

T H E

SEYBOLD

R E P O R T

Volume 8, Number 16 • August 28, 2008

New QuarkXPress: Is Eight Enough?

By John Parsons

The tools for arranging words and images on a display — for eventual print or electronic delivery — have been available on desktop computers for more than 20 years. The applications for doing such work are mature, to say the least, and as their developers look for upgrade revenue they've become plagued with "feature bloat." Despite this trend, there is still room for improvement, as Denver-based Quark has shown with its lead product, QuarkXPress. Meanwhile, Joel Breckinridge reports from Japan that QXP Version 8 includes the first significant new Japanese layout features in 15 years. The Japanese print market has changed a lot since then, however, and more and more users have decided to move ahead to PDF-based workflow with InDesign.

Page 7

Ifra's Newspaper of the Future

By L. Carol Christopher

Page 12

The authors of Ifra's "The Future Development of Media and Communication Technology" report say that the key to the future of newspaper publishing is broadband ubiquity. Consistently available, fast Internet connections will provide opportunities for more interactive content and will allow newspapers and content aggregators to provide greater customer satisfaction by knowing customers better and then shaping relevant content for them.

Seybold Report Makes a Wee Online Splash

By Iain Murray, Publisher, THE SEYBOLD REPORT.

The Seybold Report has just released a new online offering, which we hope you will enjoy. Ignoring the promises stated of late, including "global communities," "turn-key service oriented interoperability" and "semantic classification of group knowledge," The Seybold Report has opted to publish... a blog. What we lack in understated appearance we'll make up in value, and we look forward bringing you more news, commentary and event coverage, not to mention all that global, community, semantic and Web 2.0-type stuff. Thanks to the Seybold Editorial team, Infobeans and the Drupal community for their work so far in supporting the site. I am looking forward to hearing your feedback on content and functionality as the Seybold Online Experiment unfolds.

ALSO IN THIS ISSUE:

THE LATEST WORD

TransPromo Summit 2008: The Ultimate in Simplicity

3

Adding color and selling advertising to fill remnant white space in periodic statements that consumers expect to receive seems like a drop-dead winner for all concerned.

The View from Google's Knol

2

Last month, Google went live with a site designed to fill in the holes that Wikipedia — and search in general — leave open by launching Knol.

MEDIA BYTES

15

Bloggers Miffed at Variety;
Union-Tribune May Be on the Block

IN UPCOMING ISSUES:

Esquire's E-Paper Cover:
What Does It Mean?

Finding the Right Social
Software for Publishers

An Overview of the New
Inkjet Technology

Ifra's Newspaper of the Future

By L. Carol Christopher

Assuming newspapers survive the current economic environment, the future is something to look forward to, according to Ifra's third report in its *Where News?* series.

The authors of Ifra's "The Future Development of Media and Communication Technology" report say that the key to the future of newspaper publishing is broadband ubiquity. Consistently available, fast Internet connections will provide opportunities for more interactive content and will allow newspapers and content aggregators to provide greater customer satisfaction by knowing customers better and then shaping relevant content for them. The report was prepared by the German Research Center for Artificial Intelligence (Deutsches Forschungszentrum für künstliche Intelligenz) and its aim is to provide "a picture of the future of media consumption from a technical point of view."

We're already on the road to personalized consumption, but in the future it will be more so, with content being pulled from the network by consumers whenever they choose. There will be so many new services, the authors predict, that the demand on capacity will increase by at least one order of magnitude over the next few years.

With users increasingly expecting to access content any time and from any place and delivered to whatever device they prefer, the authors anticipate that over time, media services — telephony, broadband, television and mobile phone — and their associated functions will be available on every media device, whether it's a mobile telephone, a PC or a television. Consumers will be able to interact with multimedia content without having separate business relations with, for example, the local service provider, Internet service provider or broadcast TV provider. "What he wants and will get in the future is a self-adapting invisible network that regulates itself on the fly to meet his needs of course within the cost constraints chosen," the report predicts.

Invisible Technology

The goal of the networks of the future will be "to make the information technologies disappear and include the information into daily life until it becomes indistinguishable from it" — in other words, to make the interaction rather than the technology central. Mobile phones, the authors believe, are an example of a technology that has become so commonplace that it has virtually disappeared into daily life, much like keys or

wallets. MP3 players or digital cameras also "implement ideas of ubiquitous disappearing computing in the respect that they focus on the information the user wants and not on the device itself, and they are all equipped with massive computation power for image processing, audio coding/decoding, network connection, etc."

Settop boxes, media centers and gaming consoles also have potential for supporting more information technology capabilities, such as data storage, computing, network and peripheral connectivity. These "fixed devices" will be networked, mobile, seamless and scalable, invisibly embedded into the objects of everyday life, intelligent and personalized, and rich in content and visual and multimodal interaction. Fixed terminal devices will grow into "a distributed home media center integrating TV, sound systems, digital VCR, DVD library, electronic newspaper, etc., with perhaps the widest used private electronic user interface — the remote control....The TV in the living room will become the window to the Internet."

The Newspaper of the Future

The potential of newspapers lies not in the static, non-interactive format of today's printed product, but in the welding of the newspaper's "classical strengths" — nonsequential, user-driven access and high portability — with the new possibilities of mobile digital devices.

A context-aware digital newspaper "would know its user's interests and register changes in network and information channels to look for current news." Highly important events would trigger the device to notify the user with an acoustic signal or by fading in a news flash. Information about the activity of the user will be collected not only by interpreting device-specific actions, such as clicking, pushing buttons, etc., but also by using additional sensors. Integrated cameras and image recognition systems could identify the user and recognize a viewing direction typical for reading, and eye-tracker systems would be able to identify the exact article the user is currently reading, the report said.

Electronic newspapers will be thin, flexible and portable, like today's newspapers, and always-connected via mobile Internet. Information will always be up to date in much the same way that newspaper Web sites are beginning to be.

Electronic newspapers will ultimately incorporate different input and output techniques, including speech, handwriting and gesture and also tactile feedback. Applied to a digital newspaper, this could, for instance, require "the use of combined gesture-handwriting interaction," or in a very crowded environment, pointing on the display.

Newspapers and SOA

While software has been historically defined, built and modified by a single vendor company, "software components from different vendors can be combined using open interface definitions." With this service-oriented architecture (SOA), "each service offers a kind of functionality which can be independently accessed by other services....It no longer matters which type of computer, operating system or programming language is used to realize the service." In the publishing world, SOA can affect the way information is published as well as how it is perceived, and will be part of the next generation of content management systems. While SOAs will be virtually transparent to a newsroom user, IT departments and strategic management in the publishing industry will be able to respond more quickly to new demands without having to engage in major IT change projects.

SOAs will change how newspapers collect, edit and redistribute information. They might also benefit newspaper readers by creating a personal information agent that can automatically access "multiple source-spanning information related to individual interests." Google News and RSS feeds are examples today. "Using SOA as a framework, each information source can be seen as a service, whether this is a commercial online offering or a private Web log (blog). ...Using advanced text description languages such as those presented in the context of the semantic Web (see below), it will become possible to extract information from different online sources and unite them within separate interfaces, allowing for a considerably higher degree of customer adaptability in information consumption. Today, the combination of RSS feeds from different sources is the first step into the service-oriented direction."

Newspapers and Content Management

The report predicts that content management will not only be the domain of newspapers, but also of their readers. Functionality will be available to retrieve information from various sources and unify the content into one consistent layout. But the incoming information will be personalized in two different ways:

- A customer defines the content he wishes to receive by subscribing to defined sections of online sources and receives the frequently updated content.
- A customer does not subscribe to a specific source but wants up-to-date information regarding his interests regardless of the source and is willing to pay for it.

There are two ways the content could be filtered. The reader creates a basic user profile by specifying

general interests and from there, the machine begins to learn based on the ongoing interaction between the user and system. The software becomes better the more it is used. Alternatively, content could be filtered based on what the user has read in the past or by the newspaper publisher or information broker who evaluates the relevance of articles for specific users.

Newspapers and Search Engines

Search engines need to provide publishers and readers with timely access to both background information and previously published articles. The authors anticipate that unpublished information, such as the name and contact information for sources, interview transcripts, audio recordings, video and multimedia files used as a basis for an article, will have to be accessible as well. (However, given newspapers' proclivity for protecting notes and sources, it is not clear that newspapers will want all of these to be made available for search by the general public.)

Document management systems allow for the storage of mixed types of documents, while knowledge management describes storage and retrieval of business knowledge: the handling of all kinds of reusable information in a business environment. The success of these systems for search will depend on meta-tagging or alternatively, a fixed keyword list. The recent introduction of semantic tagging of documents allows for tagging at the level of the paragraph, sentence or even term, which gears search engines toward natural language processing. Ideally, the user asks a question and receives an answer with the option to manually drill down into the content. (This is possible now in "closed domains using knowledge structures but not in the context of unrestricted search topics.")

Another scenario for search engines is how material from "untrusted sources" will be handled, since "the risk of publishing either non-original or even intentionally faked material exists." Universities already use search engines to detect full or partial plagiarism in student papers. These search engines are limited to materials that have been electronically published in a text format and so would not address copyrighted images, for example. The authors believe that this is a next step.

Newspapers and Web 2.0

Web 2.0, or the culture of participation through blogs, Web feeds and tagging, has already begun to shape the future of the newspaper. According to the report, for the newspaper industry the culture of participation has largely meant relying on readers as sources of information, whose content must be distinguished from staff-produced content. The report suggests that user-generated material be rated. Contributors who have been ranked above a certain value would be directly published without moderation while those below would first be vetted before publication, initially by

staff. Eventually readers would become involved, “thus potentially increasing customer loyalty.”

Newspapers and the Semantic Web

The semantic Web is the concept that digital material be not only machine-readable, but machine-understandable through “content-oriented description...with standardized vocabularies....The result is the transformation from a Web of links to a Web of meaning.”

As described here, “The core technology elements for the semantic Web are markup languages with a formal syntax and semantics that provide a standardized concept for describing digital contents in the form of an ontology,” or a vocabulary that, for example, is the basis for a semantic description of Web pages. With a given set of logic and rules, systems would be able to draw inferences and come up with decisions.

A user could, for example, request that the system find current news about the leader of Great Britain and the system would rely on an inference rule that this would mean either the queen or the prime minister. Both readings would be used to search for representative documents. “The semantic Web does not assert that all statements found on the Web are true. But all statements on the Web occur in some context and each application needs to evaluate the trustworthiness with the help of the context,” the report says.

The authors suggest that the semantic Web approach based on formal semantics for text and media objects can solve the interoperability problem between standards with regard to the vocabulary and structures they use and even make all these standards interoperable with the rest of the Web. A news aggregation service, for example, would be able to merge multilingual information sources easily and enrich the story by combining story-related media such as photos or videos.

The challenges the authors foresee involve structuring and managing user-generated annotation data and the extension of the coverage of semantic technologies to the so-called deep Web: the thousands of databases and archives of partly analog data that are currently beyond the reach of search engine crawlers. The deep Web of the publishing industry, for example, holds an enormous potential of high-quality text and multimedia information that are worth making accessible for new kinds of services.

Newspapers and DRM

The authors distinguish between managing digital rights and controlling and enforcing of them, with a focus on digital rights management systems (DRMS). These systems are an aggregation of technical measures that protect content by using, for example, encryption and decoding, digital fingerprints or watermarks, or rights expression language (REL) such as ACAP (the Automated Content Access Protocol).

RELs in general determine the rights that are associated with a license for special content that is pre-

defined in advance. Bi-directional RELs allow a consumer to purchase content based on other conditions than those predefined by an REL, allowing the rights holder to change the license or issue a new one, for example. The authors anticipate the need to prevent abuse or non-authorized use, since “the protection of the rights holder’s rights is not in the interest of the consumer” and recommend that the content never reaches the domain of the user. Digital watermarks (either visible or invisible) can make content unattractive for reuse or flag it as illegally distributed. Digital fingerprints, for example, would identify the original buyer, who could be punished for reuse of the content.

Networks Today and Tomorrow

The road to the future will be paved using an amalgam of today’s delivery networks. It will include broadband ubiquity, networked devices and personalized consumption. For publishers, having a general knowledge of delivery networks will be as important as understanding how a printing press or backshop works.

Eventually, today’s complex and problematic 3G networks will be replaced by 4G systems that will provide “a fully seamless interworking of wireless services to realize an ‘always best connected’ experience,” achieving “sustained improvement of quality of service and the capacity of the overall data network,” although the shift from today’s environment to the new scenario will occur “only gradually.”

The evolution to the future will involve network access (going from dedicated devices to any-device access), software applications, TV and video (shifting from broadcast to on-demand services), infrastructure (with movement from proprietary to open systems) and network architecture (with movement from complex to simple approaches). Further, the changes will be economically significant because they mean that “network ownership will no longer guarantee a market power position.”

Another shift is taking place already from the terrestrial to expensive satellite technologies, which provide coverage to more remote areas. An anticipated alternative to these is HAP (high altitude platform): unmanned airships or planes that will fly in the stratosphere and provide a platform for communications. HAP will provide comparably wide coverage and elevation at a lower cost. Unlike satellites, these drones can be returned to the ground for maintenance and upgrades.

Conclusion

The authors admit that making predictions for the long term is difficult because “the success or failure of newly developed business models will force the technological development into directions not to be anticipated today.” Overall, however, the report provides an interesting glimpse at the possible range of technologies that are likely to affect the newspaper industry in the foreseeable future.

TSR

Copyright of Seybold Report: Analyzing Publishing Technologies is the property of Seybold Publications Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.