DIGITAL EDITIONS
PREPRESS TECHNOLOGY

When moving from print to Web, give readers what they want

> Guiding readers online with digital replicas. Part 1 of a 2-part series.

By Alexander Gruntsev
Special to Newspapers & Technology

There has been considerable debate over the past decade about the future of newspapers and their potential to not just survive, but also thrive in the new Internet economy.

And while there are still those who believe that print will prevail, publishers understand that the Internet can either be their hope for resurrection or the instrument of their demise, depending upon their embrace.

For some, this revelation is just starting to sink in; for others, it's been their mantra for many years.

Take, for example, Robert D. Ingle, former executive editor of the San Jose (Calif.) Mercury News. In 1990, years before browsers and Google ever existed, Ingle proposed an online service called Mercury Center, aimed at "extending the life and preserving the franchise of the newspaper." Ingle believed that newspapers needed to "give information to readers however they wanted it, integrate the print and online operations, and dream up new forms of advertising."

In the early 1990s, Ingle was the darling of the newspaper and in 1993, the Mercury News launched one of the first integrated newspaper and online products. Within months, other publishers followed suit, including Gannett, Hearst, Times Mirror and the Tribune Co.

Unfortunately, then-owner Knight Ridder and the other early-adopter publishers didn't recognize the need to change their business to adapt to this new economy. Many assumed that new advertising revenues would flock to their coffers if they just put their content online. Little did they realize that content, in and of itself, would not be enough to garner the attention of plugged-in readers and local advertisers.

The good news is that, today, for those who have survived, there are proven strategies, business models and technologies that do work for online newspapers and can turn what appears to be a bleak future into a promising new beginning for the newspaper industry.

The best of both worlds

In transitioning newspapers from print to online, the most successful publishers have discovered that the key to their longevity is to give readers what they want. Sounds simple, but too many publishers offer digital properties that do little to retain reader interest.

Because they were late to the Internet party, many publishers panicked when creating their Web presence and made the mistake of assuming their print format was inappropriate online. Instead of harmonizing the two worlds, they abandoned their widely accepted and proven print format for what they thought online readers would prefer. This was a

mistake and resulted in a proliferation of poorly designed Web sites that were missing premium content and were difficult to navigate. And although newspaper Web sites attracted readers, they couldn't hold their interest for very long. As a result, the hodgepodge of banner and link ads didn't generate the revenue newspaper publishers expected.

Case in point: The New York Times. A typical visitor to nytimes.com spent an average of just under 35 minutes browsing the site in October 2007, which equates to about 68 seconds per day, according to Paul Farhi, writing in the December/January 2008 issue of *American Journalism Review*. As low as that number seems, it's actually about three times longer than the average of the next nine largest newspaper sites, Farhi wrote.

For years, publishers of successful newspapers just couldn't figure out the right formula online. Today, however, more and more publishers recognize that combining the best of both worlds — print and digital — is the optimal way to attract and retain readers. They now offer digital replicas of their printed editions, augmented with Web 2.0 features, and are reaping the rewards of increased circulation.

24785 TREES SAVED

The reasons are simple:

· Digital replicas provide an engaging user experience. Newspaper readers typically love to browse their favorite publications in a specific way. While some start with the front page and move forward section by section, more often you'll see people pull out their favorite section first, such as Sports or Business. However a person browses the paper, they tend to follow a daily pattern and enjoy the predictability of the format. The same is true online; there is nothing easier to browse than a digital replica of a publication. You can literally "flip" through the paper at your leisure and uncover stories and related pictures you weren't expecting to find.

· Digital replicas offer news in context. As you browse a digital edition, you also discover which articles the editor considered hot that day — their visual presentation in the paper being evident by their location, font size, size and other factors.

· Digital replicas stand out from the millions of Internet Web sites and portals. Ironically, it's their traditional format that makes digital newspapers non-traditional on the Web. Digital editions are designed with engagement in mind. They allow readers to bookmark and post stories on blogs, comment on stories and share articles through e-mail. Readers can translate articles on the fly, listen to articles, print articles or crossword puzzles, search and monitor the printed media, access back issues, watch embedded videos and interact with advertisers — all without ever leaving the newspaper.

· Digital replicas share a standard format that retain readers' attention longer. The digital replica format is a standard for navigation and interaction across hundreds of publications, regardless of country or language. Whether you're reading The Washington Post in the United States; The Globe and Mail in Canada; Le Figaro in France; The Times in the U.K., or Kommersant in Russia; the format is the same. And although the evolution of the digital edition will change over time as readers' behaviors and needs evolve, today the interactive digital replica has proven itself as the most engaging and successful format for newspapers and magazines on the Internet. Case in point The Washington Post's digital edition, where the average visit time is more than 7.5 minutes.

· Digital replicas offer multiple revenue opportunities to publishers Digital editions offer the best of both worlds in terms of revenue generation for publishers. Most publishers charge a daily or monthly fee for their digital editions, which supplements their declining print revenues. Because digital editions count as audited paid circulation, they can attract new advertising revenues online as well.

Things to consider

Given that digital editions have been proven to be the optimal format for online newspapers today, what do publishers need to consider when launching a new digital product?

Like any good product manager, a publisher needs to benchmark the industry and learn from others' successes and mistakes. They need to research what works and what doesn't and adopt best practices for digital editions, including the best ways to buy them, build them, market them and monetize them.

There are a number of different business models for digital editions and a few well-established vendors in the market from which publishers can choose. The key is choosing the right vendor and business model for your needs and budget.

Some vendors charge a setup fee before you even get started — sometimes it is for a software license and sometimes it's just an upfront charge. Some vendors also charge a per-page fee (e.g. $3 per page is not unusual), while others charge a monthly fee of at least $1,000.

If you choose the software license approach, expect to pay in the neighborhood of $75,000 to $100,000. Two models follow thereafter: either the vendor

---

The need for XML

In the process of preparing a newspaper or magazine for printing (e.g. as PostScript or PDF), the geometrical properties of its elements are computed and saved but most semantic structure or higher-level modeling of the content is discarded.

For example, software routines will compute glyph coordinates, curve parameters, colors, etc., but discard information about the grouping of characters to make up words, sentences and stories; whether words represent the author, title, caption, date or content; whether they are structured as table of contents, indexes, lists or tables; what diagrams are associated with what stories; and so on.

What an e-paper vendor must do to produce a feature-rich digital edition from the PostScript or PDF files generated by the publisher is to reconstruct all the missing semantic information. This is no trivial task.

Some e-paper vendors use semi-automated tools combined with manual assembly. This approach requires many person-hours of labor to produce one title in about one hour.

A much more efficient way is through a fully automated PDF to XML processing and workflow system — i.e. a learning system that uses artificial intelligence to process every page of the publication multiple times to understand the publication-specific structure and semantics.

XML processing systems must be language-independent and capable of processing very high volumes of publications quickly (e.g. one minute per title).

When choosing an e-paper vendor, publishers should choose one that already has the sophisticated XML processing technology in production and should not rely on manual labor to generate feature-rich digital editions.

—*Alexander Gruntsev*

> Knowing what your readers like and how they read the paper is critical, especially when you are looking to maximize retention and advertising revenues.

DIGITAL EDITIONS, from page 56

runs the digital edition and charges fees to do so; or the publisher has to hire and train staff, and allocate resources, to maintain their digital editions and support their online subscribers.

This is not an insignificant investment, especially considering the costs to update digital editions when new software is released by the vendor, or when changes in Internet technology or reader expectations mandate porting the digital editions to new operating systems, browsers and platforms.

All of these models are lucrative for the vendor, but for the publisher it requires a significant capital investment and represents a high-risk proposition.

The partner approach

Another option, which is now gaining steam, is to partner with a digital edition service provider. Many publishers, including CanWest (The National Post, Vancouver Sun), Itronics Ltd. (The Irish

Times) and Associated Newspapers Ltd. (Daily Mail and Evening Standard) are rejecting vendor-focused business models and choosing instead to work closely with their suppliers.

In partnership with their supplier, publishers enjoy zero upfront investment and zero operational cost, while the service provider offers full hosting, payment acceptance, customer management and technical support.

Digital editions evolve as suppliers update technology on a regular basis and new platforms are supported as they become popular with readers. This partnership approach offers a more affordable solution to publishers who share both the risks and rewards with their digital edition partner through a shared revenue model. —*PT*

Alexander Gruntsev is vice president of business development at NewspaperDirect. He can be reached at grampo@newspaperdirect.com.

INDUSTRY STUDY

Scarborough reports highlight market penetration, audience growth

The Rochester (N.Y.) Democrat & Chronicle ranks No. 1 in local market adult penetration, according to a report from Scarborough Research.

The Scarborough Newspaper Penetration Report said the printed Democrat & Chronicle reached 79 percent of adults in the local market.

Together with its Web site the paper's reach eclipses 81 percent on a weekly basis, the report said.

Measurements

Scarborough measures audience ratings for newspapers and their Web sites across 81 local markets. The February report covered market data collected from August 2006 to September 2007.

The report also found that Washingtonpost.com is the newspaper Web site with the greatest local penetration, reaching about 22 percent of adults in the Washington, D.C., market during a given week.

Gary Meo, Scarborough's senior vice president of print and Internet services, praised both the Democrat & Chronicle and Post for their efforts. "The Democrat & Chronicle has a long tradition of service to its community, and adults in Rochester rely on it for news and information," he said. "Washingtonpost.com is considered one of the industry's premier newspaper Web site and is clearly a much valued resource among D.C. adults."

Following the Democrat & Chronicle were Gannett Wisconsin Newspapers in Green Bay, The Des Moines (Iowa) Register and The Post-Standard in Syracuse, N.Y.

In addition to weekly print and Web site audience information, the report features newspaper audience rankings for designated market areas measures daily and Sunday newspaper penetration data.

New life

Meantime, another Scarborough study reported that newspaper Web site audience is growing and is compensating for some of the declines in print readership.

Data collected from August 2004 to March 2007 for 88 newspapers in the top 50 local markets found that newspaper Web site audience coverage grew 14 percent.

"The Internet has injected new life into an industry that has been battling declining audiences for decades," Meo said of the second study. "There is a new era of opportunity knocking at its door — one that did not exist previously."

Overall, the increase in Web site audience is mitigating print audience losses by 28 percent, the report said.

The Scarborough analysis also found that newspaper Web sites targeting younger, more elusive audiences, particularly the 18-to-34-year-old demographic, increased 21 percent. —*PT*