

Musings of a Carolina Print Curmudgeon

Graph Expo '07 – Technology on Parade Curmudgeon Disputes Ho Hum Reviews

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Graph Expo '07 might well have been labeled “Technology on Parade.” With over 650 booths exhibiting almost 6,600 individual products, there was something new or tried and true but critically important for every one of the some 20,000 plus enthusiastic print executives who made the trek to Chicago’s McCormick Place in September.

After acknowledging that Graph Expo '07 was the best industry showing in years with exhibitors confirming that printers are making major commitments to new technology investments, some of the early reviews of the show characterized the event as offering little in the way of new technology --- or as one analyst put it _there were no “bomb shells”. From a technology perspective, some characterized the show as “light on technology” or “technology ho hum”.

I have a different perspective. After all, that is what a curmudgeon is supposed to do --- see things through a different set of eyes. What we saw were at least a couple of potential bomb shells at Graph Expo, one from Pantone and one from Microsoft, which I noted in the last issue of the “Scanner”.

The new Pantone color system “Goe” for specifying color, if accepted by the industry --- and there are some doubts --- could upset the way color is specified. For most printers at the show, this announcement at Pantone’s first showing since being acquired by X-Rite was a complete surprise. I would describe it as a bomb with a long

fuse --- it could sputter and go out ... what happens is largely in the hands of the designers and print buyers ... but if it explodes - *#\$\$%^@* !

The Goe system is based on 2,058 colors (compared to the 1,114 colors in the Pantone Matching System) and ten stock inks (compared to the fourteen for the Pantone Matching System) and is organized into 165 full strength colors and their derivatives. Pantone is positioning Goe as the first “completely new color inspiration and specification system for the graphic arts industry since the introduction of the Pantone Matching System 45 years ago.” The Pantone Goe System is said to include tools and interactive software for collaboration in multimedia environments. Pantone reports that companies such as Adobe, EFI, Flint Group, Heidelberg, HP, Quark and Xerox have shown their support for the Goe System by working to include it in software applications, RIPS, proofing systems, digital color output devices, and ink formulations.

The discussion among Graph Expo attending printers was whether or not a new system is needed, printer benefits if any, and the specter of having to maintain two color specifying systems, the new Goe and the old or classic entrenched Pantone system. Although Pantone says there is approximately a 40% crossover match from the old system to the new system, concern was raised about the 60% for which there is no crossover color. Although Pantone says that the difference is minimal, skeptics note that this has yet to be proven. Analysts at Graph Expo questioned exactly how RGB color values were being handled since show literature did not clearly specify and some who examined the system noted a difference between sRGB and Adobe RGB. This has now been clarified that the Goe system RGB values are only for sRGB. Some also question the Pantone claim that because the system is designed for printing uniform ink film thickness, it results in equal drying times, less use of spray powders, and more control when matching color on press.

While the new system appears to offer potential advantages in color communication and perhaps in printers' color-related operations, it also portends implementation difficulties. The odds are, in our opinion, that it will create some

interesting discussions between print buyer and printer. For now, it's a potential bomb about which printers need to stay informed. For more information, go to Pantone's web site; www.pantone.com and check out the whattheythink.com story by consultant Cary Sherburne. For those that wish to delve into the RGB issue, contact Eddy Hagen, Managing Director of the Flemish Innovation Center for Graphic Communication at eddy.hagen@vigc.org. Meanwhile, make sure you know what your favorite customer is up to.

The second potential bomb was housed at Graph Expo in its own special area labeled the "XPS Land Showcase" and touted a new file format that could prove disruptive to the almost universally used PDF format and the established protocols of prepress. XPS is said to be a complete XML-based specification for a printer page description language based on a new print path, a color-managed device-independent and resolution-independent vector-based format which encapsulates an exact representation of the printed output and support for printing features such as gradients, transparencies, CMYK color space, named colors, printer calibration, print schemas, etc. The specification describes the appearance of fixed-format documents by using a structured, XML-based document format. The XPS document format consists of XML markup that defines the layout of a document and the visual appearance of each page, along with rendering rules for distributing, archiving, rendering, processing and printing the documents.

The goal at Graph Expo was to educate the printer about what XPS is and to explain why printers should adopt the new file format for both offset and digital production.

Working with Microsoft and demonstrating XPS at Graph Expo were Quality Logic, Quark, Konica Minolta, Xerox, Global Graphics, Screen, Xitron, Software Imaging and Zoran. Aside from fueling Microsoft's Vista thrust and perhaps forcing printers whose customers work in that environment into another file format, the advantages of XML were not clear to this observer.

XPS is viewed as a potential competitor to Adobe's portable document format (PDF), due to its claimed ease of use, similarity with the PostScript specification, and native support in Microsoft's Windows Vista operating system. However, PDF includes dynamic capabilities not supported by the XPS format. Over time will XPS co-exist with PDF? Will XPS simply be a Bill Gates niche but requiring many printers to maintain and XPS capability?

A curmudgeon's advice --- talk to your prepress software suppliers, watch the trade magazines and watch this website for more information as the XPS saga unfolds. Learn now, don't be blindsided when a "Word" metric customer sends you an XPS file.

In addition to these two potential bombshell technologies, printers attending Graph Expo saw a comprehensive exhibition of products with running live applications for digital pre-publishing, prepress, digital and offset printing, wide format imaging, mailing, fulfillment, bindery and other functions. It offered special pavilions devoted to mailing and fulfillment, wide format inkjet technologies, along with a program of specialized seminars organized in cooperation with the Mailing & Fulfillment Service Association (MFSA). Products which received Graph Expo Must See 'ems recognition -- - compelling products that most commercial printers should consider --- are reviewed on the Graph Arts Show Company web site www.gasc.org, scroll down for the Must See 'ems page. Or click on www.mustseeems.com.

The Top Survival Technologies

And there is more. But before commenting on the products of Graph Expo, I would first like to review the ten technologies that the Must See 'ems Technology Selection Committee identified as critical for most commercial printers to understand and utilize.

Prior to Graph Expo, the Selection Committee which consists of 15 of the industry's top consultants, print academics, and trade magazine editors, reviews the status of print, business and production operations and identifies those technologies that are in their opinion critically important tools in the effort for printers to survive profitably in a highly competitive information and entertainment media world.

MIS is Number One!

Management information technology was selected for the second year in a row as the single most critical tool that a printer requires to run a profitable growing business. The Committee made the selection because MIS has become the core technology around which customer interfaces, scheduling, production control, integrated automation and business workflow are built. It is not enough to simply have a management information system, it has to be fully implemented, populated with correct up-to-date information, and used as an operating tool in running both the production and business sides of a print organization. The Committee noted that what started out as computer assisted estimating has slowly morphed over the last 25 years to become the centralized brain of the industry's most advanced and profitable most advanced and profitable companies.

Critical Digital

The full spectrum of digital production printing technology --- toner and inkjet based; mono-color, spot color and process color --- was selected as the number two critical technology demonstrated at the show. There was more digital printing equipment and more pages of digitally printed material at the show than offset equipment and its sample output. The amount of digital printing equipment at the show and the fact that some analysts are dubbing drupa 2008 as either the Digital Printing Show or the Inkjet Drupa illustrates the importance that this printing process now has for the global printing industry.

Confused Workflow

Workflow was a somewhat confused third ranking in the panel's identification of critical survival technologies. Confused because many of the panelists, who come from different segments of the industry with different functional backgrounds, had different perceptions of exactly what is included in workflow. For some workflow is prepress focused. Others see it embracing the entire plant, including the flow of business information. However defined, the majority of panelists felt that having an efficient flow of electronic and physical production was essential to profitable survival. The point of difference between profitable and unprofitable printers with essentially the same equipment is often workflow.

Print's New Profession - IT

A scan of the products that were on the floor of Graph Expo showed that an increasing number have some form of information technology (IT) capability requirements for a printer to properly install, utilize and maintain these products. To obtain the full benefits of an MIS requires at least a modicum of IT capability. As printers move into digital printing, variable data printing, personalization, digital asset management and some slice of multiple media, all along with a boatload of software now utilized for conventional printing operations, IT competence is increasingly important for a printer's survival. For these reasons, the Must See 'ems Selection Committee put information technology in fourth place in its list of critical survival items.

Web-to-Print

Recognizing a relationship between electronics and print, the panel identified web-to-print technologies as the fifth most important technical area of competence for printers. Web-to-print includes the use of this technology for print buyers to communicate with printers and to submit jobs for both offset and digital printing. One panelist noted that in some ways, it is a customer convenience and in other ways it

reduces costs making print more competitive. In the digital arena the end user-created database where responses to questions and choice on the internet form the bases for a personalized message is a major factor in that technology's growth. Some panelists expressed the opinion that one day the vast majority of print would utilize web-to-print technologies.

Ubiquitous Color Requires Management

With the possible exception of some book market segments, single color print is a rapidly declining product. As the utilization of color has become ubiquitous in almost all market segments, the print buyer customer demands that his requirements be precisely met. Color management technology is becoming a more important tool in meeting these requirements and for this reason was identified as the sixth most important survival technology.

The Bottom Four – Still Important

The next four selections that round out the top 10 received significantly fewer votes than the preceding group, putting them in a second tier array of printer importance.

Leading the second tier in seventh position overall was the automation of the lithographic process, a long-standing trend encompassing a variety of printing functions. Most notable is the fact that the Selection Committee stressed the importance of automation but not integrated automation using specifications such as JDF/JMF (Job Definition Format/Job Messaging Format). In 2006 JDF-enabled integrated automation was a number two survival technology pick. While not a technology per se, the Committee noted the importance of replacing technologically obsolete press equipment with newer, sometimes faster and inevitably more automated functionality. One panelist noted that reducing production costs through the utilization of automation that reduced the amount of human intervention and touch points during production was an important survival consideration.

Computer-to-plate technology is mature but less than half of the industry's operating plants have adopted the technology and even fewer utilize its companion, automatic ink fountain presets. Ranked number eight, the panel noted that it is difficult for a plant without CtP to compete against a comparable operation that has embraced CtP and its ink fountain ramifications.

The ninth ranked technology embodied in preflight software and printers' skills in using the software is mature and universally utilized by most printers. However, the Committee noted that the condition of incoming electronic files is still relatively poor and has not been significantly improved in the past few years. While in some respects, this can be viewed as a customer-generated problem, the printer's ability to economically and rapidly preflight incoming material is an essential survival skill with cost and customer satisfaction ramifications.

Be Unique

The last of the top ten survival technologies --- "application of a unique capability" --- is not a single technology but rather it is an amalgam of several technologies that individually did not garner enough votes to be separately included but collectively have the common purpose of enabling a printer to provide a unique capability and product. It is the application of existing technology to create a product that would be unique in an existing market. Or it can be the application of new technology to create new markets.

For example, one of the capabilities of digital printing is the creation of new products or products that cannot be readably produced by analog technology. Many printers have the ability to do coating for the purpose of creating gloss or to provide product protection. But few use the available coating techniques to create special effects that create a unique product and that could distinguish them from the competition. Inline diecutting offered by some press manufacturers enables unique diecuts to be produced

quickly and economically. The application of foils on press makes it possible to do foiling rapidly and cost effectively on the inside signatures of a publication. The unique application of encapsulated scratch and sniff materials or the use of lenticular screens to create 3D effects or the application of magnetic stripes to create talking products are other examples of the application of technologies to create unique printer capabilities and products. The use of technology to create printer-distinguishing products can be a profitable survival insurance policy.

Graph Expo was loaded with products that are based on these technologies. The Must See 'ems listing identifies the most compelling of them. I'll comment on some others in the next curmudgeon postings on PICA's web site.

“Ho-Hum” indeed!

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