No Major 'Disruptions' At a Powerhouse Graph Expo

By Howie Fenton

There were plenty of technology advancements and developments at Graph Expo '06, but no single spectacular new technology introduction. And that may actually have contributed to the show's overwhelming success.

As October's Graph Expo® 2006 fades into our memories as one of the most successful in years, we must ask ourselves one question: Why was this show—this year—so successful? Was there a slew of new revolutionary products or technologies introduced? Was show activity a factor of the economy or industry business trends? The answer I've come up with may surprise you.

First, let's define what a successful show looks like. It was not hard to hear the praises by exhibitors at the show and afterward. Following a presentation in one of the press manufacturers' booths, I was told, "We sold more in two days of the show than we did the entire Print® '05 show." (And Print '05 was a six-day event, compared to the four days of Graph Expo '06.)

This was not a unique outcome. After the show, several manufacturers wrote press releases such as this one: "Presstek announced over $5 million in customer commitments, including more than one dozen DI presses and over 500 qualified sales leads."

New Products

Some might suggest that the success of the show was tied to new product announcements. In support of that belief, they might cite the large number of exhibitors (625) and first-timers (80). It was one of the largest shows in history and almost half of those displaying on the show floor—some 280 exhibitors—introduced new products.

But an experienced show-goer (like your author) might counter that while many intriguing new products and advanced features were introduced at this year's event, none could truly be categorized as the kind of "revolutionary product" we've seen at past shows.

There have been quite a few of these earth-shaking (or, at least, industry-shaking) advancements introduced over the last two decades, and many industry shows have been promoted, featured, and later remembered in terms of their new product or technology announcements. For example, we still refer to the "Drupa 2004 JDF show," the "IPEX 2002 computer-to-plate (CTP)" show, or the "Drupa 1995 digital press show."

While sales activity was brisk throughout the show floor, the exhibition was not, for example, one in which several manufacturers introduced products in an entirely new category, such as computer-to-plate or JDF. Nonetheless, there were new players, new products, and new refinements to leading technologies, such as digital printing engines (see sidebar).

> "Disruptive technologies cause concern and make buyers hesitant to purchase."

So why was this show so successful? Believe it or not, maybe because there were no "revolutionary products" or "breakthrough technologies." It's possible that such products or technologies are actually "disruptive" in the marketplace and cause concern among buyers, making them more hesitant to purchase. Their absence this year freed buyers to make purchases without angst.

One of the currently hot buzzwords is the concept of "disruptive technology," a term and concept put forth by Harvard Business School Professor Clayton Christensen in his book, *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. He defines a disruptive technology as one that allows a breakthrough increase in performance, delivering capabilities that existing approaches cannot deliver. These new technologies gain an initial foothold among early adopters, continue to improve, and then bump an older, once-better technology into oblivion.

Examples of potentially disruptive technologies include electric or hybrid cars that could ultimately supplant today's industry-standard gasoline-powered vehicles. Similarly, Internet-ordered and digitally printed books could create lower demand for traditional books put on the shelves of brick-and-mortar stores, perhaps even leading to the eventual disappearance of such establishments.

And, although it is not entirely true, some people also say that digital printing in general is a disruptive technology. The argument they put forth is that disruptive technologies start off by targeting small, seemingly unprofitable market segments, but wind up consuming the entire marketplace. Their list includes inkjet printers, Google-based Internet search engines, digital printing, IEEE 802.11 wireless protocols (Wi-Fi), LCD displays, and Linux operating systems.

In this author's opinion, however, digital printing is only a disruptive technology in certain specific markets and applications—such as short-run and targeted direct-mail pieces—within the overall printing industry. At this point, digital printing does not compete with other markets that have longer print runs. It could someday, but we will have to wait for several quantum leaps in technology that would increase the quality and maintain the speed of inkjet printing.

There is a clear connection between disruptive technologies and sales of new equipment. For example, since TIVO or

high definition TVs were introduced, there has been a slow, but steady decline in the sales of VCRs and tradition CRT-based TVs. This is described in the book, *Inside the Tornado: Marketing Strategies from Silicon Valley's Cutting Edge*, by Geoffrey A. Moore, which shows that, typically, there is a small portion of early adoptors of new technology who are not afraid of buying the first BetaMax recording device or Prius.

Over the years, however, the risk of these first-generation technologies, which may eventually be replaced (as Betamax was by VHS), has become clear. There will always be those consumers who want to be the first to have something, regardless of its prospects for longevity or success, but the rest of the herd is more likely to wait until the technology "is perfected" (at least to their degree of comfort) before pulling out a credit card.

And this consumer marketplace scenario is even more pronounced in the business marketplace, where a new technology introduction is often met with even greater skepticism and lower adoption rates. In business, new technologies are often counted on to drive success, and if they fail, the result is not just an inconvenient event such the inability to record a favorite TV show, but could actually put a business in jeopardy, endangering a company, its customer base, and the livelihood of its employees and owners.

Reinforcing Reality

As a result, it's possible, and even likely, that judging new technologies that impact a business creates even more anxiety about adoption and more hesitation to purchase before the buyer is fully confident that the technology has proved itself. We all hear stories about how the early adopters have new technologies blow up in their face, so the mass market will generally wait until a technology evolves from first to second generation and reaches a plateau where breakthroughs have slowed noticeably.

Let's say, hypothetically, that hot new technologies such as JDF, web-to-print and digital and variable-data printing are considered disruptive in the marketplace by printers. If this were true, then this concern could reinforce and fuel other concerns based on the overall economy or the performance of our companies.

Ever since 9/11, our industry has been in a slump. As NAPL Vice President and Chief Economist Andrew Paparozzi has said many times from late 2001 until about a year ago, there have been "fits and starts" of a recovery but they were inconsistent. On the other hand, for about a year, the graphic arts business has been slowly, gradually, and steadily improving.

Why, then, was this year's Graph Expo show so successful? Is the sale of new equipment directly tied to the appearance of revolutionary products, breakthrough technologies, the slowing or expanding economy, or the performance of an individual company? Yes, but unlike conventional wisdom, which suggests that new and better technology drives sales, the theory proposed here is that it is the sense of security that comes with a combination of a decline in new product and technology advancements—along with an increased confidence in the economy and our own business—that drives widespread market acceptance and subsequent sales.

(NAPL Members: Discuss new technology or production issues with your peers in the In Production member forum at www.napl.org.)

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Lots of Advances in 'Hot' Technologies

The product categories that have been creating the most excitement in the last few years are JDF, digital presses, Web-to-print and variable-data software utilities. The use of Web-to-print tools is essential in the futuristic view of fully automated workflows, complete JDF workflows, CIM (computer integrated manufacturing) and human touchless production. In the fully automated workflow, estimates are created online, bids are accepted online, and files flow into production from an online sources.

As a job travels through the print production process, information is added to the file that allows it not only to supply ink key data to the press and set up finishing equipment, but also record time spent on the job and materials used, collecting data that will automate the billing process.

In addition, studies from NAPL's Printing and Economic Research Center (PERC) show that using variable-data printing solutions is one of the best ways to create the value-added services that will be a critical success trend for companies that want to grow amidst our evolving industry. At Graph Expo '06, there were a number of companies showing JDF, Web-to-print and variable-data products, including system-level manufacturers such as Agfa, Screen, Heidelberg, Kodak, Xerox, and EFI, as well as standalone Web-to-print and variable-data product applications such as those from Printable, Press-sense, PageFlex, Saepio and XMPie (recently acquired by Xerox).

New Price Point

Digital presses have been another hot technology over the last few years, and there were plenty of show announcements about advancements in this area: Punch Graphix introduced the faster Xeikon 6000, for example, and Canon unveiled the imagePRESS C7000VP—its 70-ppm entry into the digital color production arena—in a booth that was very busy since the device redefined the price point for this class of machine.

Kodak was demonstrating its NexPress 2500 and its new black-and-white Digimaster EX138. Konica Minolta announced a new 65ppm bizhub PRO C6500. Xerox showed a new DocuColor 5000, which will be replacing the 6060 and a new DocuTech Color Highlight device. (The Xerox booth also showcased an NAPL Custom Publishing variable-data application using the Association's proprietary content. In the application, various excerpts from books in NAPL's Executive Management Library were selected and printed to create an on-demand volume titled, *Integrated Marketing Communications*.)

Although these companies exhibited great products, fully functional, and showing the latest techniques, none introduced a revolutionary or breakthrough concept or implementation.