Deutscher Drucker

Dr.-Ing. Colin Sailer

CASES OF DAMAGE FROM THE PRINTING INDUSTRY

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- newspaper printing
- sheet-fed offset printing
- digital printing
- print finishing
- ink and chemistry
- printing substrates
- financing, insurance
- assessment of value, law

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Newspaper production
Small formats, big targets

■ The newspaper and magazine printer BDU Print of Barneveld (The Netherlands) has invested in a new KBA Commander CT web press because, for BDU, the future of newspapers is not simply a question of format . **Page 2**

Low energy UV
Efficient, energy saving finishing

■ When you think about UV curing in commercial print, you instinctively think about the new energy saving variant. Swiss printers in particular are already using it and during an LE UV day at Heidelberg Schweiz AG in Berne there was an opportunity to swap experiences. **Page 8**

↗ Imprint **Page 7**

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Even scent can be conveyed

FINISHING AND TRANSPORT ■ Ferag AG, based in Hinwil (Switzerland) has recently launched two new developments, its High Performance Conveyor (HPC) and its High Performance Stacker (HPS). At the same time, it announced new functions for the Mini-Sert inserting line it launched a year ago. Valecom AG, one of the group's subsidiaries, was also very pleased with the front cover advertising opportunities delivered by Memo-Scent.

By Petra Ebeling
Editor, Post Press
Deutscher Drucker

■ The new High Performance Conveyor (HPC) and High Performance Stacker (HPS) are Ferag's answer to the desire of customers from Brazil, Russia, India, China and South Africa—the so-called BRICS markets—to modernize their newspaper production processes. That being said, customers from Central Europe are also already showing an interest in the new equipment.

According to Ferag, the two systems should be commercially available from the first quarter of 2014. In the course of a presentation of the new systems at Ferag's headquarters in Hinwil (CH) its Managing Director Jürg Möckli revealed that it had taken less than twelve months to go from the decision to invest in the HPC and HPS systems to the presentation of the technology.

Ferag Managing Director Jürg Möckli

ELASTIC PLASTIC. The High Performance Conveyor system is designed for the transport of newspaper products at speeds of up to 90,000 copies per hour and its chains and clamps are made of a plastic that is similar to that used for aircraft. The Finite Element Method (FEM) was used for the design and verification of the physical properties of the clamps and its use meant that virtual prototypes could be tested on a computer in order to see whether they fulfilled the required physical properties. The robust design of the system is intended to deliver reliable production under heavy strain whilst keeping operating costs low. Although the clamps can hold products that are up to 12 mm thick the lightweight design of the chain and clamps means that the HPC offers low energy consumption.

The HPC takes products from the press and transfers them to the clamps in the HPC handover station. As well as the single handover station version, variants of the conveyor system with two staggered stations for transfer of the newspapers after the second or third fold as well as tandem configurations for twin folder deliveries are also possible. The HPC can deliver to any stage in the postpress process that is fitted with a belt on which products can be deposited. Apart from delivering products for bundling, it can also feed a roll system with downstream processing stages such as offline inserting, stitching and cutting. The chain system that the HPC is built around is application independent. Instead of clamps, the chain links can be fitted with any of kind of conveyor component. One such example would be the bundle conveyor used in newspaper printers to deliver bundles of newspapers from the multi-stack area to the loading ramps.

SERVO DRIVEN THROUGHOUT. Ferag has designed the High Performance Stacker for bundle production. The basic HPS concept draws on its Multi-Stack technology combined with servo drives throughout to ensure synchronized movement sequences. The HPS can be programmed and, optionally, it can be equipped with a light variant of the Navigator control system. The bundle compensating stacker is designed to deliver an output of 25 bundles/minute and up to three HPS units lined up one behind the other can be controlled for parallel and serial bundle production.

TWELVE FEEDER STATIONS. A number of the key features of the Mini-Sert inserting line have been enhanced. The line can now be expanded in steps of two modules up to twelve (formerly six) feeder stations. Besides the pre-fold opener there are now opening devices for magazines and broadsheet newspapers as well as half format products, without pre-folds in each case.

THE MEMO SERIES. Bernhard Leicht, Managing Director of the recently founded Valecom AG subsidiary of WRH Marketing AG, talked about the Memo-Stick, Memo-Scent and Memo-Care (in the pipeline) products. These self-adhesive, residue-free detachable forms of advertising can be prominently positioned on the front covers of newspapers and can deliver information (Stick), scent (Scent) or cream, lotions or other cosmetics (Care). A successful recent campaign saw samples of a Gucci scent distributed by Memo-Scent stickers on 400,000 copies of The Times.

Bernhard Leicht, "We are experiencing considerable interest in Memo-Scent. Perfume manufacturers and publishing groups all around the world are enthusiastic about the possibilities of getting perfume samples into the hands of potential customers in such a prominent way."

The products Ferag and its subsidiaries showed at this event are intended to respond to current newspaper industry requirements.

Bernhard Leicht, Managing Director of Valecom AG

The chains and clamps of the High Performance Conveyor system are made of plastic.

The HPS concept is based on Multi-Stack technology with servo drives throughout.

Memo-Scent was applied to 400,000 copies of a Saturday issue of The Times.".

Small formats, big targets

NEWSPAPERS IN THE MIDST OF CHANGE ■ Anyone who wants to grasp how quickly and comprehensively printed newspapers are changing needs to take a look at the Netherlands, where there is only one national title that has not switched to a smaller format. The newspaper and magazine printer BDU Print of Barneveld has invested in a new KBA Commander CT web press because, for BDU, the future of the newspaper is not simply a question of format.

By Gerd Bergmann
Editor-in-Chief
Deutscher Drucker International Edition

■ At the WAN-Ifra Printing Summit in Hamburg in the spring of 2013, Martin van Ee, the Sales and Administration Director at BDU Print, excited great interest in his ideas. Together with the newspaper designer Koos Staal, the Dutch printing executive presented the Daily XS-L product format. This is a 16-page micro newspaper with tabs that is folded down to handbag size, but which can be produced on a classic newspaper web press.

THE MINI NEWSPAPER. Koos Staal had previously developed a mini newspaper in 2004 that was folded to produce an A5 product after starting as a 40 x 59 cm printed sheet. For him, this was the logical continuation of the then incipient trend to smaller newspaper formats, the so-called 'tabloid revolution' that originated in the UK, Benelux and Scandinavia. Normally, 'tabloid' meant halving the previous (broadsheet) formats. In these countries, after a transitional period in which even The Times (London) was published in both formats, "the tabloid became accepted as the compact newspaper for the average reader", reported Koos Staal, "But just how compact is this format", asked the newspaper doctor, as Staal was once referred

The printed 'tablet'; the project realized by Koos Staal together with BDU is known as the Daily XS. To date, no publisher has been brave enough to actually produce a newspaper in this format.

to in a newspaper article. Do readers really have the three hours every day each would need to read even this format? And so he came up with the idea of a really compact newspaper. One that would take half an hour to digest, that would be really local and that could be printed on sheet-fed offset presses.
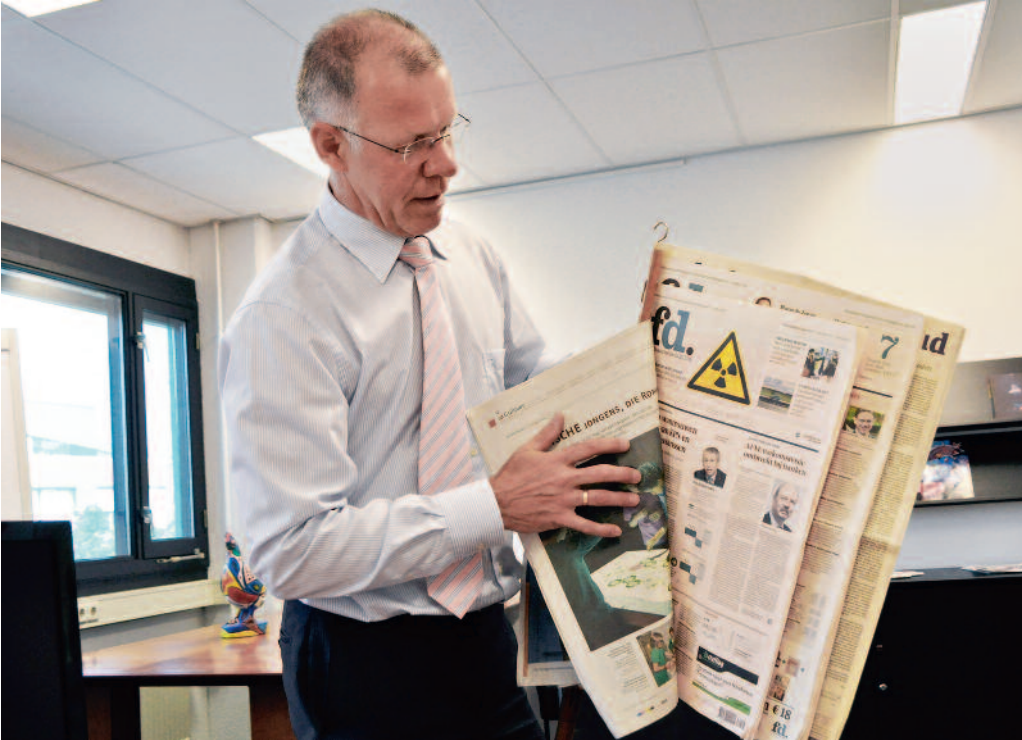
ADAPTED FOR THE WEB. Staal was really able to enthuse newspaper publishers with his idea. They saw in it an opportunity for ultra local publications, special issues for events and target group media. However, the possibility of producing it on sheet-fed offset presses found few takers.
Enter Martin van Ee. Together, Koos Staal and van Ee worked out how it would be possible to transfer the Daily XS product idea to a newspaper press. Staal, "My primary question was what were the minimum possible dimensions for a web printed newspaper." The answer was two broadsheet format sheets or eight tabloid pages. Koos Staal continues, "We then took these sheets and kept on rotating them, turning them and folding them until we had reached the right design concept."
Out of this came the Daily SX-L, a 16-page newspaper that is roughly A4 in format when closed with staggered pages heights and coloured tabs, which makes it easy to find the individual segments. When opened out it is in broadsheet

format but it can then be folded back down in any way you want. It is ideal for the bus, train or plane. What's more, as Koos Staal and Martin van Ee kept on stressing, it can be read right through in the course of a morning bus journey.

Koninklijke BDU is a publishing and printing service provider which also prints newspapers and magazines for other publishing houses in coldset web and sheetfed offset

devices in its printed formats. Unlike its predecessors, the six plate wide, double circumference KBA Commander CT is configured for a maximum tabloid format of 289 x 415 mm. Half-sized products (207 x 289 mm) are referred to as 'magazine' format at BDU Print; quarter format ones (144 x 207 mm in final format, but laid out on the press as half format), which roughly correspond to the size of an iPad screen, are, fittingly, referred to as 'BDU tablet'.

It was important for BDU Print that its new press not only offered, fast, automatic makeready but also the possibility of longitudinal gluing of tabloid formats to allow a two page step. A layer stitcher means that it is possible to produce stitched 'magazine' formats inline. Two different types of product (tabloid, plus magazine or tablet) can be produced in a single pass and the press is, of course, able to handle a variety of paper types.

THE FUTURE? Clearly, Dutch newspaper publishers are also quite conservative. There are still no contract customers for the Daily XS-L/BDU tablet, although BDU would license the (protected) product format to other publishers. The concept may well be ahead of its time.

However, Martin van Ee uses the striking BDU tablet as a means of starting sales discussions that, when the deal is done, usually end up running as standard small A4 magazine format products. Business that he is delighted to take.

Commercial Director Martin E. van Ee shows how newspaper formats have shrunk in the Netherlands.

BDU PRINT AS A CONTRACT PRINTER. Daily XS-L is not, however, the only new newspaper format that Martin van Ee has been involved with or had to deal with in recent years. His company, which for the sake of simplicity markets itself as BDU Print or BDU Media is actually known correctly as Koninklijke Barneveldse Drukkerij & Uitgeverij. Located roughly in the middle of the country, in the small town of Barneveld, the company employs 210 people and publishes and produces newspapers and magazines. 63 of these employees work for the print subsidiary, which operates two newspaper presses and two eight colour sheet-fed off-set presses. However, only the smaller titles produced on these presses are the company's own products: a local daily newspaper, the "Barneveld Krant", which, with a run of 10,000 copies is the smallest independent daily newspaper in the Netherlands, as well as 40 local weekly newspapers and 60 other periodicals. BDU Media handles the advertising sales and all the production of titles for numerous other publishers. A total of 60 newspaper editions and 160 magazines are produced in Barneveld, which means that BDU print has its finger on the pulse of the market. Van Ee knows what makes publishers tick. He knows what he needs to offer in order to be seen as a print partner for the future.

ONLINE LINKS. Many of the special interest and target group specific magazines produced by BDU Print have been affected just as much as daily newspapers by the change in reading habits and the advertising market.

In his conversation with Deutscher Drucker Martin van Ee referred to the Dutch pathfinder's newly designed newspaper as an example. It consists of four separate magazines with a heavy emphasis on the link between print and online through its Layar app in particular. Online functions are accessed through Layar not just by scanning QR codes but whole printed pages. These functions might be an info page or a web-shop from which a product described in the newspaper can be ordered. As Martin van Ee continues, "With Layar we reach mobile devices. Publishers want to use print to trigger actions that they can track and so gather data about their readers or users."

PRINTED 'MOBILES'. In a manner of speaking, BDU Print is also moving towards mobile end

Jacco der Vries, managing director of KBA's Dutch web press agency Rotagraphic BV (centre), with printers Rutger Heijmen (l) and Melvin Taribuka.

Hans Daniels, general plant manager at BDU Print shows the double-spread plates for the new KBA Commander CT

The Commander CT for Barneveld

■ The new 6/2 press at BDU has four four-high towers, four reelstands and a jaw folder. It has a maximum web width of 1734 mm and a cylinder circumference of 830 mm. Up to 47,000 newspapers, with up to 96 tabloid format (289 x 415 mm) pages can be printed per hour. Only panorama plates are used.

Focus on content: efficiently produced— and paid for by the reader

WORLD PUBLISHING EXPO 2013 ■ Editorial systems and software to enhance the use of contents as well as for testing out new business models. Besides multi-channel publishing, techniques for implementing various approaches for paid content were also in focus at the World Publishing Expo. Corporate Publishing was also a bigger presence in Berlin. The newspaper industry's most important trade show seems to have scored a bull's eye with this mix.

By Thomas Stuckenbrok
Technical Author
Deutscher Drucker

■ Tisitors were treated to wide range of additional attractions even before the show opened. Springer staged a Media Hack Day on the Saturday and then on Sunday there was a Smart Paywalls workshop. A whole host of events took place alongside the show the show itself: the Digital Printing Strategies SFN forum, the 6th Tablet and App Summit, the 12th International Newsroom Summit as well as further workshops and high quality discussions focusing on future prospects for the industry. One high point was the networking opportunity provided by the News Publishers Night on Monday evening.

Inside the show halls there were four open Mediaport stages for free events. These presented a series of interesting programmes dealing with the following themes:

- Power of Print—innovative approaches towards ensuring that the printed newspaper continues to play an important role
- Revenue, Content, Advertising—new ways of securing revenue
- Social, Local, Mobile—examples and new approaches for modern interaction with readers
- Workflow Efficiency—optimizing and automating relevant processes for your company.

In his opening address, Springer's CEO, Matthias Döpfner, agreed that online journalism could be much faster and more interactive than print but was not inevitably so. Content is the key to success and has to be presented so as to exploit that specific advantages of the various platforms.

On the software front it was noticeable how themes from last year had moved forward. The move to media neutral data holding is now well advanced and has been integrated into the user interfaces. Content is the focus—often with substantially simplified access to multiple sources and incorporating DAM (digital asset management) systems in order to be able to archive and call up content simply.

Preparation for the various output media has been optimized. Publication channels can be sequenced in any order, changes can be passed on transparently. Probably as a reaction to current cost pressures and perhaps exacerbated by Adobe's licence policy, many systems are seeking to repla-

Woodwing Enterprise 9: the new user interface of the Content Station 9 is the most revolutionary part and maximizes the ease of multi-channel publishing. The publication of content via a digital channel requires just three steps: creation of a dossier, generation of the text and then the instant publication of the article via the desired channel.

ce external licences (such as Adobe InDesign) with their own browser integrated functionalities so as to offer customers lower cost solutions.

Many paywalls offer technical support for payment systems such as the Metered Model, which allows a set number of online articles to be read within a certain time span.

MEDIAPORT REVENUE. Business models that aim to correct the historic mistake of making content freely available on the net were presented here. Publishers are still experimenting with different models.

Digital subscriptions are enjoying steady but slow growth, with price being a decisive factor. The question of whether to charge for digital content in addition to the printed subscription is also controversial and so handled in different ways. Paywalls are viewed very differently. A final judgement is not yet possible about whet-

her these will be accepted in Germany and result in more revenue. Further ideas for additional revenues involve bundles and sponsorship.

The NOZ (Neue Osnabrücker Zeitung) talked about the success of its digital strategy. This entailed producing a digital issue, with limited staffing demands, rather than a pure PDF. The conversion of readers of the printed edition into digital readers is being driven forward with deliberate cannibalization of the print run. Through an attractive price model with just one price it has so far been possible to secure 14,000 subscribers, which corresponds to about 10% of the print run.

TABLETS. Tablets have now established themselves for digital consumption with pure PDF, HTML5 and combined apps and have moved forward with the integration of responsive design. This has led on to the next stage, their use as a

simple tool for mobile requirements and for offering sports or reader reporters simple search, image and text tools with direct connection to the system.

EDITORIAL SYSTEMS. *Atex* offered its proven One View Product Suite based on the Atex Web CMS. A new feature was the convenient and easy to operate integration of a paywall that works on a metered or content related basis.

CCI presented its digital publishing solution for template based app production besides Newsgate for the content and ad desk and comprehensive advertisement administration.

Funkinform presented its Mobile Business Client for deadline, task and customer data administration (including display of advertising motifs on the tablet). An advertising system featuring online advertisement acceptance and design was a further focus.

Infomaker from Sweden offered Open Content, a task planning and editorial system that handled XML format data. Newspilot assigns resources and provides information about upcoming activities as well as serving as a print and mobile editor. Tablet publishing in the browser handled by HTML5.

Interred showed off its CMS, which was originally developed for the web, with multi-channel publishing capabilities for print, web and tablet. Print layout is handled through InDesign plug-ins, whilst the editor and production planning are covered by the browser. The tablet app offers editors access to the system and the picture is rounded off by high performance, scaleable web sites, as demonstrated by the Heise Verlag one.

Markstein Software showed Tango Media as well as its newly developed Tango Applisher low cost app solution.

Multicom presented expanded Ngen software featuring an advertising system with a template-based online editor. Ngen Mobile allows freelance contributors to edit articles and photos in the system from the tablet.

PPI Media focused on Content X as a smart, low cost all rounder for editors and specifically on the planning tool, CX Planner. It also featured its AdX advertisement planning solution, which, as a leading advertising system, allows print, online, mobile and tablet to be integrated, booked and administered at low cost.

Redweb showed off its Atlas database and web services based editorial system. By using Internet-based technology with in-house developed planning, layout and editing tools the system can be used on the move and can serve all publishing channels.

Woodwing presented the reworked Enterprise 9 editorial system. The Content Station can be used to create dossiers tailored to the individual publishing channels and in many cases it is capable of replacing InDesign as the editor. It is, for example, capable of automatically generating Cloudtags for web publishing. Elvis DAM provides the basis for effective content management not just for newspaper but also for magazines and corporate publishing.
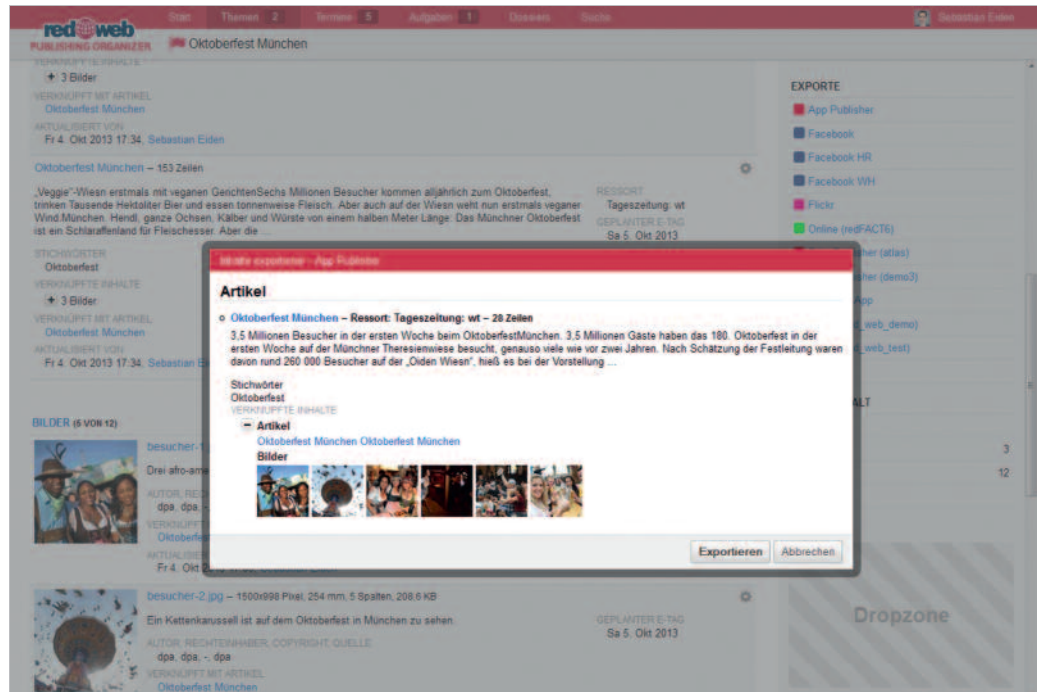
The transfer of an editorial dossier in Redweb via the 'Publishing Organizer' module to the Publisher app. Contents can therefore be prepared within a matter of seconds in an app.

OTHER INTERRESTING NEW DEVELOPMENTS. The positioning of numerous small solution providers around the Mediaport stages was somewhat unfortunate. They attracted a lot of attention as a result of their location but were unable to exploit this to any great extent during the talks. There were, however, a number of really interesting solutions.

Gogol Medien showed Cloud Publishing for advertising freesheet and newspaper publishers with the focus being on local reporting through the straightforward integration of reader reporters.

Vision Link brings 12 years of experience to e-publishing on the web and showed this in its digital solutions for app production and its evaluation tools that allow numerous conclusions to be drawn from its broad database.

SUMMARY. Product evolution through the integration of mobile devices, aids for the realization of paid content and stimulation through events and workshops.

This mix at WPE 2013 provided companies a good foundation for future decisions.

8,500 VISITORS AT WPE 2013 IN BERLIN

About 8,500 visitors from 90 countries attended the World Publishing Expo 2013 in Berlin, Germany–the largest global trade fair for the newspaper and news publishing industry.

The 43rd annual exhibition included 267 exhibitors from 35 countries, including printing press manufacturers, editorial and advertising system providers, new media providers and other suppliers to the industry.

The 8,500 visitors was an increase from 7,000 who attended the 2012 Expo, which was held in Frankfurt, Germany.

"We have very positive feedback from exhibitors and visitors, there is a positive feeling in the industry," said Vincent Peyrègne, CEO of the World Association of Newspapers and News Publishers (WAN-Ifra), the organiser of the event.

"Berlin, more than in the past, showed there is no competition between digital and print, but they are working hand in hand," he said.

"Suppliers are reconsidering their roles, there

is a good combination of the two worlds. And Berlin really made a difference – the innovative ecosystem in Berlin was a perfect match for the Expo."

The World Publishing Expo brings together suppliers to the industry with its thought leaders and decision makers.

In addition to the exhibition, which showcased the latest technologies, the event featured 200 speakers sharing their success stories, four Media Port stages focusing on developments in print, workflow efficiency, social-local-mobile and revenue generation, and five premium conferences on tablets & apps, newsroom issues, audience measurement, digital printing and new revenue streams.

Next year's World Publishing Expo will be held in Amsterdam, The Netherlands, from 13 to 15 October 2014, at the Amsterdam RAI exhibition centre, which has invested heavily in infrastructure and optimised exhibitor services. *(WAN-Ifra Press Release)*

Testing out the new XPress 10

LAYOUT-SOFTWARE ■ It has taken while for Quark to adapt its layout software to the capabilities of the Apple Mac's OS X. With Xpress 10 it is finally using the Cocoa programming interface. We have had a look at what is a substantially rewritten version.

By Alexandra Oettler
Technical Author, Software
Deutscher Drucker

■ Tut with the old. XPress 10 will only run on recent operating systems. As a base configuration, the publisher lists Mac OS 10.7.5 and Windows 7. XPress 10 will not run on Windows Vista and the OS 10.6.8 that is widely used in prepress. Apple Mac's Maverick OS should be supported shortly after its launch. There's even a cut off in backwards compatibility. The new version will only open documents from version 7 onwards. Anyone who needs to open older documents will need XPress 7 to 9 as a stepping stone.

XENON GRAPHICS ENGINE. Gone too are the days of pixellated previews. Quark has developed the new Xenon Graphics Engine for the rendering of placed PDF files and illustrations in image formats such as PhotoShop and Tiff. This process allows XPress to consistently deliver the best possible display for the various elements, even on modern, high resolution monitors. In the test it became apparent that moving complex elements such as the new QR codes on older computers can be very slow.

Various forum comments report similar experiences with Apple computers. Other users, however, have been impressed by the speed with which it works. With the new version, the user has the option of trying it out for 30 days before buying

RGB colours are marked in the colour palette with an appropriate symbol.

it and seeing how XPress 10 runs on their own computer.

EFFICIENT USER INTERFACE. By reorganizing the user interface Quark has simplified working in the XPress layout. The familiar measurements palette has been developed into a smart allround palette. In the updated measurements palette it is now also possible to access functions such as 'character' and 'paragraph' for activated text or 'border style' or 'drop shadow' for the picture boxes. Previously, these tasks were handled by the
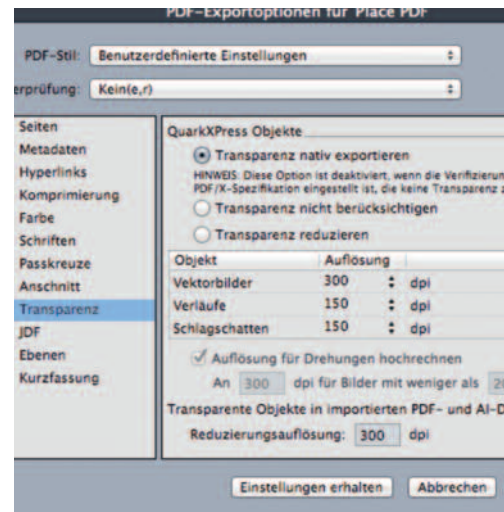
In PDF output it is now possible to export native transparencies as an option.

menu. However, anyone who prefers to access these functions via the keyboard will find there is little that needs getting used to since the familiar keyboard commands are unchanged.

In the current version the palettes positioned on the right of the screen for things like pages, colours and style templates can now be organized as an individually configurable stack of palettes. A setting also allows the automatic display or removal of the palettes in order to release more space for the design in the layout. After palette sets have been created, 'palette groups' can be saved for various purposes, such as—for example—typography or the app studio—and then called up using a keyboard shortcut. The page navigator, which can be opened from a symbol in the lower document window, has been tidied up and offers optimized previews.

Anyone using XPress under Mac OS can work in full screen mode, which Apple has supported since 10.7 (Lion). Needless to say, this option is not ready in Windows. Overall, one quickly becomes used to the efficient interface and would soon miss it.

NEW AND IMPROVED FUNCTIONS. No current design program is complete without a QR code function. Like Adobe InDesign CC, the new XPress allows QR Codes to be produced directly within the layout. The QR Code Creator generates scannable codes from any text or from digital business card details. The codes are laid down as vector objects that can be individually coloured.

The Word import functions are greatly enhanced and it is now possible to transfer images
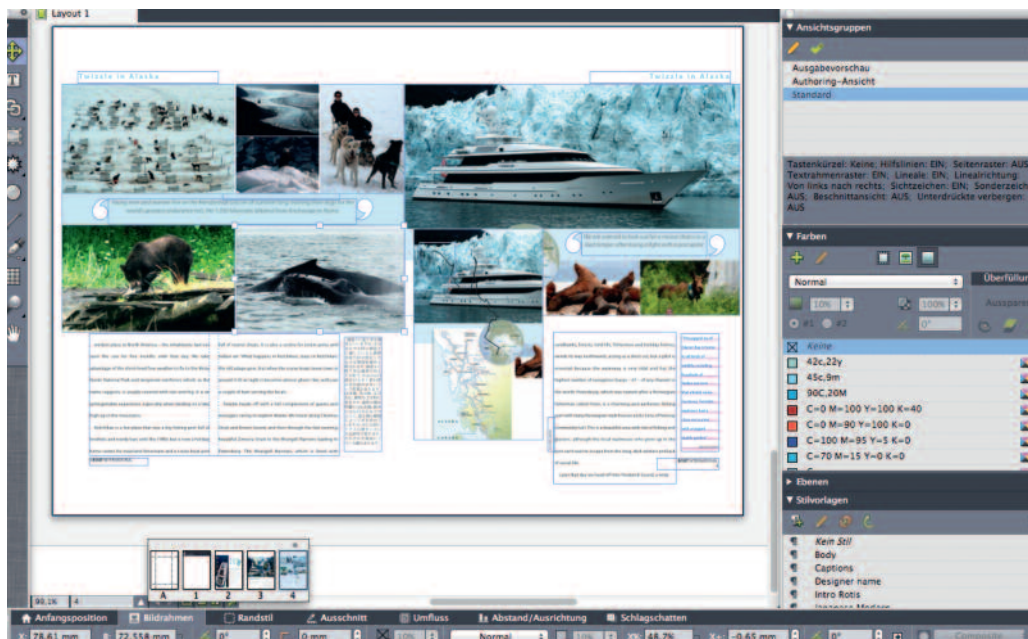
The restructured user interface offers more oversight and some individual setting options.
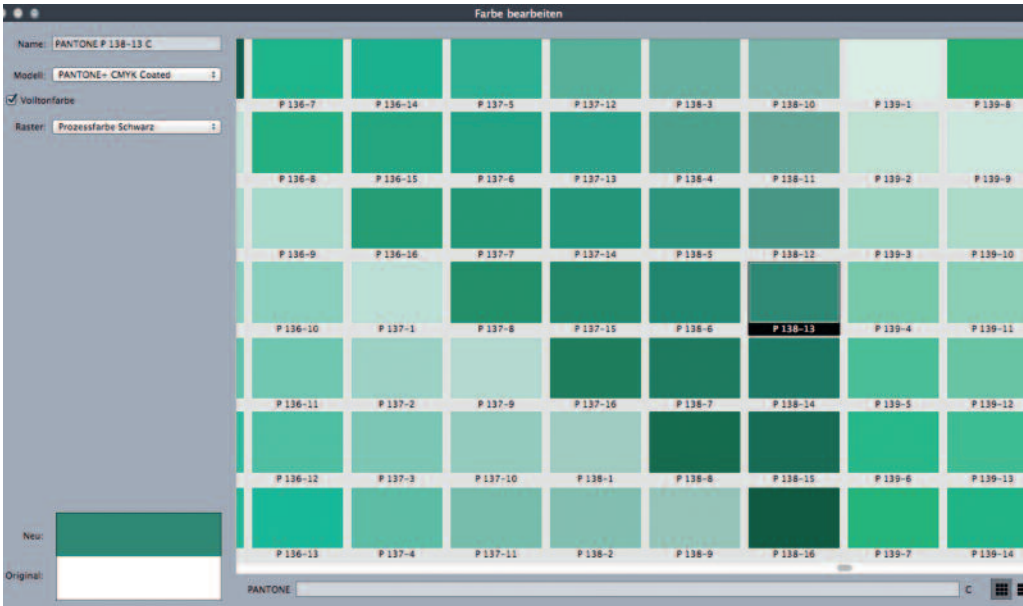
The 'Edit colour' dialogue can be switched to a large-scale view.

and hyperlinks that are embedded or linked. On import, the user also receives a comprehensive check on what will happen to the Word style templates in XPress.

XPress is finally able to highlight missing fonts directly in the text using a selectable warning colour. All editions also include typographic functions for East Asian languages and the user no longer needs to buy, if required, a special version for Japanese, traditional or simplified Chinese or Korean.

Things have also changed when it comes to layers. When copying and inserting objects the associated layer information is taken into account. So, if a layer from the source layout is not present in the target layout then this is created by the program. Layers can now also be laid down and managed on master pages.

It is now also more convenient to align multiple objects. The new measurements palette allows the user to specify a master object in relation to which the other elements are arranged.So far as colours are concerned, RGB colours can now be displayed in the colour palette with an appropriate symbol. As a result, descriptive names such as 'RGB red' or 'CMYK red' designed to help differentiate between colour patches are a thing of the past. A clearer overview of the large array of spot colours is now offered by the 'Edit colour' dialogue box, which is expandable in full screen mode.

Amongst other features, the new 'Expanded image settings' palette allows the selection of image layers when placing Tiff or PSD files. Image layers can also be created from each other through layer modes (such as 'Multiply'). The palette that supersedes the 'Image effects' of the previous version also accesses the colour channels and the paths that may exist in the image.

PRINT AND PDF OUTPUT. The optimized print preview provides an accurate overview of the future printed result, making it possible to spot an incorrect page alignment or the wrong paper size before it is too late. The user can visually check the output settings.
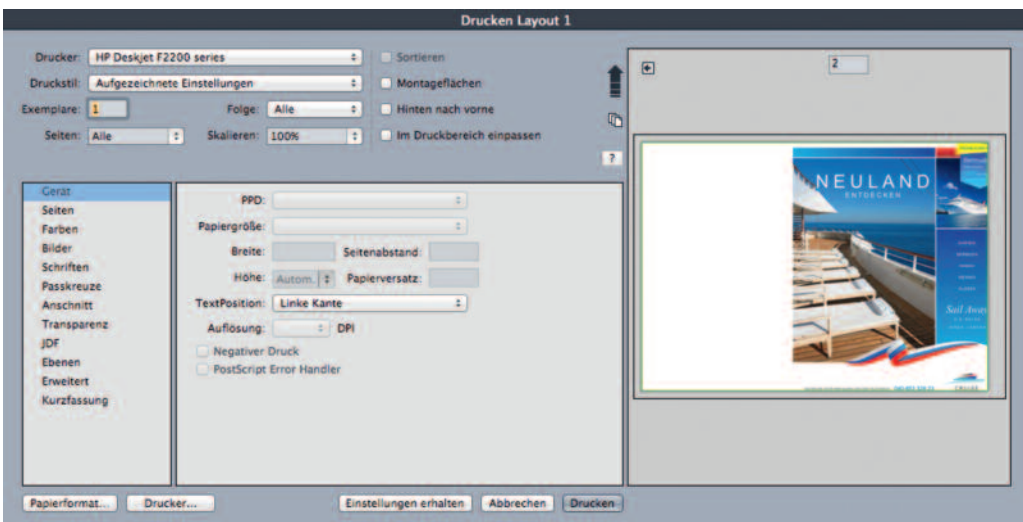
An important feature of XPress 10 is its start to finish support for transparencies in PDF workflow. This means that the program can import PDF files with transparencies, display them in the layout and then output them as a PDF with transparencies. In 'PDF export options' there is now an "Export native transparencies" button.

However, during the test there were limitations on what could actually be done. There was no problem with PDF documents placed in the XPress document that featured elements that were not fully opaque. There were, however, problems when it came to processing imported PDFs with more elaborate transparency effects (soft edges, drop shadows, and transparent gradations). Some of these problems affected the display of the PDF in the XPress layout but some only became apparent when the PDF was exported. Placed PDF objects featuring the aforementioned transparency effects were either not output or output without the desired effect.

If a drop shadow effect is applied directly in XPress, PDF export generates the correct result for the exported transparency. In connection with this, it should be mentioned that XPress continues to proceed via PostScript when generating PDFs. The problem with PDFs and transparency effects is currently being analysed by the publisher and a solution is being worked on. PDF output in accordance with the ISO PDF/X-4 standard should also be delivered by a later version.

SUMMARY. XPress 10 offers substantially improved handling of functions and clearer palette management. The new interface is a success. The XPress user has had a long wait for some of these helpful innovations. Overall, Quark has taken a big step forward with XPress 10 compared with the predecessor. Nevertheless, there are still a number of tasks on the to-do-list, probably because of the extensive re-programming.

The print preview has been completely redesigned and offers an overview of all relevant information.

Under absolute control

LEAN WORKFLOW ■ The integration of MIS and production workflow is a crucial factor for the future success of a printer. Nowadays, efficient process management is an absolute must, especially if one is involved in e-commerce. Heidelberg's range of Prinect modules is now complete and opens up considerable possibilities for smaller companies. Prinect Smart Automation now also allows fully automatic job set-up.

By Michael Schüle
Editor, Prepress
Deutscher Drucker

Jørn Bonde

■ Heidelberger Druckmaschinen AG now has roughly 650 Prinect integration customers worldwide, where integration is understood to mean that at least two production areas of a printing company are integrated with each other into a bidirectional workflow system. Prinect is of course capable of much more. Since Drupa 2012 the Prinect Business Manager (based on Cerm) and Web-to-Print Manager (based on Pageflex) modules mean that the system now offers its own solutions for printer management and e-business integration. Heidelberg's demanding target—the integration of all of a printing company's management and production processes into one system—can now be fulfilled from one end to the other with its own modules.

There are, however, only a handful of integrated Prinect users that use all the Prinect modules from Web-to-print, via MIS to the complete production solution. However, these have very quickly found that the commercial success and future fitness of a printer in a technically comparable competitive environment depends upon processes that are optimized and automated and that interact with management, planning, production and sales at the very limits of performance. Modern software tools are driving this development forward. Heidelberg's goal is to substantially increase the number of such 'Printect High Performers' by the end of 2014 and Deutscher Drucker recently had the opportunity to visit two of the current

pacesetters in Scandinavia. In terms of their printing equipment neither of these companies is anything out of the ordinary but what is impressive is their efficiency and strategic focus.

SVENDBORG TRYCK. Svendborg is a harbour town on the southern coast of the Danish island of Fünen. The printer of the same name is a full service company employing 26 people that was founded in 2006. It is part of Fynske Medier, a large Danish publisher and media house operating from 17 different sites, employing over 500 people and dating back 150 years. The group is headquartered in Odense and last year turned over some €70 million.

Just three years ago Svendborg Tryck was threatened with closure because, despite an increasing volume of orders, it was continuing to make losses. However, everything changed in 2011, following the dismissal of the Svendborg managing director and the arrival of new management at Fynske. The workflow integration that had been embarked on in 2008 following the takeover of another printer with an incompatible workflow and plate output system was continued with Heidelberg and what was once a vision has become reality. The result is a comprehensive, fully integrated, smartly automated system with links to management (Prinance) that spans machine presetting, electronic scheduling, job tracking and data reporting from production for job costing and cost monitoring. The only condition that Fynske Medier laid down for Svendborg was that whatever it did it should generate sales, and it set it the stiff target of doubling turnover within five years. Since then the mantra at Svendborg Tryck has been, "growth and new customers ahead of profit." To this end, the print service provider has not (initially) been required to generate profits, although the aim is to come as close to break-even

> "
> **We want to have total control over everything in the company—especially costs.**
>
> Patrick Andersson, Managing Director and owner of Tryckfolket AB

as possible. This growth is not, however, be achieved by dumping and low quotes but as far as possible by offering customers added value through crossmedia.

As it has turned out, in 2011 and 2012 Svendborg managed to increase sales by 10% each year and then in the first half of 2013 by 20%. In order to succeed in this growth strategy the two Speedmaster CD 102s and the iGen3 and Heidelberg Linoprint C751 in the digital print segment obviously need to be heavily utilized. How might this be possible given static demand and sharply increasing production capacity across the whole of Europe? Svendborg strengthened its own sales team and developed a strategic sales plan for securing customers without always needing to resort to price. The key element was to exploit synergy with the parent company. Svendborg is able to call on a Fynske sales team that is 100 strong, as well as using its accounts department and production (IT and software, including Prinect), which are hosted by Fynske in Odense. A 1 Gigabit fibre optic link means that the virtual server in Svendborg functions without a hitch.

Even more decisive has been its sustained development in the area of process efficiency (over the long term) as well as the added value (through the use of the parent company's expertise) referred to above. Svendborg has long since ceased to just sell print. Now it offers a whole array of services that will help the customer to be more successful internally or in the market. At the moment, short, one minute advertising films costing €500 that are activated by a QR code are very popular. Svendborg also develops digital publishing strategies for its customers or takes on the production of online advertising for newspapers, apps or radio commercials. The company's current advertising slogan, "Our strength is everything that we can't do", is a bit of a teaser. Head of sales Jørn Bonde is well aware that it is Fynske that gives him the
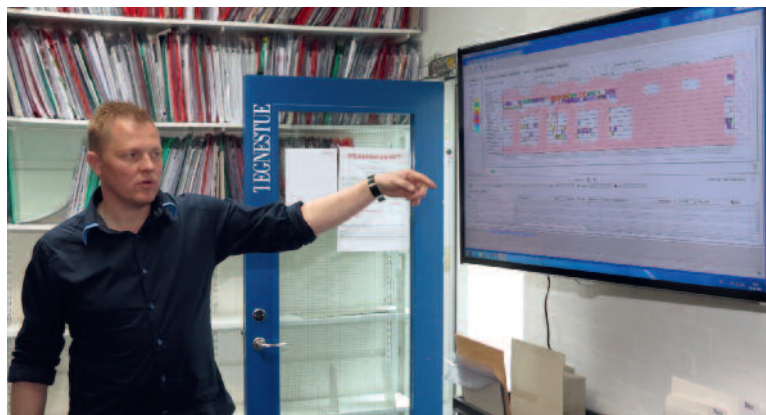
IT expert Brian Thorsgaard (Fynske Medier): thanks to the integrated Prinect Scheduler any authorized employee can view the planning board via the Cockpit. This updates in real time on the basis of production machine reports.

edge in sales. "We stand out from the competition through our multimedia offerings and can provide customers with the right complement to print. And so word gets around." However, it has also succeeded in gaining customers where print does not form a major part of the advertising campaign but who have been won over by the possibilities of coordinated production. As a result, even in these cases, print revenue grows. "One thing that is really crucial for our sales efforts is that we are now no longer talking to customers about limited print budgets but about the company's entire marketing budget.

TRYCKFOLKET. Tryckfolket is a 49 employee, commercial printer based in Malmö (Sweden) that is known beyond Sweden for its efficient process management. With the integration of Prinect Web-to-Print Manager (last summer) and Prinect Business Manager as the MIS (in use for the last three months as a replacement for a Filemaker based MIS) the company has plugged the final gap in its integrated management/production/logistics system.

The current path was embarked on in conjunction with Heidelberg just a few years ago with the aim of achieving production that was both as lean as possible and highly reliable. It did so because market demand increasingly meant that the printer was having to handle very short runs, fully automatically, rapidly and without any 'frictional losses'. Besides efficient workflow, the other key factor for the head of the company, Patrick Andersson, is absolute control of costs. The workflow therefore needs to constantly and automatically report all data, which must be transparent to the MIS (job costing) in particular, picking up cases, for example, where a job has not been printed on an offset press for reasons of cost but on the Nexpress and so inserted into the document oriented workflow by the Digital Print Manager.

Last year Tryckfolket turned over €9 million, quadrupling the company's turnover in the space of eight years. Where it does differ 'slightly' but significantly from Svendborg is that Tryck-

The head of Tryckfolket, Patrick Andersson (r.), at the back end of the florist e-shop. The integration of the new MIS and Web-to-Print Manager into the overall system has increased efficiency, control and achieved the reduction in administration that was vital for the success of the project.
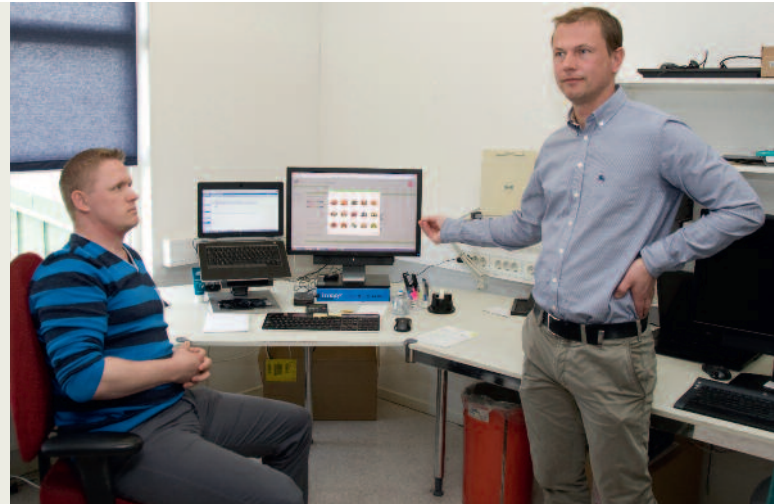
> **Stop all the moaning–compared with other ones, our industry has had it much too easy over the last 15 years.**
>
> Patrick Andersson

folket could lose 40% of its sales and still operate profitably. By themselves, these almost unbelievable figures show how lean integration has made the Malmö operation (even though this is not yet complete in the areas being addressed). Or might it be that Tryckfolket has some secret recipe to counter falling prices for printed products? Patrick Andersson, "Of course not, at the end of the day it is the market that decides on the value of the product. And things are just as tight for us as they are in central Europe. What we do, however, have influence over and can act on appropriately is everything that happens after a job arrives."

At Tryckfolket too print is only a part of the mix. Larger customers are analysed by the Tryckfolket Plus programme in order to identify what products and services they require and they can then be offered a tailor-made added value package. The result has been a growing feel for the market over time that, on the one hand, has had implications for the company's own investment decisions and that, on the other, has clearly directed its future strategy along the lines of PoD, webshop solutions with easy to use ordering options and fulfilment services.

Investment in the Prinect Business Manager/Web-to-Print Manager is another thing to have come out of this understanding of the market. Tryckfolket has developed an e-printshop (B2) for a European network of online florists that allows the local branches to order their indivi-

dual sales and PoS campaign materials from Tryckfolket. This involves some 10,000 transactions each year (short runs, high administrative load) and in order to make such a project profitable it is essential to run a solution that allows the same staff numbers to handle 30% more orders with transparent information flow from an integrated workflow system for production and management (cost control). Even the booking of the UPS delivery for the printed products is generated completely automatically by the system. This is the only way that, despite delivery charges, Tryckfolket is able to be competitive against local printers based close to the various florists.

SMART AUTOMATION. Both Tryckfolket and Svendborg Tryck are currently field testing Heidelberg's new Smart Automation technology. Simply by analysing the products in the production queue this allows fully automated job set-up and handling through pre-defined 'Smart Templates' without any manual intervention. For the first time, it also makes it possible to set up jobs simultaneously in the webshop, the MIS and the production system. Smart Automation can also be used for the production of ganged-up formes.

Prinect modules at Svendborg Tryck

- Prinect Prinance
- Prinect Direct Access
- Prinect Prepress Manager with Renderer (including Smart Automation)
- Prinect Integration Manager
- Prinect Pressroom Manager
- Prinect Postpress Manager
- Prinect Digital Print Manager
- Prinect Remote Access
- Prinect Data Terminals
- Prinect Scheduler
- Prinect Signastation
- Prinect Color and PDF Toolbox
- Prinect 3rd-Party-W2P-Connector with ntegration into Prinect (not into the MIS)

Prinect modules at Tryckfolket

- Prinect Business Manager
- Prinect Web-to-Print Manager
- Prinect Prepress Manager mit Renderer (including Smart Automation)
- Prinect Integration Manager
- Prinect Pressroom Manager (with Analyze Point)
- Prinect Remote Access
- Prinect Digital Print Manager (Kodak Nexpress)
- Prinect Data Terminals
- Prinect Signastation (including ganged-up forme manager)
- Prinect Color and PDF Toolbox

Primer: universal panacea against poor coating adhesion?

AN EXPERT REPORTS FROM THE COALFACE ■ Printers and finishers alike feel that they are on safe ground if they apply proven coatings on the press as a primers for subsequent finishing processes. What about if this leads to a complaint?

■ Nowadays a large proportion of presses are fitted with integrated coaters that allow the inline application of various coating systems. Especially in the case of jobs that call for an additional UV coating, this opens up the possibility of applying a primer instead of the conventional protective coating in order to create the optimum conditions for the adhesion of a uniformly distributed, high viscosity UV coating, which in turn improves the look of the gloss.

Primers are also the right choice for ensuring films being applied uniformly over the printed sheet will adhere well regardless of printed motif and ink coverage. Primer coatings should not contain any waxes, since these might disrupt the adhesion of the UV coatings or the lamination adhesives.

Styrene-butadiene co-polymers are extensively used for primers, since these contain a high proportion of polar groups, which creates the right conditions for the optimal adhesion of finishing coatings and adhesives.

NATURE OF THE COMPLAINT. Only the phrase, "separation of the print coating during postpress creasing", used in two separate complaints submitted at almost the same time hinted at a similar underlying problem in two jobs that featured very different types of finishing. In one case a presentation folder had been film laminated whilst the other related to a UV coated folding box.
Both jobs had, however, incurred the displeasure of the customer because of the poor quality of the creases.
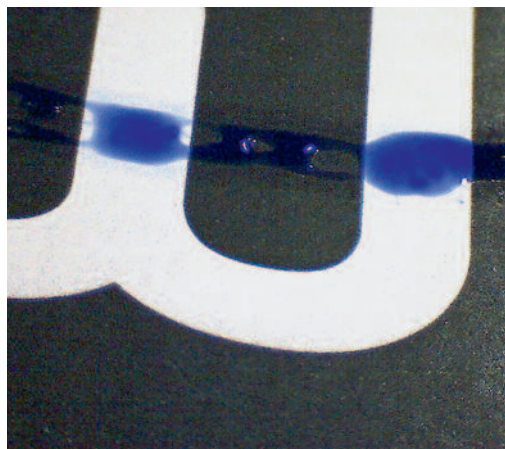
A test ink (38 mN/m) wets the primer on top of an unprinted area but not above a printed area.

ESTABLISHING THE CAUSE. According to the available printing information and the data sheets, both jobs had used primer rather than protective coatings, and these had been applied inline with the offset printing. Despite the use of a primer, adhesive tape tests of the coating and peeling force measurements of the film lamination revealed differences in the bonding properties of the coatings between light halftone areas in the images and heavily inked ones.

The separation of the UV coating or the laminating film in the creases of the samples subject to complaint could clearly be related to areas with the highest ink coverage. Fortunately, a number of unfinished printed sheets were still on hand in the companies in question and further measurements could be carried out on these.

Surface tension measurements carried out on different zones of the printed sheets and interpretation of the results of these on the basis of Finat Test Method 15 led to some surprising conclusions about the cause of the complaint. Tests of the heavily inked printed areas on the sheets intended for UV coating revealed surface tension values of around 33 mN/m, which is surprisingly low for a preliminary primer coating. Heavily inked image areas on the sheets to be film laminated displayed even more extreme values of 29 mN/m.

It is generally accepted that values below 35 mN/m have an increasingly adverse impact on the bonding properties of coatings and adhesives. On the basis of these surprising measurements, the suspicion arose that, contrary to the claims of the printers, a protective dispersion coating with a high wax content had been used instead of primers.

The second surprise came when surface tension measurements were carried out on the unfortunately very limited unprinted areas. The only areas available for such measurements were some reversed out large type and a narrow unprinted margin just inside the edge of the supposed primer's coverage.

Tests on these limited unprinted zones were relatively difficult to carry out but the results for the surface tension of the dispersion coating that had been applied were 37 mN/m or 38 m/Nm in the two cases. The photograph shows a test carried out with a 38 mN/m test liquid, which is wetting the reversed out letter but not wetting the immediately adjacent solid print.

The results of these tests prove that a primer was applied on the press with the best of inten-

tions, but it leaves the question unanswered of why there are substantial differences in the surface tension of the coating over the area of the print that are strongly correlated with the ink coverage of the motif. As already explained, the primer was applied inline. The only remaining possibility is that the wet-on-wet coating resulted in a mixing of the components of the ink that were being absorbed (oils), some of which can have a markedly non-polar character, and the coating that was applied in the final step.

In any event, experiments with a test printing device show that applying the coating wet-on-wet or wet-on-dry has an impact on the surface tension of the coating. Whether the emulsifying properties of the inks and the associated damping solution additives used on the production presses had a further negative impact would need to be established through further tests.

SUMMARY OF THE INVESTIGATIONS: When the intention is to finish prints off-line it is essential that genuine primers are used. The answer to the question posed by the title of this article is that unfortunately primers are not a panacea against poor UV coating or laminated film adhesion. Specific factors associated with the printing process and wet-on-wet application of the primer create a situation that is like a mathematical equation with numerous unknowns.

Edited by Frank Lohmann

DD-SERIE

PROBLEMS FROM GRAPHIC COMPANIES

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Fast, cheap and reliable switching element printing

PATENTS AND REGISTERED DESIGNS ■ The invention relates to printable switching configurations for electrochromic displays, in particular, and to the processes for creating such switching configurations. The task of the development described here is to make it possible to print (in this case screen print) electrochromic or similar display elements quickly, rapidly and reliably.

■ In many applications, such as children's or party games as well as for greetings cards or magazines, there is a need for flexible, thin electronic display elements that can be produced cheaply and in large numbers. It should also be possible to activate such elements at the press of a button in order to display text, a picture or a movement sequence, as the patent specification states.

STATE OF THE ART. Electrochromic and electroluminescent displays have been developed for this purpose. Their components including the display element, an electrochemical battery for tension supply and the conducting pathways and switching elements can all be formed by means of a printing process such as screen printing. As the patent specification further states, this involves printing an anode element for the battery, the electrochromic display element and the first conducting pathway that connects the anode element and the display element on a flexible plastic substrate.
A cathode element for the battery and a second conducting pathway are printed on a second section of the substrate. After printing, the anode is initially still separate from the cathode, no electrolytic reaction takes place and the battery is inactive. By folding the substrate along a predetermined fold line in a subsequent step the cathode element can be brought into contact with the anode element via an electrolytic layer printed on the anode. By making contact between the second conducting pathway and the display element the electric circuit can be closed and the display element activated. Additional breaks can be incorporated into either the first or the second conducting pathway that can be closed by pressure contact switches, which can likewise be printed on the first or second substrate. This makes a reversible activation of the electrochromic display possible.
The use of a flexible substrate and screen printing technology makes the production of thin electrochromic displays possible at a suitably low cost for a large number of applications.

LIMITATIONS. The bit, as things currently are, that is the demanding part is the additional contact making stage that is required after folding the second section of the substrate over the first section in order to connect the second conducting pathway to the display element. This contact making step increases production times and, in

practice, it is also prone to faults, as the patent specification further states. Reliable contact forming makes considerable manufacturing demands, which significantly increases production times and costs. The forming of switching elements also increases the production workload.

OBJECTIVE OF THE INVENTION. The task of the invention is to provide switching elements and associated switching configurations together with processes for their production that make possible a fast, cheap and reliable production of electrochromic or similar display elements.
The task would be achieved by a particular switching group or process for the production of a switching group or for the formation of a switching configuration. As can be seen from the accompanying drawing, this consists of a switching group (10) with:

■ a switching element (30, 30') with a spacer (26, 26') that spatially and electrically separates the second conducting pathway from the first in the open switch position of the
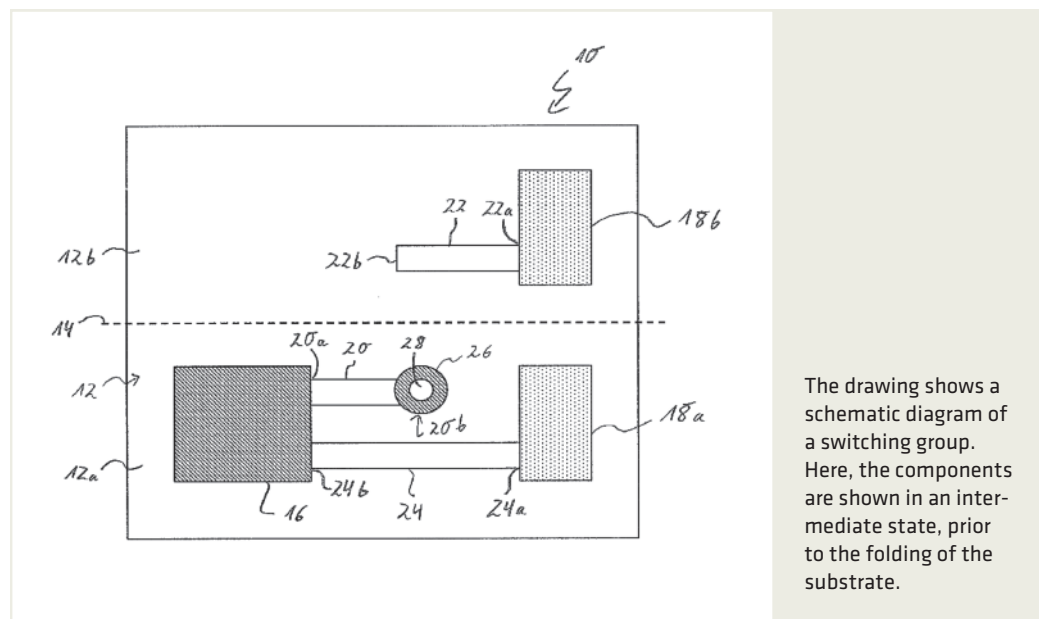
The drawing shows a schematic diagram of a switching group. Here, the components are shown in an intermediate state, prior to the folding of the substrate.

■ a first substrate layer (12a) on which a first conducting pathway (20) is formed, with the first conducting pathway being connected to an electrical consumer (16);
■ a second substrate layer (12b) on which a second conducting pathway (22) is formed, with the second conducting pathway being connected to a source of electrical tension (18a, 18b) and that at least partially overlaps the first conducting pathway.

switching element, with the spacer being formed in such a way that if pressure is exerted on the first substrate layer and/or the second substrate layer the switch in the switching element moves to a closed position and the second conducting pathway and the first are in contact.

Edited by Frank Lohmann

Efficient, energy saving finishing

LOW ENERGY UV ■ When you think about UV curing in commercial print you instinctively think about the new energy saving variant. Swiss printers in particular are already using it and during an LE UV day at Heidelberg Schweiz AG in Berne there was an opportunity to swap experiences.

By Frank Lohmann
Editor, Printing and Finishing
Deutscher Drucker

■ In our fast-paced age, print buyers are looking for the fast delivery of high quality, finished printed products. UV curing can help to achieve this and it has now also been available in the form of several different energy saving variants for a number of years. Heidelberger Druckmaschinen AG (Heidelberg) has named its version of this drying technology Drystar LE UV (with the LE standing for low energy), which it launched at Drupa 2012 with the aim of allowing commercial printers in particular to move into UV printing. Swiss and Liechtenstein printers, where there is high demand for uncoated papers and finishing, have been quick to recognize the potential of this technology and are setting the pace when it comes to LE UV print.

PMA BERNE PRESENTS LE UV. In order to stay abreast of this trend, Heidelberg Schweiz AG has installed a five colour SX 52 with coater and LE UV in the Berne Print Media Academy, and it will be staging a series of widely differing LE UV days up to the end of the year as well as offering individual advice.

25 printers recently attended one such event in Berne to learn about the technology. Where it scores over conventional UV and to an even greater degree over conventional offset is in its ability to deliver a wide variety of finishes with high gloss. The elimination of powder, instant drying and therefore quicker postpress and short delivery

Markus Rusch (l.), Managing Director of Druckerei Appenzeller Volksfreund (DAV), shows staff of the press manufacturer (Frank Süsser and Hilde Weisser, both of Heidelberger Druckmaschinen) prints that have been produced on the six colour Speedmaster XL 75 LE UV with coater and perfecting.

times as well as the ability to print on a whole host of different papers and films are also benefits of LE UV. "Specifically in the case of small format and the Speedmaster 52 LE UV, printers are seeing possible new applications that they can use to set themselves apart and to deliver added value to the customer", reported Frank Süsser of Heidelberg's Speedmaster SX 52/XL 75 Anicolor product management.

A large number of different coating applications were shown off at the LE UV day: high gloss, drip-off, matt coating using the printing unit or two-pass matt coating effects that could normally only be achieved by a high-end UV press. "This opens up new applications that can also be used with different formats", commented Hanspeter Blasiger, Press Product Manager at Heidelberg Switzerland, when talking about the prospects for LE UV. It is no surprise therefore that one in two of the quotes that Heidelberg Switzerland is sending out to customers across all formats already features LE UV technology.

GOOD ON UNCOATED PAPER TOO. Druckerei Appenzeller Volksfreund (DAV), a printer that produces high quality results on uncoated paper with one of the first six colour Speedmaster XL 75s with coating and perfecting (a Speedmaster XL 75-6-P+L LE UV), is one of the companies exploiting the potential of LE UV technology. Founded in 1875, the printer produces local newspapers for the canton of Appenzell and the community of Gais on an elderly Albert A200 web offset press from Albert-Frankenthal.

In the sheet-fed offset segment it produces high quality commercial work of all kinds for consumer and capital goods and tourism. The full service company employs over forty people, with about a third of the output going to Appenzell and the remainder elsewhere in German-speaking Switzerland. "We have quickly come to realize that we need to set ourselves apart from run of the mill printing through feature such as coating, offering a range of materials and, of course, making sure that we always meet deadlines. In order to achieve this and to win and retain customers we have had to invest", explains Markus Rusch, the Managing Director of DAV. The new Speedmaster XL 75 LE UV allows us to offer customers added value whilst also increasing the reliability of the printing process. "For example, we no longer need powder, which in turn means that mailing campaigns can run routinely with

optimum contrast values on offset papers. It is advantages like these that justify the higher costs for the highly reactive UV inks", continues Rusch. Visibly better brilliance of the colour tones is achieved on offset and uncoated papers, since the instant drying means that the colour density no longer falls off and the instant curing means that there is no set off. Scratches no longer occur either. "I am certain that LE UV technology will win through. We have even already received orders from other printers", adds Rusch. "We have already decided to acquire a six colour Speedmaster SM 52 with coater and LE UV when

Trillium technology en route to commercial launch

UPDATE ■ Following on from its presentation as a concept study at Drupa 2012, there is now further news about the commercial launch of Xeikon's new Trillium liquid toner technology. The manufacturer has also launched a new toner for its existing series of presses.


Kevin Bein, Managing Director of the Berne printer Aquaprint in front of his Speedmaster SX 52 LE UV..

the current four colour SM 52 perfector needs to be replaced."

The company is also planning another digital printing investment. This autumn a Linoprint C 901 is being installed at its Teufen site, where three employees produce flyers and business cards.tern Flyer und Visitenkarten produziert.

POSSIBLE NEW APPLICATIONS are also opening up for small format, as is apparent from another Swiss printer, Aquaprint. This is based in the capital Berne and it has just installed a small format Speedmaster that is also equipped with LE UV. "The Speedmaster SX 52 LE UV can print on a very wide range of materials and the sheets exit the press dry, meaning that they can go straight to postpress", comments Kevin Bein, Managing Director of Aquaprint, in summing up his experience of the new five colour press with coater and the Printect Easy Control colour measurement device.

Another full service printer, Aquaprint has six employees and primarily specializes in finished postcards for customers all over Switzerland. It has even founded its own postcard publisher, Freshfish. "We are not interested in long runs but in postcards on innovative materials like uncoated paper or films, together with motifs that give the message emotional impact and value. The results are minor works of art", concludes Kevin Bein. His press is therefore fitted with the substrate extension pack that allows it to print materials up to 0.6 mm thick. It's obviously a business model that works since the company has been going for ten years.
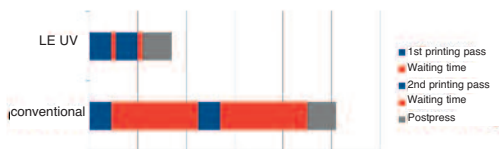
The chart provides a comparative breakdown of production costs between LE UV and conventional printing. Use of LE UV sharply cuts the waiting times between the two printing passes and between printing and postpress and it also reduces the amount of storage space that is needed (no semi-finished products sitting on pallets). The production workflow is faster, less capital needs to be tied up and invoicing is speeded up.

By Judith Grajewski and Katja Jäger
Staff writers
Deutscher Drucker

■ A demonstration Trillium press has now been installed in the Belgian HQ of Xeikon in Lier and the first beta tests should begin by the end of the year or the first quarter of 2014 at selected Benelux users. The official launch is now scheduled for the spring of 2014.

Xeikon's Trillium liquid toner technology should fill the gap between high quality electrophotographic sheet-fed printing and high speed, reel-fed inkjet. The technology is based on a gel-like toner suspension in a white oil carrier liquid. According to the manufacturer, this allows toner particles of just 2 µm, which is significantly smaller than is the case with dry toners. The printing units are similar in design to an anilox inking unit. They have an anilox roller and an ink forme roller but, instead of a plate cylinder, there is an imaging roller (OPC, organic photo conductor) and an intermediate roller that resembles the blanket cylinder and that actually transfers the printed image to the substrate web across a 5 µm gap. Xeikon claims that this intermediate roller means that there are no substrate limitations and the toner does not penetrate into the paper fibres but bonds to its surface.

What is really unique are the short distances the toner particles need to move—what the manufacturer refers to as 'micro-gapping'—since the toner is transferred to the substrate across a gap of 5 µm. By comparison, in inkjet printing the gap, according to Xeikon, is 1,500 µm and with dry toners and low viscosity liquid toners it is around 200 µm. Xeikon argues that the narrow gap between cylinder and substrate means that individual toner particles can be precisely placed and that this results in improved image quality. Fewer toner particles are also required to generate the same appearance as a dry toner print and this in turn should lead to reduced production costs.

Since Drupa the look of the Trillium press has changed. At the show the individual press towers were arranged in a row but now they have been rearranged to allow the typical Xeikon vertical printing process, which also results in a particularly compact press design. A duplex press with two printing towers, unwinder, fixer unit and rewinder should be 11 m long.

NEW TONER OPTION. Xeikon has also launched a new toner for its existing 3000 series in the course of its regular sequence of Café events designed to promote an exchange of digital print production knowledge. It claims that this Ice toner offers high print quality, high light fastness and a genuinely opaque white. It will allow conventional substrates to be printed directly without the need for primer. According to the manufacturer, the new toner can be used by any of the Xeikon 3000 series of presses and for all kinds of labels. It is especially suitable for heat sensitive materials such as PE or thermal labels because it runs with a fixing temperature that is some 10 °C to 15 °C lower than normal. Ice toner offers the same advantages as the manufacturer's own QA toner, although approval for its use for foodstuff printing is still pending. To begin with, QA toner will be sold alongside Ice toner but in the long term the latter should supersede the former. A press software upgrade is required in order to be able to use the new toner.

Ice toner should be available from the fourth quarter onwards, after having been presented at Labelexpo in Brussels (24 to 27 September). Xeikon ran a special promotion in advance of the show that allowed interested parties to upload print files to www.seetheproof.com and then to collect print outs on a variety of materials including heat sensitive PE from the Xeikon stand.

5 µm
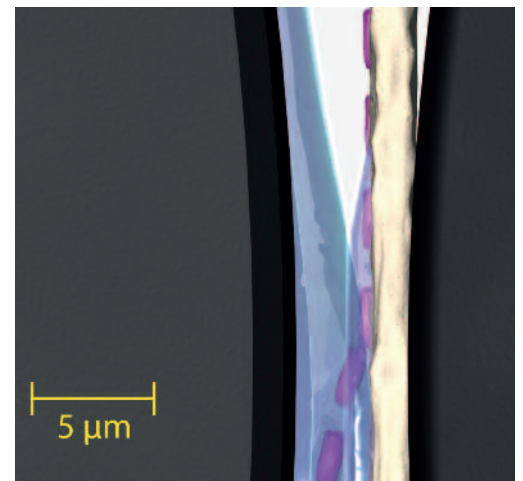
The Xeikon Trillium toner particles only have to travel a distance of five micrometres from the roller to the substrate. The manufacturer refers to this as micro-gapping.

How to earn a lot of money

PRINT CONGRESS ■ It's not news that the print and media industry is going through a phase of massive restructuring. Amongst other things, this means that every print service provider needs to re-examine its business model, now and in the future. Piet Saegeman, Business Development Manager at Chili Publish, presented some exciting ideas about which trends new business models could exploit from initial concept to implementation.

By Petra Ebeling
Editor, Post Press
Deutscher Drucker

■ "Innovation! There's really no way to start a discussion about business models nowadays without using this word. Everybody loves innovations. Until it affects them. Because every innovation means change." It was with these words that Piet Saegeman, Business Development Manager for Germany, Austria and Switzerland at Chili Publish of Belgium, began his lecture on trends during the 'Future-Check' 2013 Print Congress organized by Deutscher Drucker and GC Graphic Consult.

CHANGES. As Charles Darwin explained, it is not the strongest species that survives, nor the

In his talk, Piet Saegeman explained current and future trends...

most intelligent, but the one best able to react to changes. "This also applies to companies", continued Saegeman. There is a big danger that many printers do not invest in time and so they now have problems. "One must be able to react, one must be able to change, quite fast, in order to able to react to changes in industry. Don't build your business model around a fixed solution, rather solutions should be able to support current and also future business models", he explained in his talk.

Saegemen has already been involved in a number of changes in the printing industry. Some 15 years ago he began his 'print career' at Barco Graphics, then, at Creo and Kodak, he experienced the switch from film to PDF workflow, before moving to Apple in 2008.

Soon afterwards, the iPhone and iPad hit the market and print was certified dead. "Up to this

point in time the question had been how we print but it then became, why do we print", recalled Saegeman in talking about this paradigm shift, before then proceeding to highlight a number of new trends.

DISINTERMEDIATION/PERSONALIZATION.
Disintermediation is a word that Saegeman finds particularly fascinating. It refers to the elimination of individual steps in the added value chain, the removal of an intermediate role. In the global information market the disintermediation of digitizable and non-digitizable products promotes the possibility of market participants communicating directly via the Internet. Here, one should not underestimate the Digital Native generation, argued Saegeman, going on to explain, "that they are your children.

They are online all the time and everywhere. They have grown up with Internet technology and they are at home with it. If this generation needs print then it must be high quality and targeted print, and we might be at next trend point." It doesn't matter whether it's a T-shirt, a stamp or a shoe, "personalized products can be sold for a higher price. They become premium products. Do something with this information", urged Saegeman.

PROSUMER. The prosumer was another concept addressed during the talk. This is a person who uses a technology to have achieve good results without necessarily knowing their way around

> **"Digital Natives are your children. They are online all the time and everywhere. They grew up with Internet technology. They are at home with it.**

it. This applies, for example, to digital cameras (automatic programmes) or driving (ESP) or even the possibility of having an Internet presence.

"In the past, if you wanted a good web site you had to design this, to learn to code, to program the site and much more. Now—take Facebook—

... and offered an overview of various possible business models.

for example, you have the choice of a large number of Internet technologies for publishing. "These new possibilities should be used", declared Piet Saegeman.

BUSINESS MODELS. Saegeman concluded by explaining how extremely easy it could be to add value. "There is the supplier, a product and a customer. The customer needs the product and gives the supplier money for it. It's simple." However, it's not usually so simple. Often, anyone who thinks and works like this has not taken his or her competitors into account, competitors who use the same model, who supply the same product but either a better quality or a cheaper one. "There is also a two-sided model with two markets, that of the suppliers and that of the buyers. In between, there is a trading platform, such as an auction house like Christies, that earns money from the auction. You can also earn money four times over in a business model, or do as Apple does and earn money many times over", explained Saegeman. Apple is very good at selling. "On the one side there is the customer who uses an iPhone and on the other side there is the music industry, the film industry, the broadcasters and the telephone companies, who all have to give Apple a share of their revenues. Even app developers have to pay Apple 30 per cent. And so the company earns money on all sides", continued Saegeman.

The trend to free information from the Internet has grown over recent years but it's not a long-term model, because nobody earns any money from it. In contrast to it there is the 'Bait and Hook' business model used by Gillette, for example. The first time a product is used it is free but the customer has to pay for subsequent purchases. 'Freemium' is another interesting business model. Here the basic product is given away, whereas the full product costs money (eg.

the Drop-Box web service). The term Open Innovation refers to the opening up of the innovation process of organizations and therefore the active, strategic exploitation of the outside world in order to expand the potential for innovation. This is a model that is often used in the pharmaceutical industry.

Saegeman's view is that the 'Long Tail' model is particularly suitable for suppliers that offer a large number of niche products. With these, it is only possible to make money on the Internet, because such seldom requested products cost too much in terms of rental and storage to be held by a conventional shop.

IMPORTANT QUESTIONS. With all these business models and disciplines it is very important to draw up a business plan for the added value. In doing so, the following questions must be kept in focus: what resources, what activities have I got, which partners can I work with? What benefits do I want to promise my customers: print, identity or something different? How will I interact with my customers? Where are my customers, my markets, how can I generate more added value form them?

In conclusion, Saegeman provided a simple example of overall project management. "You offer the printing of a wedding invitation. At the same time you could offer the young couple a free project management page on the Internet as a checklist." Besides the invitations, this should include the following points: invitation to the stag or hen parties, photographer, video, music, catering. flowers, transport. clothing, cake. "All these points mean business. For a cake maker the information that, "I have a couple getting married is worth money", as Saegeman pointed out. And then you can also earn good money with other points on the list such as thank you cards and photobooks.

And, don't forget to include a wedding anniversary reminder for the bridegroom in the checklist. That and much more belongs in the database. "As a result, you don't just print the invitation, you create an all embracing customer relationship. If, three or five years down the line the couple have children then these will soon be off to nursery and school. Invitations to celebrations and parties await you. How's that for a business model", and so Piet Saegeman concluded his talk.

Recommended reading

- Alexander Osterwalder, Yves Pigneur, „Business Model Generation", Campus Verlag
- Seth Godin, „Wir sind alle anders", Kindle Edition,
- Chris Anderson, „Free – Kostenlos", Campus Verlag und „The Long Tail", Deutscher Taschenbuch Verlag
- Jeff Jarvis, „Was würde Google tun?", Kindle Edition