Two Views of BookExpo America 2001

On-demand print production is finally finding mainstream acceptance by extending a title's life cycle. On the e-book side, profits are still in the future; today, customers must be educated and the market must be nurtured.

BookExpo America, held this year at Chicago's McCormick Place in early June, has since the late 1990s been a showcase and marketing venue for new book technologies. In 1998, the show was abuzz with concepts for book-on-demand (BOD) printing. The 2000 show, taking place only a few weeks after the surprise success of Stephen King's *Riding the Bullet* experiment, was something of a coming-out party for all things e-book-related. We'd have liked to enjoy a similar high this year, though we know that there must be valleys between the hills.

Part of the reason must be the soggy economy, which is making vendors in every trade more cautious. Yet we hasten to say that BookExpo saw a respectable amount of foot traffic; the book publishing business, though hardly immune to business cycles, is in good health.

Mainstream Adopts Book-on-Demand

By Peter Zelchenko

This year, the book-on-demand printing vendors—those that bothered to show up—were focusing less on new equipment and more on addressing publishers' economic concerns. In particular, the vendors are helping publishers spread out their operations geographically to address the cost of shipping.
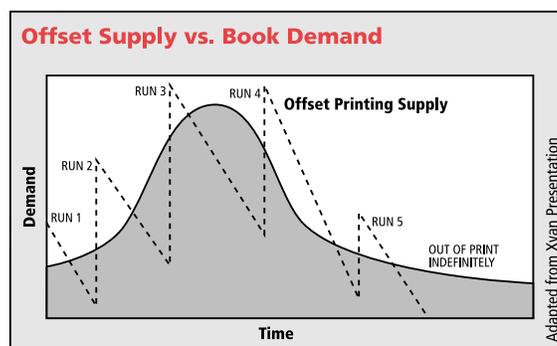
Adobe, although it is still the center of the universe on the software side of BOD, appears to be almost completely engrossed with e-books these days. But Adobe execs say that the company isn't turning away from print; rather, it's letting its OEMs take center stage.

Heavy equipment missing

In marked contrast to previous BEA shows, we found not a single laser printer on the show floor, let alone the tons of heavy iron that IBM and Xerox had trucked in for the 1998 event. That year, an IBM InfoPrint 4000 was directly across the aisle from a large Xerox installation, and the two booths were

brimming with sales activity and technical talent. Last year, Océ and Xerox duked it out, with Océ bringing in one of its massive DemandStream 8000 web-fed printers.

This year, Océ had nothing but glass cases filled with print samples. Xerox's woes kept it off the floor entirely. Jerry Rachfal, vice president of publishing relations for both Xerox and ContentGuard, was the only employee of the troubled document company at BEA, and he was stationed in the ContentGuard booth. Xerox has made a strategic decision to concen-

Offset Supply vs. Book Demand

RUN 3 · RUN 4 · Offset Printing Supply · RUN 2 · RUN 1 · RUN 5 · OUT OF PRINT INDEFINITELY · Demand · Time · Adapted from Xyan Presentation

Print-on-Demand Opportunity In Terms of a Book's Lifetime Demand

Demand: 100,000 · 10,000 · 1,000 · New Title · Frontlist · OFFSET VS. POD THRESHOLD · Back-list · Out of Print · POD · POD · POD · Time · Adapted from Lightning Source Presentation

Stempeck's Effect of Enhanced Margins

Publisher Contribution Margin: 35% · 30% · 25% · 20% · 15% · 10% · 5% · 0% · –5% · Offset Runs With BOD Support · 70% · 80% · 90% · 100% Offset Without BOD Support · Book Return Rate Assuming Offset Alone: 10% · 15% · 20% · 25% · 30% · 35% · 40% · Source: John Stempeck, Avalon Associates

The point is profit. Book publishers can earn money over more of a title's life cycle by using on-demand production to supplement conventional offset printing.
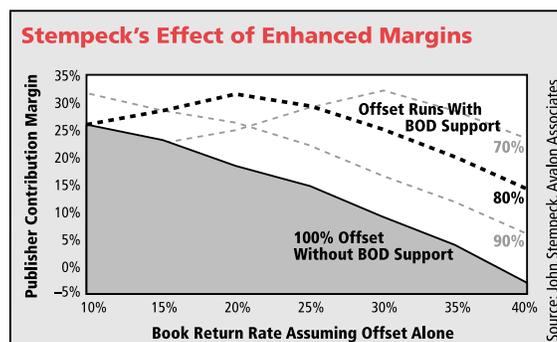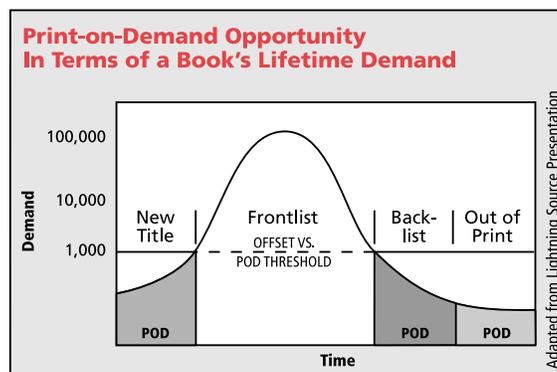
trate on color printing and is exercising extreme parsimony in all other areas *(see Vol. 1, No. 1, p. 3)*.

It is clear that the absence of big hardware displays is mainly due to the overall economic situation rather than to any decreased interest in BOD. In addition, hardware vendors may now believe that publishers and booksellers (who comprise most of the attendees and exhibitors at BookExpo) are satisfied with the overall concept of printing books on demand and are more interested in the financial issues than the machine specifics. The publishers we surveyed were more accepting of BOD than they had been in past years, and they generally took for granted that this is a realistic option for the beginning and end of the life cycle for many trade books.

"I can't remember ever talking to a publisher who didn't immediately grasp the benefit" of book-on-demand printing, said Kevin Haynes of Xyan, based in Horsham, PA. The only issues now, publishers are saying, are how to get the pricing down to the point where BOD is competitive with offset, whether product quality is good enough, just which titles are appropriate, and how and when to print these titles. So, instead of touting the latest equipment, vendors are sharpening their ROI estimates. For example, Lightning Source and Xyan have positioned BOD as a natural complement to offset printing (see charts).

Quality is still a concern, but it's no longer an embarrassment to BOD vendors. Integrated Book Technology of Troy, NY, and Don Leeper's BookMobile of St. Paul, MN, had side-by-side "before and after" samples comparing offset to BOD. Although colors on the covers were slightly off and books with fine-line images were not compared, the overall results were impressive even to a trained eye.

An example of improved pricing was given by Xyan, which displayed a 161-page book that it said could be produced for $4.50. This price includes printing and binding, as well as labor. Compare this with what we said last year.

Tough times for small systems

The "small is beautiful" group of innovators, which includes Sprout and the Marsh Technologies/On-Demand Machine Corp. team, were not in attendance at this BookExpo. Atlanta, GA-based Sprout is known to have been in dire straits since late last year; Marsh Technologies, of Chesterfield, MO, is busy in the trenches with continued development *(see the Seybold Report on Publishing Systems, Vol. 30, No. 5)*.

Digitz.net, the book-on-demand branch of BookSurge LLC, though it had no booth of its own at BookExpo, was very happily printing books on a Hewlett-Packard workgroup megacluster. In addition, T/R Systems of Norcross, GA, is thriving and has demonstrated a strong interest in books on demand through its work with such customers as The WordPro of Ithaca, NY. We think that small-system vendors,

because they need less financial leverage, may survive the economic doldrums better than companies that depend on large-system sales.

The problem that a large-system vendor faces is convincing prospects that they'll be able to get enough jobs for their equipment to justify the per-page costs. This is a particularly keen issue for Xerox, whose DocuTech has long dominated the scene. Xerox's service and consumables costs are calculated on the basis of volume, and real savings do not come until a DocuTech is turning out millions of impressions per month—which is a lot of books.

As a result, Xerox has begun to give in on its formerly rigid click charges. A former Xerox executive, who asked not to be identified, said, "Because of their financial troubles, both with the SEC investigation as well as the large number of shareholder lawsuits, many people are able to negotiate much better terms with Xerox now."

Chipping away at shipping

On the other hand, some Xerox owners seem to be having no problem reaching productive saturation on their machines. Integrated Book Technology, Inc., of Troy, NY, and the well-known Xyan are two that were present at the show. Xyan sees as its primary targets the Internet-based publishers that are shipping directly to end users.

In fact, Xyan's Kevin Haynes said that the firm will be adding bookbinding and shipping capabilities to its Irvine, CA, facility beginning this summer. This, he says, will reduce shipping costs and should improve job turnaround time for West Coast customers. Currently, he says, all jobs are shipped from the flagship plant in Horsham and typically take seven days.

IBT, for its part, said that it is soon to gear up a facility in the United Kingdom. Lightning Source will be opening new plants in Reno, NV, and the U.K., according to LSI's Andrew Weinstein. These moves suggest two things: First, books on demand are achieving real market penetration—there's finally enough business to justify plant expansions. Second, driven by the need to whittle shipping costs, producers are moving closer to the distribute-and-print approach. How far this trend will go cannot be predicted—a bound book to the desktop? to the zip code?—but, if the print-on-demand forecasts by Forrester Research and others prove to be justified, it cannot help but proceed.

Adobe moves to the background

Perhaps because it is in many ways a messier and less sexy business than simply offering an e-book for downloading, Adobe has lately seemed reluctant to acknowledge BOD's superior potential. Adobe's current marketing statement is "Network Publishing: Publish anything, anywhere, on any device." Certainly, this must include print. Forrester Research has predicted that e-books will take only a 3.2 percent share

of digitally delivered content in five years, while books on demand will share the remaining 96.8 percent with digital textbooks.

Predictions might be wrong, so we shall also offer a bit of present-day reality. Mitchell Davis, co-founder of BookSurge LLC, of Charleston, SC, which today offers both print-on-demand books and electronic books, told us that during the month of March, titles on his Greatunpublished.com site sold for an average of $87.50 in print format, while electronic formats for each title averaged 60 cents.

This makes it all the harder to understand Adobe's relative inattention at BookExpo to books on demand as compared to e-books. It just seems to defy the numbers.

Relying on third parties. "Adobe is passing [book-on-demand printing] through their partners," said one Adobe person. He listed several implementors of the Adobe Content Server, including iUniverse and Lightning Source, which are soon to be joined by OverDrive and possibly Reciprocal. Steve Potash, president of Cleveland, OH-based OverDrive, said that his company is supporting BOD development for Random House, Harper Collins, McGraw-Hill and a number of other important publishers. But he seemed tentative about their printing plans so far, saying that there was "not as much direct traction yet with print on demand" as with their e-book efforts. In contrast, iUniverse is gung-ho about book-on-demand printing, announcing at BEA that it had just printed its 500,000th POD book, with an average of 100 copies printed per registered title. Josh Haims, client solutions executive at iUniverse, added that the company does not even sell e-books to consumers. IUniverse farms out its printing to six outside POD vendors.

Although PDF has become the *de facto* standard file format for book-on-demand transmission, and although Adobe presumably would gain by developing tools that specifically encourage BOD printing to multiple platforms, there appears to be nothing under active development. Adobe's Internet Printing Group Product Manager Paul Beyer says that Adobe is "150 percent behind print on demand and I'd wager to say we own the vast majority of the market with our systems," referring to the PDF format at the content end as well as PostScript at the RIP end. He added that his group is "particularly in support of print on demand that is driven by Internet connectivity." For undisclosed reasons, this was not showcased at BookExpo this year. But Beyer hinted that "over the next six to eight months, we'll be seeing some very interesting things coming out of Adobe."

Security concerns. Adobe has been supporting companies such as T/R Systems and Océ in developing their networked job-control offerings, respectively called Maestro and Prisma. Out of the box, these products do not address the problem of securely moving a PDF book, including cover and finishing instructions, as a unit from a publisher's site to some remote printing facility. Part of the problem is that, as distribute-and-print becomes more widespread, the remote printer becomes less of a known quantity and more like a "black box"—one that, on the technical side, might or might not offer automated imposition, printing and binding, and on the business side, might or might not adhere to best financial practices.

It is not simply a matter of redirecting an e-book to a printer. There are a number of potential differences between e-book PDF data and print-on-demand PDF data, which may include (among other things) higher-resolution images, high-resolution bitmapped type, different image cropping and pagination, and separate cover documents for both paperback and hardcover. According to Kevin Nathanson, an Adobe group product marketing manager, the Adobe Content Server provides full support for books on demand, but it is clear that this support is nowhere near as extensive as its e-book handling. The Adobe Content Server, explained Paul Beyer, is tailored for e-books and was not designed for print on demand.

Nathanson also said that Adobe's Job Definition Format, which can be wrapped tightly within any ACS-encrypted document, contains all information that may be needed for BOD-specific handling, but he does not know of anyone who has implemented an end-to-end book-on-demand solution that thoroughly integrates Adobe Content Server and JDF. Adobe's primary preoccupation, says Nathanson, is not how to get a book document and instructions from one place to another for printing, but rather how secure the printing facility will be from hackers.

With a PDF e-book, the "black box" is the Adobe eBook Reader, over which the company's technical staff has full control. With a printing facility or kiosk, Adobe's customers will want to be certain that content is secure all the way into the RIP. The obsession with security is well founded, claims Nathanson: Imagine an individual intercepting a formerly secure PDF that has been saved to an intermediate PostScript file during the spooling process, then re-distilling the book without a password and distributing it on the Internet.

Quietly Growing the E-book Market

BY MIKE LETTS

Besides the considerable drop in the number of e-publishing-specific participants compared with last year, BookExpo saw several conspicuous no-shows (most notably Versaware, Ibooks.com, Copyright Clearance Center and do-it-yourself publisher

Xlibris). For those companies in attendance, the objective in Chicago was much different than in 2000. Companies such as NetLibrary (www.netlibrary.com) and Microsoft (www.microsoft.com) rented relatively little floor space and devoted most of their attention to one-on-one demonstrations and tutorials with publishers and authors. "We're focused more on meetings with publishers," a NetLibrary representative explained, noting that the booth contained one terminal for demonstrations and six tables for one-on-one meetings. Similarly, a Microsoft employee noted that last year's show included the company's formal introduction of its Reader and DAS products to publishers. This year, the company is trying to educate those same publishers.

Too soon for profits. The low-key nature of this year's technology exhibit isn't surprising. With most major publishers voicing serious concerns over the current state of the print-publishing industry, little time can be spent focusing on new and financially unproven technologies. Market studies continue to find scant interest in e-books among consumers. During the show, market research firm The NPD Group (www.npd.com) released its findings on e-book awareness. According to the report, which compiled responses from more than 3,000 people, nearly 70 percent of those polled had heard of e-books. But less than 5 percent said they were "very likely" to purchase one. Three-quarters of those polled said that they did not see e-books as part of their future.

This doesn't mean that the industry has stalled. On the contrary, e-book reading technology is improving, and the larger players are continuing to throw substantial funding into their e-publishng ventures. But the dynamics of the market have changed; the focus has shifted distinctly away from trade fiction into areas such as enterprise and educational publishing. Many of the interesting and innovative companies that gave BookExpo such a spark last year have either ceased operations or are struggling to survive. As we see it, these vendors were in the right place, but at the wrong time.

Some positives. Be that as it may, things weren't completely quiet. A profoundly important demonstration of the DOI-EB caught its share of attention, and we've devoted a separate story to it *(see p. 8).* Several vendors took time to demo new products, while others made product and service announcements, and we will discuss the significant ones here.

ION Systems unveils eMonocle Reader

ION Sytems (www.ionsystems.com), which is based just outside of St. Louis, was one of the few companies that used this year's BEA to make a major product announcement. ION, which developed the end-to-end e-publishing system and library GalaxyLibrary.com, introduced eMonocle, an OEB-based e-book reader for Windows, Mac and Unix operating systems. GalaxyLibrary allows publishers to submit titles in PDF or Quark formats and have the files converted and ready to push out to a number of e-book and print formats. The e-book formats are Microsoft Reader, Acrobat eBook Reader, GoReader, Franklin eBookMan, Gemstar, Palm Reader, Pocket PC Reader, eMonocle, HTML, and even Braille. ION contracts with Automated Graphics Systems, a division of Consolidated Graphics, to perform its print-on-demand services. Large-print POD titles are available for visually impaired readers.

Using the TextCafe conversion service from Texterity, ION Systems will automate PDF-to-OEB conversion for publishers for $35 dollars per document, assuming no additional problems arise during the conversion process. There are no minimum-submission or rights-transfer requirements, but a contract must be negotiated with Ion Systems before the company will accept any title submissions. GalaxyLibrary has 3,200 titles in its repository. The company will use IBM's Electronic Media Management System (EMMS) as the backbone of GalaxyLibrary.com, and it is using ContentGuard's XrML markup language for digital rights management. Content can be viewed either online using any Netscape or IE browser, or offline using any of the supported readers.

While ION Systems supports several e-book readers, eMonocle is its own application. The reader is Java-based and will render any OEB file without modification. The client-side application is about 1.5 MB, said Jill Thomas, CEO of ION Systems. The application is fairly straightforward, although we think it too closely resembles a Web browser window. (Its main competitor, Microsoft Reader, has a more attractive interface.) A table of contents runs down the left side of the window, with the text to the right.

The most impressive highlight of the reader is its reflow capability. Type size can range from 10 to 192 points, making it an ideal reader for visually impaired persons. Ion Systems is quick to note that eMonocle exceeds the display requirements set by the Americans With Disabilities Act. As the type size is increased, the reader automatically reflows the entire document, resizing columns and altering the page count.

Images (GIF and JPEG are supported) resize to meet the width of the text columns. This can cause some distortion when text is enlarged or reduced. To view an accurate enlargement, users can click on the image to open it in another window, where it can be blown up to eight times its original size. EMonocle uses Sun's Java 2D rendering technology (http://java.sun.com/products/java-media/2D/datasheet.html) to sharpen the appearance of text and images on screen, which is particularly useful when the point size is enlarged considerably.

A beta version of eMonocle will be available for download at the end of June. While the basic reader will be free, an upgraded version that includes annotation, highlighting and bookmarking will cost $30.

Our take. Being an IBM Business Partner, ION Systems has a valuable friend to help promote its products. While eMonocle is an attractive and useful OEB-based reader (particularly for the visually impaired community), it faces serious competition from Microsoft Reader (another OEB-based reader), which is popping up on devices big and small. Not only does that pose a distribution challenge, but Microsoft has priced Reader rather attractively—it is completely free. (Making matters worse, we suspect that, unless the Justice Department intervenes, the software will most likely be embedded in the next Windows OS.) Although there is a free version of eMonocle, it lacks several important features.

ION, although a small outfit, has already taken on a heavy load, operating an end-to-end e-publishing service that guarantees quick and efficient (not to mention cheap) conversion of a multitude of formats, while offering customers the option of a print-on-demand delivery, digital fulfillment or both. Now the company has entered the e-book reader battle, currently dominated by software giants Microsoft and Adobe. The key to any form of success, therefore, must be to reach agreements with the major online book retailers to make eMonocle and GalaxyLibrary titles available to a larger audience, while at the same time working to increase its small library.

Reciprocal discusses upcoming Digital Warehouse

Although no formal announcement was made in Chicago, we learned that Reciprocal (www.reciprocal.com) is nearing the launch of its content management system, Reciprocal Digital Warehouse. The service, which is powered by Documentum (www.documentum.com), will be ASP-based and should be available within the next 30–60 days. At the moment the service is strictly limited to e-books, but work is underway to incorporate audio and video

capabilities into the service. According to Reciprocal representatives, Digital Warehouse allows a publisher to create a master digital warehouse that can push content out to multiple channels in multiple formats. The service can be wrapped with any of the numerous digital rights management systems available through Reciprocal.

In an unrelated announcement, Reciprocal also reached an agreement with NetPD (www.netpd.com), a technology developed in the U.K. that provides copyright protection to content owners by scouring the Internet for sites that post pirated material and removing it. NetPD landed on the map when Napster opponent Metallica hired the company to provide evidence of copyright infringement in its court battle with the popular peer-to-peer file sharing network. Under the agreement, Reciprocal will promote and sell NetPD's services to its customers.

Ebrary continues to plug away

Perhaps one of the more upbeat exhibitors in Chicago was Ebrary.com (www.ebrary.com). While the company has seemingly been in the development stage for more than a year and has repeatedly pushed back its launch date, the content-agreement announcements and additions to the company brain trust continue to roll in. The company told us that it expects to roll out its first live integration with a channel partner, Pearson's Learning Network (www.learningnetwork.com), in late July. Over the course of the next 12 months, additional channel partners will be launched every couple of months. This will be the first live use of the company's new Ebrarian service, which allows a publisher to bolt Ebrary's library-database and purchase services onto its back end *(see The Bulletin, Vol. 6, No. 32 for more)*. Although the company would not discuss specifics, it hinted that one of those channel-partner launches will include a "major online bookseller."

In addition, Ebrary announced content agreements with 12 university presses in the U.S., which will add several thousand titles to its library, with content ranging from finance to zoology. An agreement with Bertelsmann subsidiary Springer-Verlag, a scientific

Automatic text reflow. The eMonocle reader will automatically reflow text and columns as the point size is increased. At left you see the same document viewed at different point sizes.

Echyon reader. Now called the AOne Pro eBook, this dedicated device is attractive and relatively inexpensive.

publisher, to make its mathematics and statistics titles available through Ebrary's online service was also announced at the show.

Everybook packs it in; sells technology to Estari

After several years of struggling to get a marketable product out the door, Everybook has called it quits. The company originally attempted to develop a dedicated e-book reading device more than two years ago. After numerous launch delays, the company scrapped the idea in favor of a PDF-based reader and file organization application called DocAble *(see The Bulletin, Vol. 6, No. 15 for more)*.

Although Everybook ceased operations, several of its founders purchased the rights to DocAble and have reorganized as Estari Software. Estari has increased DocAble's price by $20, from $50 to $70.

We have our doubts about DocAble's usefulness and, legalities aside, this latest move amounts to little more than a company name change. It seems like another confusing move from a historically troubled company. Nevertheless, we hope Estari will have more success than its predecessor.

GoReader alters launch; expands market focus

Although GoReader (**www.goreader.com**) did not exhibit its dedicated reading device at BookExpo, we did get a peek at the Chicago-based company's final production model. We had been favorably impressed with the old demonstration model, and the new device is much improved. It is lighter, and while the screen size is the same, the final model is thinner and has a more durable metallic casing.

The company is still on track for a fall launch, Andrew Watts, marketing analyst for GoReader, told us. But the device won't be available for general sale as initially planned. Instead, the company is focusing on a series of limited "proof of concept" runs with approximately 15 educational institutions. The institu-

tions will pay for the devices and will use them in the classroom.

The company is also exploring new markets, said Watts, most notably the corporate and military sectors. This is an about-face from last fall, when CEO Rich Katzmann told NIST attendees in Washington that the company would focus solely on the education market. However, according to Watts, there is significant interest from at least one government institution looking to lighten the load of service manuals and other documentation.

Echyon makes U.S. debut

Korean e-book developer Echyon, which we first met at Ebook Europe in March *(see The Bulletin, Vol. 6, No. 25),* came to Chicago to get a feel for the U.S. market. Its desktop Reader and Publisher software is available in Korea, and its dedicated reader device, now called the AOne Pro eBook (**www.aonepro.co.kr**), is slated for release in Korea in September. But the company is still unsure when it will release its products in the U.S., said company representative Louis Yoo. First and foremost, the company needs to land a distribution partner for its attractive and relatively inexpensive dedicated device.

As for its Windows-based Echyon Reader and Echyon Publisher desktop software, the company is doing some market research to determine a pricing structure for the products if it decides to make them available in the U.S. As yet, according to Yoo, nothing has been decided.

The AOne Pro device uses a Linux operating system with a 100-MHz Intel Pentium-based processor. The screen measures 5.6 inches diagonally with a 320×480 mono LCD touch screen. The AOne Pro has 16 MB of memory and includes a Smart Media Card expansion slot for additional external memory. It supports OEB and Franklin eBookMan formats and has an MP3 player, earphone jack and built-in dictionary.

E-book signings

For some fun, as well as an interesting demonstration of potential e-book capabilities, Palm and Palm Digital Media Group (which, until its acquisition by Palm, was PeanutPress) staged an e-book author signing on Sunday morning. Fans of two science fiction authors that have successful titles available for the Palm Reader, Julie Czerneda and Steven Swan, were able to have the authors actually sign their Palm version in the same manner as they would a print book. According to Mike Seagroves, director of business development at Palm Digital Media, the signing process uses a piece of code that is embedded in the Palm Reader running on any Palm OS-based device. The autographs will be permanently tied to the title and visible whenever it is opened. **TSR**