Digital Book Technologies May Reshape All Production

The book is the "fabulous invalid" of the printing industry, its imminent death regularly predicted. The future of printed books is still debated, but it seems less likely that digital technology will kill books than that it will just change how they are produced.

Those arguing that books and book production are dead (or at least dying) cite evidence of lower book readership, fewer book publishers, comparisons of the costs of long offset runs versus shorter digital runs, and the book distribution model. On the other side of the argument are those who maintain that print production is evolving and morphing with digital and online technologies, and that anyone taking advantage of this evolution will be able to use it for any printing application capable of digital transference.

This is not a new controversy—but one that is growing in intensity as traditional book production and distribution strategies are challenged by digital production and online approaches. Books may be the first to see the benefits of these new production and distribution strategies, but others will follow.

Jeff Jarvis, who writes a provocative blog at *Buzzmachine.com*, recently posted a report entitled, "The Book is Dead. Long Live the Book." Jarvis wrote that books are "an outmoded means of communicating information," and then said that they are not alone among media that are faced with "better means of doing what they do."

Affordable Option

But don't tell that to Kathleen McGowan. Last year, she and her husband, Peter, went thousands of dollars into credit card debt to fly from Los Angeles to New York for the Bookkeeper America convention. McGowan had spent several years researching and writing her novel, *The Expected One*, Book One of *The Magdalene Line*, which she subsequently self-published early in 2004 through BookSurge Publishing (www.booksurge.com). Self-publishing is when an author pays, publishes, and markets his book himself. Although so-called "vanity presses"—which usually charge hundreds of dollars or more in up-front fees to cover editing and promotion—have been around a long time, affordable selfpublishing is a relatively new option. In the past, most authors who wanted to publish a book had to submit their work to publishers who routinely rejected 98% of unsolicited manuscripts.

Many self-publishers don't put books on shelves, but on Web pages. Xlibris Trade Publications (trade paperbacks, hardbacks, and short books) are listed on *Amazon.com*, *Borders.com*, and *BarnesandNoble.com*. For sellers, not

putting books on shelves can be a good thing. When books are put on shelves two things happen that can hurt pricing and profits. First, book

distributors or wholesalers get a piece of the pie, and second, books not sold go back to the wholesaler, who can then return them to the publisher for a refund. And, books on bookstore shelves can easily be damaged or stolen.

McGowan's self-published book turned into a Cinderella story when it gained wide readership and then was picked up for traditional publishing by Touchstone, an imprint of Simon & Schuster, as part of a three-book deal for which she received a seven-figure advance. This may be the exception rather than the rule, but it points out that there are new ways of manufacturing and publishing books.

Today, anyone with a computer can use a template-based publishing strategy

with a company such as Lulu.com, a printing and distribution service with headquarters in Morrisville, N.C., which offers print-on-demand publishing (printing at several sites in the U.S., U.K., and Spain) and fulfillment through an online store stocked with its customers' products.

Revenue Triples

The company, which has produced an average 167,000 books per month this year (up from 122,000 in its best month last year), announced in May 2006 that it had revenue of \$1 million, a huge jump from \$300,000 in May 2005. It has 45,000 titles on its website. Lulu.com allows the prospective author to choose a layout

66 Each book costs \$4 to \$7 to produce, but can be printed in runs of a dozen."

from a bunch of available templates on the site and upload the manuscript files. The company "flows" the text into the layout and prints it. Lulu software automatically takes care of the printing and mailing, so the book is never touched by a human hand.

Lulu uses Lightning Source to print many of its books and get them into Amazon and Ingram. Lightning Source provides the backbone for many selfpublishers in the print-on-demand (POD) industry, though BookSurge may become more of an option now that it is owned by Amazon.

Companies such as Lightning Source, Xlibris, iUniverse and dozens of others use new computer equipment to print and bind single book copies that can be finished in minutes. Set-up fees typically range from \$200 to \$700, with the author getting a 15% royalty on any books sold. Each book costs \$4 to \$7 to produce, but can be printed in runs of a dozen, compared to \$3 to \$5 for books produced by a traditional printer in runs of hundreds.

Template based production is a digital and online technology that is used for very specific niches today. For example, let's say you're Pizza Hut and you want all your franchises to create similar pieces with different specials, but maintain brand integrity by creating documents with the right look and feel. Then you can allow individual units to design their ads online from templates and have them printed overnight.

Tip of the Iceberg

We are seeing only the tip of the iceberg of applications and use of templatebased design, with technology pioneers using it for a variety of printed projects and helping clients reduce costs and turnaround times. The Washington State Department of Printing, for example, won a 2005 PODi (Print on Demand Imitative) Award for its use of template-based production. The unit worked with PageFlex to develop a Webto-print application that allowed its 1,023 users from 367 state agencies to access design templates, customize them, and produce business cards, stationery, and brochures.

By using Web-based interactive editing technology, the Department saved more than \$10,000 in just four months without reducing the actual printed product. The savings were derived from less proofing, shipping of proofs, and preflighting. And the Webto-print application reduced turnaround times—for example, the time for obtaining business cards was reduced by 67% over traditional ordering processes.

According to Amy Bamberger, account manager, Printable Technologies, "Printable's core technology allows for the building of custom books, too. In one case, a technology company sends its training teams all over the world to train customers. The trainers go online and select the specific chapters they need and put them in the desired order; they can personalize the covers, add cover graphics, and request a PDF proof. The book is then assembled, the pages numbered, a table of contents created, and the book is printed, bound, and sent to the location. This streamlines the creation and ordering process."

In time, this type of book building capability will make its way into university settings, where instructors will be able to select chapters from different textbooks; upload worksheets, articles, or syllabi; and design their own course pack/textbook pulling in information from many different sources—in essence personalizing their class content.

Companies such as EFI, Creo, and XMPie are among those now offering variable and/or templated workflows for books, as well as for stationery, marketing literature, and advertisements.

Variable online quotes are another new technology employed on many book sites, where you can switch between perfect bound or saddle stitching, black and white or color pages, as well as different page lengths, sizes, and different covers, and compare costs of various configurations. Each site offers varying royalty percentages, depending on its distribution channel (exclusivity or shared distribution).

Order of One

Digital asset management or client file storage capabilities are also helping to fuel on-demand books and template-based printed materials such as manuals. In a self-publishing model, this allows customers to order one book at a time (eliminating inventory) and is useful in other print material scenarios, e.g., a small safety manual printer in Texas uses it to enable its oil rig customers to print safety manuals one at a time. Human Resource departments can also use this technology to print "customized" employee manuals, as needed, for new employees.

The Future of the Book: Doom and Gloom

According to the National Endowment for the Arts (NEA), only 57% of the U.S. population now reads even one book per year—a decline of 4% in the last decade. The number of adult Americans who regularly read literature—novels, short stories, plays, and poetry—dropped from almost 57% in 1982 to a current level of 46.7%, translating into a loss of 20 million potential readers.

The NAPL State of the Industry Report 2006 reported that the number of book printers fell about 25% in just the last seven years, and, according to Dr. Joe Webb's Trendwatch Study #17 (Spring 2005), book publishers last year represented only about 60% of their 1997 numbers. This is due to a large degree to industry consolidation, with 10 publishers now accounting for more than 80% of annual book publishing revenue, and the top 10 book printers accounting for more than half the book manufacturing revenue.

According to the U.S. Census Bureau, there were 557 book printing companies in the U.S. in 2002, down from 690 in 1997, with just over half (51%) of these companies employing fewer than 10 people—although companies with 100 or more employees accounted for 82% of the total value of shipments (\$4.87 billion in 2002, down from \$5.51 billion in 1997). Strategies on Demand, LLC, estimates total book printing industry shipments at \$5.4 billion in 2005, with Visant (a merger of Von Hoffmann and Jostens), RR Donnelley, and Quebecor World as the top three North American printers.

Lost Revenue

Another important issue in the book market has been the increase in returns. In 2003, 34% of hardcover books (excluding children's books) were returned to publishers, compared to 28% in 1993. According to the Association of American Publishers, in 2004 those returns had a wholesale value of \$801 million, up from \$743 million the year before. A recent *Wall Street Journal* article dates the escalation of returns to the 1990s, when book chains became super-stores and expanded the size of their orders. Retail practices from those chains and from discounters have led to an ever-shortening life for best-sellers.

In addition, in anticipation of lost revenue from returns, publishers have raised prices. Between 1985 and 2003, hardcover book prices rose 118%—far outpacing the 71% gain in the Consumer Price Index—and these price increases have, in turn, hurt sales. **TECH TRENDS**

Remote soft proofing was not created specifically for books but works well for them, and on-demand authors can access websites that will send them a PDF proof of what their book will look like or let them preview it online in a page-by-page format.

Cost Cutting

Consumable and maintenance costs determine a large portion of the manufacturing expense for toner-based pages. Since the introduction of color tonerbased devices, we have seen a steady decline in these costs: In the early days of color toner production, the fully burdened cost per page was about 75¢; today, with modest volume, the cost per page can fall to 25¢, and some manufacturers say high-volume work can cut it to 10¢.

This significant reduction in costs coincides with the largest on-demand book publisher offering color ondemand books. Lightning Source pioneered on-demand books, prints more than a million books a month, and can produce a single copy of a hard- or soft-cover book in as little as 12 hours, generating most of its sales from trade book publishers and university presses. After two years of research and development, it will begin full production of color-interior books at its U.S. facility in LaVergne, Tenn., in August, and at its printing facility in the U.K. in 2007.

"The introduction of a genuine printon-demand solution for color books takes Lightning's service offerings to publishers to a new level," said David Taylor, senior vice president of Global Sales. "Single copy color-on-demand is here."

According to Frank Romano, professor emeritus at Rochester Institute of Technology, "The future of books is on-demand printing. There will be more titles than ever before as individuals and families self-publish short runs of books to preserve memories or express themselves for many reasons."

On-Demand Online

For more information on today's broad spectrum of self-publishing options, competitors, and possible collaborators, visit sites such as Books and Tales (www.booksandtales.com/pod), a personal opinion site that lists (and rates) more than 40 print-on-demand publishers. You may also want to contact some of the following on-demand vendors:

- ▶ Book Market, Fairfield, Iowa (www.bookmarket.com).
- ▶ Fox Acre Press, Takoma Park, Md. (www.foxacre.com/bookpage/ *bod-address.htm*).
- ▶ Instantpublisher, Collierville, Tenn., a subsidiary of Fundcraft Publishing Company, the world's largest personalized cookbook publisher (www.instantpublisher.com/).
- ▶ iUniverse, a Barnes and Noble affiliate, Lincoln, Neb. (www.iuniverse.com/).
- ▶ Lulu, Inc, Morrisville, N.C. (www.lulu.com).

The Future of the Book: Alive and Well

The argument that book production and publishing is not only alive and well, but positioned for a rosy (although somewhat different) future, comes from several market researchers. In its study, The Future of Paper, (April 2003), InfoTrends/CAP Ventures found that 87% of the 1,100 respondents read books, with just over 90% saying they read paper-based books, 3% preferring electronic books, and 9% preferring a mix of both. Interestingly, age and household income did not play a role in these preferences.

Para Publishing, Santa Barbara,

> Self Publishing Search

British Columbia

(www.trafford.com).

Calif. (www.parapublishing.com).

(www.selfpublishingsearch.com).

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Howie Fenton, NAPL digital technology

or email hfenton@napl.org.

Trafford Publishing, Victoria,

About 80% of the respondents did not expect the way they read books to change over the next five years. In fact, books were the only type of document where a higher percentage of consumers indicated they expect to utilize less electronic content than more electronic content! Surprisingly, fewer younger people than older people expected to be reading electronic books.

An Interguest study, The Digital Book and Manual Printing Opportunity (Oct. 2005), concluded that the compound annual page growth from manuals will increase 7% and the page growth from books will increase 26% from 2004 to 2009. It noted that fewer than 5% of books and manuals are done in color today, predicting color will grow to 15% over the period because of lower total costs associated with digital color printing.

Favorite Format

In The Future of Paper, InfoTrends/CAP Ventures also cites the book as the type of publication the greatest percentage of people prefer to receive in paper format, and this format is well established in terms of the size, weight, page count, chapters, and quality of the printed page. Perhaps even more importantly, book readers appear to have formed a solid relationship with their printed books, looking forward to lying in bed or sitting in a comfortable chair and reading a good novel, or taking a book with them to read in an airport or doctor's waiting room.

It seems clear, however, that fewer people will be reading the same book—as more choices are available to fill a greater variety of niche preferences. The day of the one-sizefits-all blockbuster seems to be fading and the future of the book seems to comprise more titles and shorter runs. According to a Lulu.com study on The Life Expectancy of Bestsellers, for example, in the 1970s, the bestselling novel on The New York Times averaged 13.9 weeks at #1; in the 1980s, the average dropped to 7.2 weeks; in the 1990s, to 5.5 weeks, and in this decade, to just 3 weeks. Put another way, only 4.4 novels reached #1 each year in the 1970s; now an average 18.2 are at the top annually. At the same time, the number of books published in the U.S. almost doubled between 1993 and 2004, from 104,124 to 190,078, and more than 1,200 "niche-buster" titles are published on Lulu.com each week.