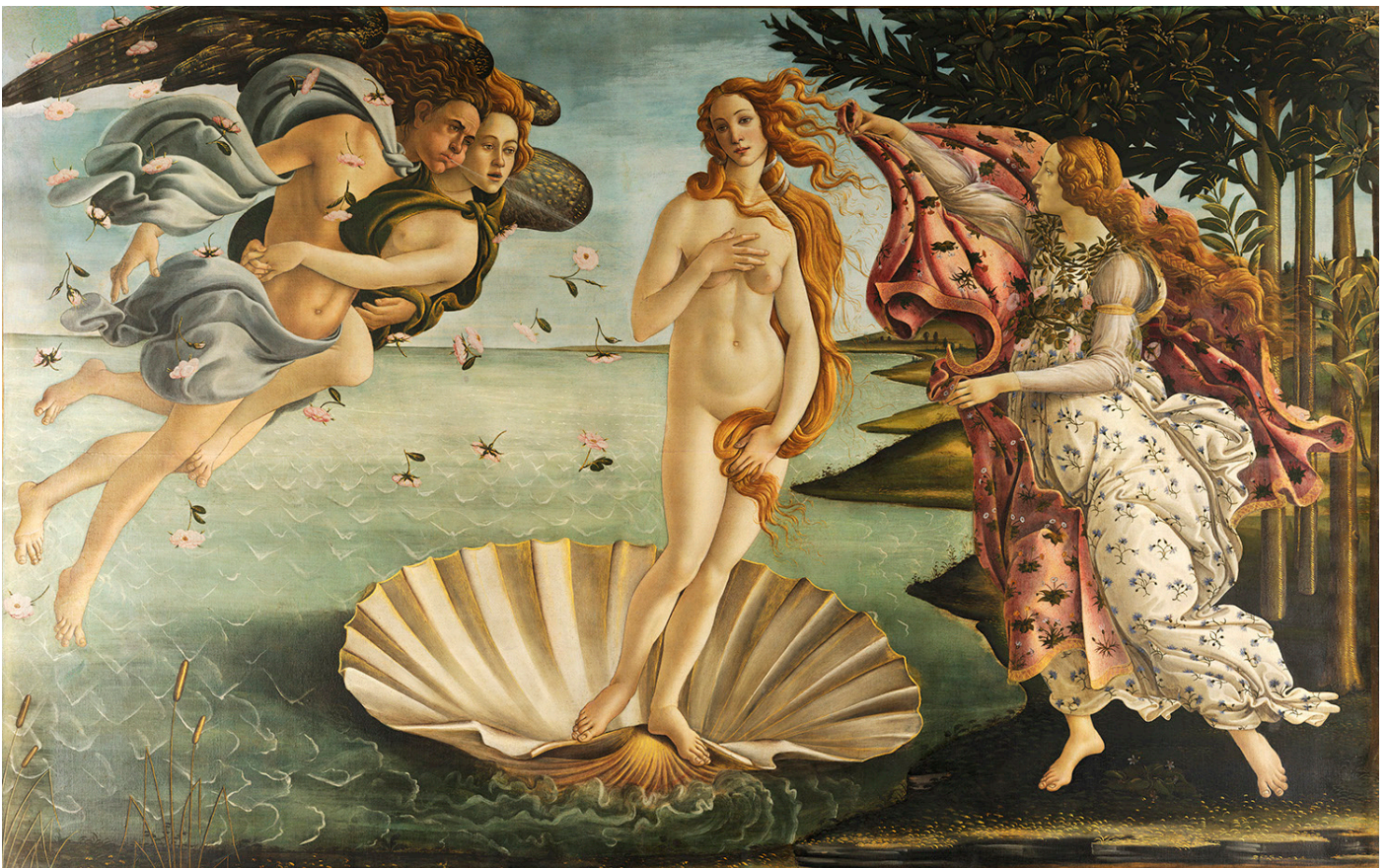
# Adobe CC 2014 features

When Adobe launched the new distribution and licensing model for Adobe Creative Cloud last spring it was stressed that one of the benefits would be gradual updates.

But it seems as if Adobe belatedly realised that they might miss out on some marketing benefits if updates are only gradual and sort of anonymous. So in June Adobe announced CC 2014 with most of the key components gaining the extension 2014 to their name. While about 10 of the applications in Adobe CC have been updated to a 2014 version, we will only focus on Illustrator, Photoshop and InDesign in this review. But other major components in Adobe CC, like Dreamweaver, InCopy and Premiere Pro, are also part of the 2014 release.

Illustrator was the first software Adobe launched to support the creation of vector graphics using PostScript technology and a page description architecture. As a side note we can look back and remember that the first version couldn't actually open a "raw" Postscript or EPS file and edit it – it took several iterations until Adobe realised that this would be a good feature! But since way back this is now, of course, possible and Illustrator 2014 is actually version 18, with version 1 launched in 1987 (but called Illustrator 88). This means that Adobe has made major updates roughly every 18 months for 27 years now!

While Illustrator can definitely be considered a mature product by now (understatement!), there is of course some nifty news in Illustrator 18 (2014). This includes improved font handling using the Adobe Typekit web-based application. Missing fonts are not only marked, but can be found and activated if they reside in the Typekit library. This type of font management has been a must-have for most designers for years, but until now



Adobe used Venus' face, taken from Sandro Botticelli's *The Birth of Venus*, 1486, as the logo for the first version of Illustrator.

only provided by third party font providers, such as our favourite, Linotype Font Explorer. Now Adobe provides a similar service through Typekit.

Performance is said to have improved, especially in Windows, through better support of fast graphics cards. But performance has also been improved through enhancements to older and well-known functions. One of the main tools in Illustrator is the pen tool and creating or editing the vectors (or more correctly, the spline-curves) could be a source of frustration. Until the 2014 version the designer almost always had to go back and edit the curve after its creation, but now designers can have both a better preview of how the curve will look and, by pressing the option key before releasing the anchor- or end point, the node will stay open for final adjustments. You can also change a corner point to smooth without ruining the shape. Much appreciated Adobe – but this is how it should have worked early on!

Next to Illustrator Adobe Photoshop is the most well-known and used application in the Creative Cloud. This was not originally developed by Adobe, which acquired the license back in 1988 from brothers Thomas and John Knoll. Version 1 was released in 1990 under the Adobe brand name, and today we have reached version 15, if we look under the hood.

As with Illustrator, the font management has been improved through integration with Adobe Typekit, but there is also a series of improvements to tools and functions that should be appreciated by designers and photographers alike. The Blur tool, for example, has been extended with a Spin Blur tool, useful for adding the effect of motion to, say, a wheel. Another new tool to create the illusion of motion is the Path Blur, by which only a part of the image will get a blur in a certain direction.

Yet another function related to blur is a new tool called Focus Area by which you can create an artificial shallow depth of field. Unrelated to this tool, but on the same theme, the areas that are in focus can be selected when creating layer masks, a common task when editing images.

Since documents created in Photoshop today often become quite complex, using multiple layers and linked

objects, a Package function has been added to Photoshop 15 (2014). Using this the designer can be sure that all objects in a design will be transferred when saving and copying the document, for someone else to open on another computer, outside the original network. This can be compared with the important and very much needed Package function in InDesign. Without it, many InDesign documents would be copied without the linked illustrations and/or high resolution photos.

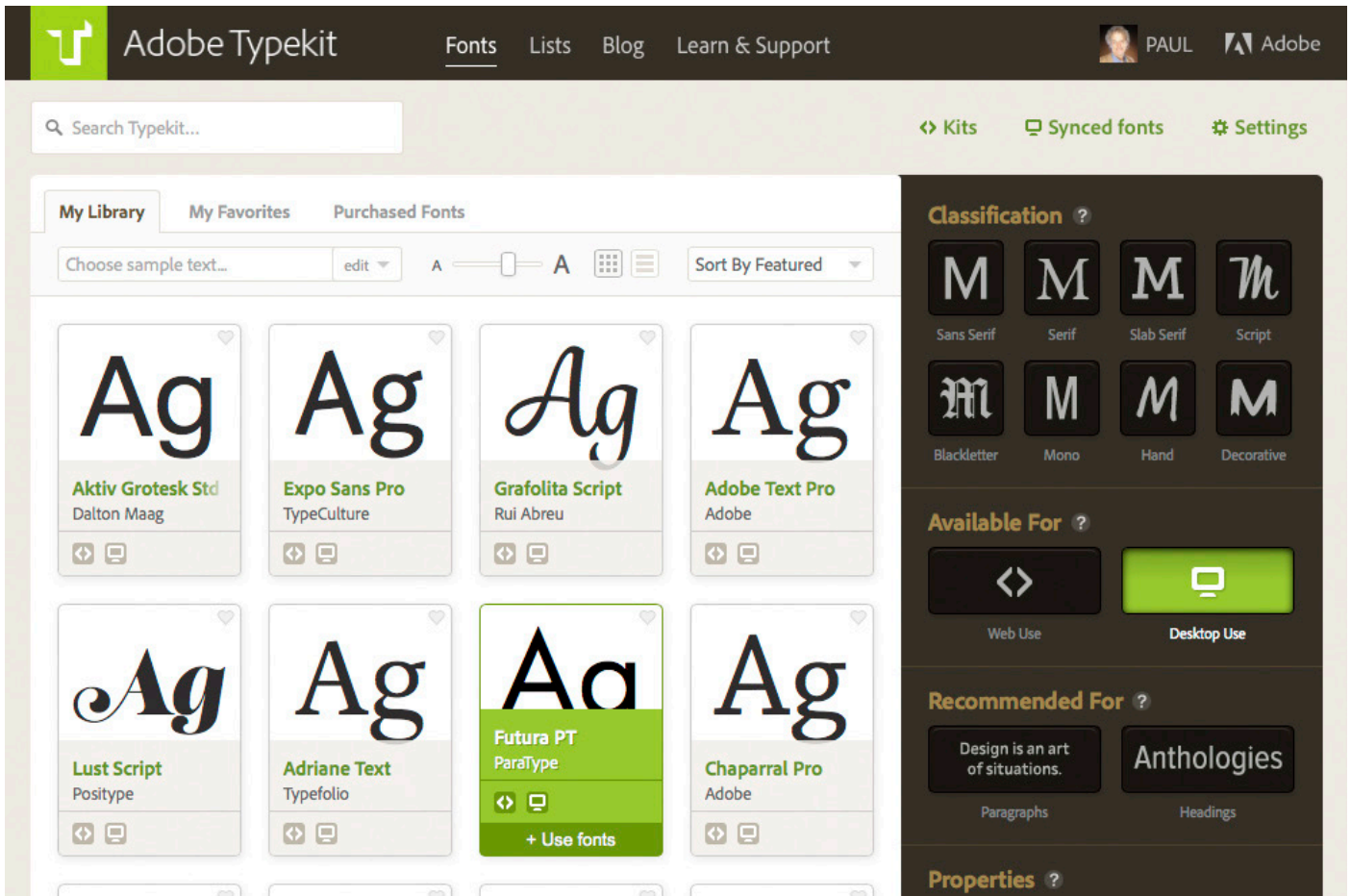
Another sign of the times is the improved support for 3D printing in Photoshop. It's obvious that this exciting and still quite new printing technology is gaining momentum, and so Photoshop needs to support it better.

So finally to InDesign – is there anything useful here? InDesign is another product that didn't originate inside Adobe, with the prototype layout software actually started by programmers at Aldus to replace the ageing PageMaker. Adobe saw the potential, and when it acquired

**While the enhanced cross-media support is perhaps the most obvious new feature in InDesign, there are a range of improvements that should increase both user friendliness and efficiency.**

Aldus in 1994 it allowed those programmers to continue the project. It wasn't until 1999 that version 1 of InDesign was released, and this new update in CC 2014 is version 10. Again, it means Adobe has made major updates to InDesign every 18 months, earning a new version number, for the last 15 years! And again – a mature product, so what news can there possibly be to report?

Well, with the uptake of cross media production, not least eBooks, there are some welcome improvements regarding support for the EPUB format. This includes better handling of CSS (Cascading Style Sheets) and metadata. Another enhancement related to cross-media production



Typekit, originally a product launched by the company Small Batch, was acquired in 2009 by Adobe, and has been more seamlessly integrated in the 2014 version of Adobe CC.

is improvements to how QR (Quick Response) codes are handled, especially when data is merged.

While the enhanced cross-media support is perhaps the most obvious new feature in InDesign, there is a range of improvements that should increase both user friendliness and efficiency. Thus the Tables function now supports simple drag-and-drop when changing place or order of the columns or rows. Another basic function that has been improved is the Search function where previously you couldn't go back if you skipped a word too fast, which was silly, but now you can go backwards when scrolling through the search results. We mentioned the Package function in InDesign earlier as a good example of important and useful functions, and this has been improved still further.

So, while Adobe perhaps hadn't planned to market updates to the Creative Cloud in this way, here we are,

with a 2014 version. And from what we can see there are many reasons to renew your license, or switch from your older license model under the Creative Suite, to the Creative Cloud. Improved usability combined with new functions and features, should mean improved efficiency.

- **Paul Lindström**

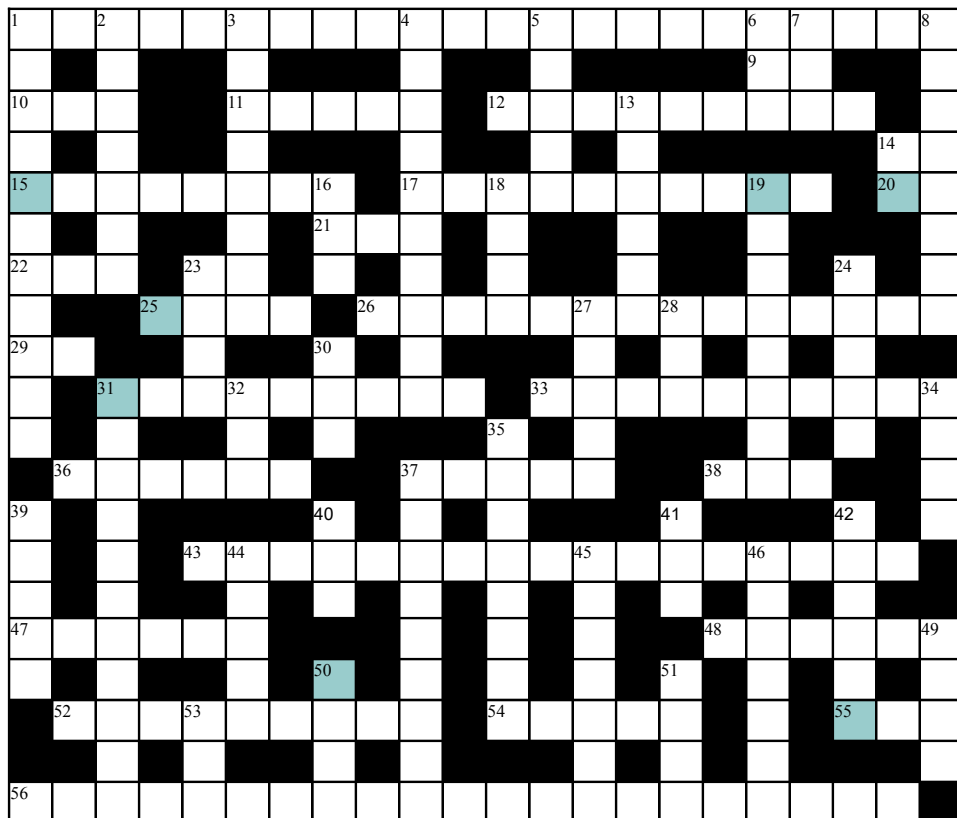




# X-word Puzzle

## Number 55\*

It's been a while so after the break here is a puzzle to get your brain going again. It isn't particularly difficult and we've added an extra acrostic tease for you.



- 22. Nonspecific. (3)
- 23. Germany. (2)
- 25. The long or the short is the leading edge. (4)
- 26. She's what we all want from time to time, but never get. Lucky Cinderella. (5, 9)
- 29. Information Technology. (2)
- 31. What the European REACH regulations are all about. (9)

- 33. Process of coping? The boss. (10)
- 36. Not a reflective, and fading to obsolescence. (6)
- 37. He, she or it sharpens. (5)
- 38. To write or a tool with which to do it? (3)
- 43. Examples of it are bags, pouches and similar soft containers. (8, 9)
- 47. Brand named sticky vinyl. (6)
- 48. Labels for subsequent use stored as they come off press.
- 52. Makes smooth, or lots of diaries? (9)
- 54. Nimble and flexible. (5)
- 55. Not he. (3)
- 56. Impossible to see them, but they will define your future. (9, 12)

### Across

- 1. One of the signs of positive economic activity, bringing together or corporate shopping? (7, 3, 12)
- 9. Greek letter R. (2)
- 10. Black. (3)
- 11. Can be made of virtually anything, but mostly it's wood. (5)
- 12. Process of turning print into a value added product. (9)
- 14. The ratio 3.14 (2)
- 15. Meaningful to the situation or discussion. (8)
- 17. System for ensuring complete control and constant improvement. (6, 4)
- 20. Electronic Printing. (2)
- 21. To decay. (3)

### Down

- 1. Waste sheets or processes for getting the press up to colour. (4, 7)
- 2. Kings, Queens and their relations. (7)
- 3. Substituted. (8)
- 4. Huge print sector making a comeback because it works. (6, 4)
- 5. Gives up or leaves. (5)
- 6. Three as in stimulus? (3)
- 7. Electrically charged atom. (3)
- 8. One who writes. (8)
- 13. Almost black but not quite. (6)
- 14. Physical Education. (2)



- 16. Make an effort and a rugby player scores six. (3)
- 18. Done. (4)
- 19. No longer functional or with purpose. (8)
- 23. Ten cent US coin. (4)
- 24. How many colours ought to make black, but don't? (5)
- 27. A thousand of these to the kilo. (5)
- 28. What makes you unequivocally you. (3)
- 30. Frozen and vital component of a decent Gin & Tonic. (3)
- 31. Made from lots of layers of paperboard to create a box? (11)
- 32. From a boy to this. (3)
- 34. A colour that's not a solid. (4)
- 35. Can't remember if it's Alzheimer's? (8)
- 37. Common print method in the newspaper industry. (3, 6)
- 39. Polishes. (5)
- 40. A factor of one million million million. (3)
- 41. Also Known As. (3)

- 42. Need to be right for the screen to be right. (6)
- 44. Made of flax and sometimes used in paper making. (5)
- 45. Essentially a bidding war. (7)
- 46. Making more or less white, diminishing boundaries. (7)
- 49. Necessary for sublimation printers. (4)
- 50. Single side of a leaf of a publication or a small boy? (4)
- 51. To remove, as in label from the package? (4)
- 53. A friend to a hobbit, but not necessarily a dwarf. (3)

Once you've solved the puzzle, write down the coloured letters from the grid in the box below and unscramble to reveal the secret word, which is the theme for this month's puzzle.

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\*Answers in the next issue

## Number 54 - Answers

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

