GPO's 'Future Digital System'

Article courtesy of in-Plant Graphics (www.ipgonline.com)

This excerpt from a speech by Public Printer Bruce James about the GPO's strategy for collecting, handling and disseminating digital information offers in-plants a look at their own futures as keepers and producers of their organization's information. (Speech delivered September 26, 2006, at Rochester Institute of Technology. To watch a portion of it, click here. To read the full text of this presentation, click here.)

By Bruce James

Making government information available to the public is the core of GPO's mission: "Keeping America Informed." This critically important function sustains one of the keystones of our republic: an informed and enlightened citizenry. No one will dispute the fact that government information is crucial to informed public decision making and the achievement of our national goals.

Throughout most of its history, GPO guaranteed public access to government information through printing. Even today we continue to print the majority of our most important documents. But in just the past few years, there have been revolutionary changes in the way the public accesses and uses government information.

New and continuously evolving strategies of communications now are not only possible but have become mainstream practices, changing how America is kept informed. This has put GPO at the very epicenter of change in the ways people create and use information to communicate, remain informed, research a topic and preserve a record.

Today, for a large and growing share of government documents, there is no longer a requirement for typesetting, printing or binding, and there is no tangible document to make its way to library shelves or otherwise be preserved for the future. A document author begins the process by digitally recording a manuscript on a personal computer. By making this document available through a Web portal there often is no need for an original printing of multiple copies.

Such documents are said to be "born digital and published to the Web." So pervasive and common has this publishing strategy become that we estimate that as many as 50 percent of all Federal government documents are now born digital, published to the Web, and will never be printed by the GPO.

Transforming the GPO

This trend was well established when I took office, and therein lay the challenge for GPO. What the White House asked me to

The **e**review

The *eReview* is a monthly publication of the Printing Industry Center at RIT for registered Affiliate companies. Articles are also published in the quarterly printed publication *PrintReview*.

Subscriptions

You are receiving this newsletter because you registered as an Affiliate of the Printing Industry Center.

▶ unsubscribe

Contact the Center

Co-Directors (email):
Frank Cost and Pat Sorce

do was move GPO out of a 19th-century-based printing mentality and into the 21st century digital world. Throughout my life I have used technology to enhance the ability to get information into the hands of people, and this was a task I was up to taking on.

Transforming GPO to a modern digital platform would involve a number of fundamental changes, however.

The digital age itself presents its own unique set of issues and concerns, and carrying out GPO's transformation would require us to develop solutions to the problems that digital information presents. For example:

- Printed books can last hundreds of years, but how do we ensure that digital information will be easily accessible even five years from now?

- With so many publishing solutions now available, how do we create a common set of standards for digital documents?

- What's the best way to ensure the security of digital information?

- How do we deal with the multiple versions of official documents in a digital environment? How do we determine which version deserves to be preserved for the future?

- What's the best way to go about making legacy information content—the content now stored in millions of printed government documents housed in library and agency collections nationwide—digitally available?

- Now that information content is easily separated from the form and format in which it can be delivered, what kind of system can be developed that most efficiently permits content to be repurposed?

- In the vastly decentralized information marketplace that the government has become, how do we create a system for capturing that information for convenient and effective public access?

To be sure, GPO already had considerable experience with electronic technology when I arrived. The agency had successfully navigated the transition from hot metal to computerized typesetting in the 1960s and 1970s. And in the early 1990s GPO set up one of the government's earliest and most comprehensive Web sites, GPO Access.

But subsequently the agency fell behind the pace of digital technology innovation. This was due to a variety of factors. For example, there was a period in which GPO's future status was being debated intensely, which led to a decrease in investments pending the resolution of that question.

But there was also the absence of a comprehensive vision of GPO's future in a digital environment.

Fundamentally, GPO hadn't been organized around a digital platform. The agency didn't have a good concept of what that digital platform would look like, and as a result the questions and

Communications Manager (email):
Ashley Waltz
(Web site, publications, general info)

Mailing Address:
Printing Industry Center at RIT
College of Imaging Arts and Sciences
Rochester Institute of Technology
55 Lomb Memorial Drive
Rochester, NY 14623

Phone: (585) 475-2733
Fax: (585) 475-7279

About the Center

Dedicated to the study of major business environment influences in the printing industry precipitated by new technologies and societal changes, the Printing Industry Center at RIT addresses the concerns of the printing industry through educational outreach and research initiatives.

Support for the Center comes from:

Sloan Foundation
Rochester Institute of Technology

Adobe
Eastman Kodak Company
Heidelberg
HP
NewPage Corporation
NPES
Standard Register
U.S. Government Printing Office
Vertis
VIGC
Xerox Corporation

challenges posed by the digital transformation were left only partly resolved. The print-centric culture of the agency, which had served printing well, was not well suited to moving the agency forward in the digital era. Even where GPO's digital activities were concerned, we were putting data in typesetting codes and formatting the data as replicas of the printed page.

Creating a New Digital Platform

The core of our future operations will revolve around a GPO-developed Future Digital System—which we're currently calling FDsys—that is being designed to organize, manage and output authenticated content for any purpose. This system will ingest into a central repository all the public information of the government and reduce that information to a common denominator, which means having a uniform character set and coding structure for data. This system will preserve the content independent of specific hardware or software so that it can be migrated forward for the benefit of future generations.

Eventually, all known Federal documents, whether printed or born digital, produced both prospectively and retrospectively, will be cataloged and authenticated and then entered into the system according to GPO metadata and document creation standards.

Content may include text and associated graphics, video and sound, and other requirements that may come to be. Content, which may be stored at various quality levels, will be available for Web searching and Internet viewing, downloading and printing, and as document masters for conventional and demand printing, or other digital requirements.

This strategic goal took a significant leap forward with the award of a contract to Harris Corp. for master integrator services to guide the planning and acquisition of the FDsys component system. This partnership represents the culmination of careful analysis and planning to specify our system requirements, and it marks a major milestone as we forge ahead to develop a robust and flexible digital platform that will provide permanent public access to information from all three branches of the Federal government.

Security and Intelligent Documents

Security and intelligent documents—including passports, Federal identification cards and potentially other documents—will be a growing and increasingly important business line for GPO, perhaps as much as 50 percent of GPO's business in the future. There are new statutory requirements for these documents in the recently-passed legislation that GPO is working to implement. And from our standpoint, there are certain digital technology synergies that can be brought to bear to improve the security of these important documents.

We created a new business line for Security and Intelligent Documents in 2005 that consolidates our long-standing expertise in security documents.

The major product of this unit, of course, is U.S. passports, which by law must now include computer chips containing identifying information. We've been working on the e-passport project for better than two years, involving testing and creating the new production process for these documents. Along the way we've

found that the same skills used for this product could be used to help Federal agencies meet other security document requirements, such as the production of new Federal ID badges that must also contain computer chips. As a result, we're developing a new capability for this product line.

Thanks to the hard work of all our employees, and with key support from our oversight and appropriation committees in Congress, we've managed to turn GPO in a new direction, one that promises a positive future for our great agency for many years to come.

Our digital platform, once it's relocated and fully equipped with the new technology, will provide the physical image that reflects GPO's full participation in the digital world.

Download the full speech from: http://www.gpo.gov /news/speeches/PP_RITSpeech.pdf

Visit the In-Plant Graphics website: http://www.ipgonline.com/

Research publications of the Center are available at: http://print.rit.edu/research/

BACK TO TOP

e review