Digital “Tipping Points” for Print Applications?

Since 1993 when Indigo first introduced their digital press, the printing industry has debated the merits of the technology, which markets it would best serve, which applications would eventually go all digital, and when we would see the demise of conventional printing as we know it. Here it is 17 years later and the sky still hasn’t fallen in—at least not due to this new technology. So PRIMIR members asked the folks at IT Strategies to investigate this marketplace and provide some insights into why the much anticipated tipping point hasn’t occurred, when it might, and where opportunities exist today.

The key objective of the PRIMIR Megatrends in Digital Printing Applications study was straightforward: evaluate major print applications and determine which (if any) will migrate from analog to digital production printing, when and why?

Over the course of eight months IT Strategies conducted extensive research with experts, printers and customers via e-mail surveys and personal interviews—in all, over 900 respondents. The study focused on 12 applications: books, catalogs, direct mail, labels, magazines, manuals, marketing collateral, newspapers, packaging (folding cartons & flexible), and specialty printing such as calendars, photo books, etc.). The research was limited exclusively to production printing, excluding any equipment under $50,000 in acquisition cost akin to desktop printers and copier/MFP devices. Using equivalent letter-size simplex impressions/pages as the lowest common denominator, this study quantifies the page volume and rate of transition from analog to digital production printing for each application.

Tipping point = unstoppable momentum. A surprise finding of the research: few of the studied 12 applications will tip within the time period of the study (by 2014), some have momentum to possibly tip by 2020 or later, but the tipping point for most of the applications is decades away, if at all.

**Figure 1 - Trillions of letter-size, simplex production pages, North America**

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<table>
<thead>
<tr>
<th>Year</th>
<th>Analog Pages</th>
<th>Digital Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>10.06</td>
<td>0.17</td>
</tr>
<tr>
<td>2010</td>
<td>9.56</td>
<td>0.24</td>
</tr>
<tr>
<td>2011</td>
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<td>0.26</td>
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<tr>
<td>2012</td>
<td>8.71</td>
<td>0.28</td>
</tr>
<tr>
<td>2013</td>
<td>8.24</td>
<td>0.30</td>
</tr>
<tr>
<td>2014</td>
<td>0.08</td>
<td>0.33</td>
</tr>
</tbody>
</table>
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...the tipping point for most print applications is decades away."
Contemplating an organization’s purpose and vision is a hard task during times like these when so much energy is being focused on ‘wrestling the alligators’ and fighting the fires at hand; few feel they have the time to step back to consider their future and mission. Yet, as hard as it is to devote resources to such an endeavor, there couldn’t be a better time or a more important time—especially if one believes that the changes occurring within our industry are as much structural as economic. This is exactly why NPES and GASC have begun this important process now.

Two months ago, NPES and GASC began the process for developing a strategic plan that will set us upon a path for the next few years. I actually hesitate to refer to it as a ‘strategic planning process,’ since how we (and others) developed a plan to deal with our industry’s challenges in the past was a far different approach than what we must undertake today. In the past, a SWOT analysis, member surveys, and scenario planning each played an integral role in developing the plan. It seems to me that using yesterday’s tools to address tomorrow’s challenges just won’t produce the best results.

With the help of Seth Kahan, author of the best-selling book, Getting Change Right, we’ve developed a process that will help us “get change right.” Through a combination of focus groups and individual interviews with various constituents at multiple levels we have been drafting an evolving set of assumptions about the future of our industry that will be used, prior to the Board convening, to discuss... debate... adjust...and finally craft our plan for the future. During these early stages of the process as we reach out to even more stakeholders, the assumptions and issues will evolve. The benefit of this approach is that it allows us to include viewpoints from multiple areas of expertise to provide the greatest depth, rather than building a foundation based on a much smaller, more finite group to develop a “plan.”

While our outreach and response has been excellent thus far, there’s always room for more. Now is when I ask for your contributions. In return, I will provide you with regular updates on the assumptions as they evolve through this process—an informative tool that has received contributions from many of our industry’s most respected leaders and thinkers. So please, weigh-in with your insights on the major trends that you believe will most influence the future of our industry. If you want something less abstract to reply to, consider these questions:

- What do you see as the single largest challenge to your business in the future?
- What programs and services offered by NPES excite you?
- What is NPES not providing that we should?
- How would you make GRAPH EXPO/PRINT an even stronger industry event?

These questions are provided only as guides to elicit your thoughts about our future—so please feel free to stray as I am as interested in your ideas and concepts as well as your tactical response to trends.

I am excited about the potential of this process, for not just NPES and GASC, but for the industry. Help me and the Boards respond to the structural changes occurring in our industry so that we can remain relevant and responsive for you. Share your thoughts with me via e-mail: rnappi@npes.org, or reach me by phone: 703/264-7200. Thank you.

“...It seems to me that using yesterday’s tools to address tomorrow’s challenges just won’t produce the best results.”
However, digital printing has made some serious inroads in the non-publishing related applications, especially where there is opportunity to add value through complex variable-data content. Book printing, however, is the one publishing application that has embraced digital printing and will continue to see positive growth.

According to Marco Boer, vice president, IT Strategies, and principal researcher on this study, “A more important finding is that the analog production page volume is shrinking independent of digital production print volume growth. In fact, while digital production printing in North America is forecast for a compound annual growth rate (CAGR) of 11.5% thru 2014, it is from a very small overall volume base (22 billion in 2009 to 33 billion pages in 2014). Despite the relatively small volume, the value of those North American pages, including value-added services is much higher than analog. Analog printing will see a negative CAGR (-5%) for the same period. Digital production printing would have to grow about 200% per year to even approach an overall market tipping point.” (Figure 1)

And, although not a focus of this particular study, let’s not forget that many digital pages are bypassing digital production print entirely and shifting to decentralized self-print in the office in very short runs using copier/MFP or desktop printers.

Digital printing is a very attractive offering for print service providers from a revenue and profit perspective especially in niche applications where the value of the pages is much higher. The research reconfirmed the fact that digital production print thrives with smaller run length, complex (variable data), rapid response jobs. In 2009 in North America those jobs represented 1.5% of production print volume (if one excludes newspaper, catalog, and magazines digital production print it represents a 7% share). (Figure 2)

As production run length per job continues to decrease, digital production print eligible share of jobs will grow proportionally. Figure 3 identifies the CAGR for the applications specifically covered in the study. Established applications for digital printing have lower projected growth rates, while those that are not established may have significant potential and high growth rates. Still, these growth applications currently represent relatively limited volumes. The report also identifies conditions under which digital printing adoption could accelerate even in the high analog volume segments such as magazines and catalogs. Despite that, the threat to analog is not digital printing. The true threat to analog is habit change and pages migrating to electronic displays/readers. A point in fact from the research—print specifiers reported that investment for design and marketing for electronic display is nearly equal for most production applications to investment in production print.

Opportunity abounds for manufacturers serving both analog and digital print markets. The published report will detail threats and opportunities, as well as provide a thorough analysis of findings from both the printer and specifier for each of the 12 applications. The report will be published in mid-fall and available to both NPES and PRIMIR members.
The chart compiled from UCC data provided herein by Equipment Data Associates (EDA), shows up-to-date UCC (see definition below chart) activity for all printing equipment. Both new and used printing equipment filings decreased slightly in July and were slightly below the 7 month average for 2010. The bad news is that there is still no sign that the industry is returning to growth. The good news is that the filings have been relatively flat for the last 12 months except for a spike in December 2009.

Although UCC filings are a combination of new equipment sales, used equipment sales and refinancings of existing placements, they are still a strong indicator of market activity.

This information is extracted directly from EDA’s comprehensive database of nearly 30,000 records for purchasers of printing equipment.

For each of the data points in the table, subscribers to EDA’s market intelligence services can see exactly who purchased the piece of equipment—and the manufacturer and model. NPES member companies that participate in the free NPES Market Data program are eligible for significant discounts on EDA’s services. By combining the critical purchaser information from EDA with the comprehensive market statistics, analysis, and forecasts provided by NPES’ free Market Data program, participating NPES member companies can get a complete picture of the current and anticipated future activity in the marketplace.

For more information, or to join the free NPES Market Data program, contact NPES Assistant Director for Market Data, Rekha Ratnam at phone: 703/264–7200 or e-mail rratnam@npes.org. For specific information about the market intelligence services offered by EDA, contact Mauricio Jurin at phone: 704/845–1099 or e-mail: mjurin@edadata.com.

Market Intelligence News: UCC Filing Update

When the U.S. Senate returns to Washington, D.C. this month its first order of business will be to resume consideration of the Small Business Jobs Act. A less robust version of the legislation, H.R. 5297, passed the House of Representatives in June, but ran into a sharply divided Senate.

Access to credit is a critical issue facing small businesses today, and is a top tier NPES government affairs priority. In that regard, NPES and over 40 other trade associations that comprise the Small Business Access to Credit Coalition are advocating for provisions in the Small Business legislation that continue enhancement of popular Small Business Administration (SBA) loan programs and extend expiring loan guarantees and borrower fee reductions.

Funding of $37.5 million under 2009 stimulus legislation temporarily raised guarantees to 90 percent for SBA 7(a) loans and reduced fees in both the 7(a) and 504 loan programs. Congress later appropriated an additional $125 million to extend these provisions through February 2010. The depletion of these funds has demonstrated their importance and effectiveness for credit-worthy businesses.

SBA 7(a) loans are the most flexible, with financing guaranteed for a variety of general business purposes. They are designed for start-up and existing small businesses, and are delivered through commercial lending institutions. SBA 504 loans provide long-term, fixed-rate financing to acquire fixed assets (such as real estate or equipment) for expansion or modernization.

As a central piece of his 2010 Jobs Plan, President Obama has called for:

• Continued extension of increased 7(a) and 504 loan guarantees and fee reductions; and

• Permanent increases of the maximum loan size of 7(a) loans (from $2 million to $5 million), and of 504 loans (from $1.5 million to $5.5 million).

The SBA has stated that these

Printing Equipment UCC Filings: 2006—2010

A Uniform Commercial Code Form 1 (UCC–1) filing is a financing statement required by law to be filed with the state to show that one party (usually a lender) has a security interest in another party’s (usually a borrower’s) personal property, and most frequently relates to the commercial financing of capital equipment through a lending institution. UCC data is filed everyday throughout the U.S. Each UCC data filing statement has three components: the borrower, the lender, and what the borrower purchased, including make, model and serial number. Once the data is filed, EDA’s more than 50 employees manually review each filing to identify and correctly classify the transactions of printing equipment. What results is a robust database that offers subscribers continually updated information on exactly who is buying or leasing what pieces of equipment.
Access to credit is a critical issue facing small businesses today, and is a top tier NPES government affairs priority.

proposals will help alleviate the “lending gap” that exists between credit-worthy small businesses and the financing that banks are currently making available through conventional loans. And according to the Congressional Budget Office they will have no impact on spending or revenue.

Along with a number of other provisions designed to help small business, the Senate bill would also extend 50 percent first-year bonus depreciation, retroactive to January 1, 2010, for equipment placed-in-service by December 31, 2010. And it would extend and enhance IRC Section 179 expensing for tax years beginning in 2010 and 2011, increasing the amount taxpayers can write-off in the first year from $250,000 to $500,000, and raise the phase-out threshold from $800,000 to $2 million. Neither of these provisions was included in the House-passed legislation.

A focal point of the Senate debate on the bill has been competing amendments that would either modify or repeal the recently enacted mandate that businesses issue IRS 1099 Forms to all vendors that provide them with $600 or more in goods or services in a year.

NPES has joined numerous other business organizations in vigorously opposing the new Form 1099 mandate, and believes that it should be totally repealed, not just legislatively modified or mitigated administratively.

Those who object to this burdensome new prescription for more costly government paperwork can register their opposition at: www.stopform1099.org to send e-mails and make phone calls to their Senators and Representatives. And supporters of increased SBA financing, bonus depreciation and enhanced expensing should contact their Senators and Representative at: http://www.npes.org/government/myrep.html.

For more information contact NPES Government Affairs Director Mark J. Nuzzaco at phone: 703/264-7235, or e-mail: mnuzzaco@npes.org.

Global economic turmoil, industry consolidation, emerging international markets, converging cross-media technologies, soaring costs for raw materials and energy, ‘green’ as the new deliverable, and many other forces are changing our industry. How conversant are YOU with these forces of change and their impact on your bottom line?

Discover how to meet the challenges and benefit from new opportunities they create at the NPES 2010 Annual Conference. This year’s robust agenda is designed to engage you in strategic conversation with industry leaders and peers who are, likewise, forging innovative pathways toward the new model of print.

This year’s program takes on added depth with an up-to-the-minute global economic update and forecast, a provocative perspective on the new rules of marketing and PR, a revealing industry report on mega trends in digital printing, and the world-class level networking activities that members have come to expect from NPES.

You will return home with insights and tactics that will enhance your relations with customers and vendor partners, and be better poised to position your business for success in the months and years ahead.

For complete program information and a registration form visit: www.npes.org
Print Remains Vital to the Economics of Journalism

Responding to an article titled, “Journalism’s Next Revolution,” that appeared in the July 12 edition of Barron’s magazine, NPES Board Member Jochen Meissner rebuts the ‘forecast’ demise of printing on paper with his perspective on the enduring ‘evergreen’ value of print.

The article “Journalism’s Next Revolution” in the July 12 issue of Barron’s asserts that “The iPad could usher in a new era for media…” and that this particular electronic device, unlike others that preceded it, “…signals the long-awaited end of the era of cutting down trees, turning them into paper and printing words on it…”

I admire the ingenuity of Apple, and I may be biased by my position as CEO of a company that manufactures printing presses, but the arguments supporting this conclusion and the more general misconception that there is no future for printed newspapers are flawed.

The presumption that the end of ink on paper is “long-awaited” implies that communicating electronically is automatically and always the “greener” alternative. This fallacy should be challenged more rigorously. The environmental impact of electronic devices flowing to landfills at an accelerating rate and the electricity to power them and keep them fed with data during a relatively short lifespan prior to obsolescence, on the other hand, tends to be overlooked.

The idea that everyone will have an electronic device through which they access journalistic content is intriguing from a theoretical standpoint, but unproven from a practical one. Compatibility, formatting commonality and reliable distribution are significant hurdles.

Simple economics present an even more imposing barrier. The elimination of printed journalism could render that journalism—and its essential role in society—accessible only to those with the means to invest in relatively expensive electronic devices and to reinvest continuously to avoid obsolescence. Large populations in developed countries and even larger ones in developing countries that are unable or unwilling to keep pace with constantly evolving electronic technology would be left out. Advertisers who have historically paid a good portion of the bill for journalism would likely take their money elsewhere in response to this segmentation and a net decline in audience.

In comparison, printed newspapers are easily accessible and increasingly affordable. The article in Barron’s stops tracking developments in newspaper press technology in 1843, so it may surprise some people to know that suppliers have made considerable progress since then. Constant innovation has made the actual printing of newspapers very inexpensive. This has dramatically improved the value proposition, especially for advertisers.

I found it ironic that this article reached me in the printed version of Barron’s and that it concludes by refuting its own initial assertion that the iPad will revolutionize journalism, conceding in the last sentence that “all we need now…is to conceive the new business model.”

Journalism is a valuable product. As with any product, the challenge is to monetize that value so that production and quality are sustainable. There is considerable doubt that a model based on delivering content exclusively through e-readers could accomplish this.

Instead, businesses that produce journalism should strike a balance between the expectations and requirements of their two revenue sources—readers and advertisers—and seek ways to expand both bases. Increasing, not decreasing, the range of cost-effective media and distribution options is a more promising strategy.

Printed newspapers continue to evolve and they remain a proven platform through which readers and advertisers receive value in exchange for supporting journalism. I have no doubt that those qualities will ensure their prominent role in the media mix for many years to come.

Jochen Meissner is president and CEO of Goss International, a leading supplier of press and finishing systems for newspaper, magazine, catalog, direct mail and other printing applications, with major manufacturing centers in Asia, America and Europe.
Nominations are now open for the Harold W. Gegenheimer Awards for Industry Service, which will be presented at the Awards Dinner during the NPES 2010 Annual Conference to be held November 18-20, 2010 in Phoenix, AZ.

Established by the NPES Board of Directors in 1993, these prestigious awards are presented annually to one NPES member company and one individual employed by a member in recognition of their leadership and commitment to building a strong future for the printing and publishing industry and its suppliers.

The awards, named in honor of the former Chairman of Baldwin Technology Company and former President and active leader of NPES, are in recognition of his lifelong commitment to technical innovation, sound management, support for education and research and working for the good of the whole industry beyond the limits of his company's interests.

The awards consist of individual plaques presented to the corporate and individual recipients, plus their names added to commemorative plaques on display at NPES headquarters. Additionally, NPES established two Harold W. Gegenheimer Award scholarships with the National Scholarship Trust Fund, to which $1,000 is given in the name of each recipient each year. These scholarships are offered first to employees, or children of employees, of NPES members who are pursuing studies in graphic communications.

Nominations for the Individual and Corporate Service Awards may be made by the delegate of any NPES member company. For complete award criteria and to download a Nomination Form visit the NPES website at: http://www.npes.org/about/gegenhenawd.html.

Supporting Tomorrow’s Talented Workforce Today

In 2001 NPES’ Board of Directors created an endowed scholarship fund with a contribution of $300,000 to the Print and Graphics Scholarship Foundation to encourage bright young people to plan for careers in the industry and to benefit the employees of NPES member companies.

First consideration in awarding these scholarships is given to employees, or children of employees, of NPES members, enabling them to pursue studies in graphic communications and related fields; additional consideration is given to graduates of PrintED accredited programs.

For consideration, applications must be postmarked by March 1st of each year for high school students and by April 1st of each year for college students. To obtain an application packet and for more information contact PGSF Administrator Bernie Eckert at phone: 412/741-6860 or e-mail: beckert@printing.org.

A variety of other scholarships, ranging from $500 to $1,500 per year, are available for graduating high school students planning to pursue a career in graphic communications at two- or four-year colleges. For more information, contact the Print and Graphics Scholarship Foundation (PGSF) online at: http://www.printing.org/pgsf, phone: 800/910-4283 or e-mail: pgsf@printing.org.

2009 – 2010 Regis J. Delmontagne Scholarship Award Recipients

- Matthew Joers—majoring in graphic communication management at University of Wisconsin-Stout.
- Mary Severson—majoring in graphic communication management at the University of Wisconsin-Stout.
- Hugues Norelus—majoring in graphic arts and printing technology at Central Maine Community College.
- John Warburg—majoring in graphic communication management at Georgia Southern University.
- Vivian Mak—majoring in graphic design/digital media at San Jose State University.
- Christa Ickowsk—majoring in imaging at Western Michigan University.
- Megan Pierick—majoring in graphic arts at Madison Area Technical College.
- Brant Beswick—majoring in graphic communication management at Pennsylvania College of Technology.
- Megan Thomas—majoring in printing management at Bridgemont Community & Technical College.
- Tina Yahr—majoring in printing management at Ferris State University
NPES Vote For Business 2010

The business community will be a key player in engaging citizens across the country this fall in the political process culminating on Election Day, November 2, 2010. And NPES will be a participant in this effort through NPES Vote For Business 2010, a resource supported by the U.S. Chamber of Commerce, aimed at equipping NPES members with the tools necessary to inform and activate employees and customers during this all-important election season.

Following one of the most divided Congresses ever, and in the midst of the most challenging economy ever experienced by most people, the 2010 mid-term elections are the chance for NPES members to weigh-in and support candidates who vote for public policy that encourages economic recovery, jobs and prosperity, and to counteract union plans to spend over $100 million to protect anti-business incumbents.

NPES Vote For Business 2010 will provide easy on-line access to valuable resources to educate, register, and turn out the pro-business/pro-prosperity vote. Look for the web portal to NPES Vote For Business 2010 on the NPES homepage.

For more information contact NPES Government Affairs Director Mark J. Nuzzaco at phone: 703/264-7235, fax: 703-620-0994, or e-mail: mnuzzaco@npes.org.

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