



Let's talk e-discovery

Learn how to implement legal policies using key technologies

Technology 07 Leadership Series presented by GTSI & FCW

- OUR SITES CURRENT ISSUE SPOTLIGHT ON SUBSCRIBE BLOGS E-SEMINARS INDUSTRY INSIGHTS EVENTS JOBS FAQ

SEARCH FCW

FCW.COM STORY

Print | Email | Comment | Subscribe

Advanced Search

RESOURCE CENTER

White papers, case studies, vendor information, webinars

NEWS TOPICS

- Business BPM CXOs Columns Columnists Defense E-Government Enterprise Architecture Funding Homeland Security Health IT IPv6 LOB Management Procurement Privacy Policy Program Management State and Local Security Technology Telework Workforce

More Topics



Subscribe Now!

Table of Contents



A paperless manifesto: 7 proposals

By Heather B. Hayes Published on October 8, 2007

Editor's note: This story was updated at 5:15 p.m. Oct. 10. Please go to Corrections & Clarifications to see what has changed.

JoAnne Gray is an assistant administrative officer who used to spend little time at her desk at the Anne Arundel County Council building in Annapolis, Md. Instead, she was usually in the council building's basement researching legislative history at a resident's request, a chore that involved digging through boxes of old bills, resolutions, amendments and backup documentation.

However, an initiative to digitize those 1 million-plus pages of paper records has ended Gray's frequent expeditions to the basement. "It's cut down tremendously on the time it takes me to research something," she said. "And I don't have to physically copy and mail or fax my findings. I can just e-mail it."

That single automation project was simple and affected only the jobs of two people. But it soon proved to be an effective first step in Anne Arundel's countywide initiative to become a paperless government.

"We're taking baby steps, starting simple and building from there by adding a little more complexity with each new project," said Jack Martin, Anne Arundel County's assistant information technology officer. Other projects are now under way at the Fire Marshall's Office and the Permits Office, he said. "It's a work in progress, but we are, in fact, making progress."

Ever since IT vendors and consultants began touting the vision of a paperless office, overworked, paper-burdened and resource-strapped state and local government officials have dreamed about the possibilities of junking file cabinets, getting rid of interoffice mail routes and reinventing clunky business processes as models of workflow efficiency.

Many agencies have moved forward to achieve their paperless goals, but others still wait on the sidelines. Agencies that decide to go ahead now can benefit from the experience of earlier adopters. Here are some tips from those early adopters.

1. Imagine a better way Converting a paper-based process to an electronic one should involve more

Comment Click here to comment on this article

Related story links "Next up, e-discovery challenges" "Treasury seeks to automate invoice workflow process"

Newsletters You might also be interested in these FCW newsletters: Daily E-government To learn more, click here.

Keep tech folks in the loop Some document management solutions are easy enough to implement that go-getter types sidestep the bureaucracy and deploy the systems themselves without getting the technology staff involved. However, keeping the information technology shop in the loop is good advice.

"We may not necessarily have all the answers, but we do know the right questions to ask," said Jack Martin, assistant IT officer for Anne Arundel County, Md.

Martin said it is often tempting for an agency or office to forge ahead on a small digitization project that doesn't appear to affect anyone else. However, when that happens, "things don't get built to any standards, and then they've got a stand-alone system that can't grow or interact with other departments."

An IT department can determine standards and naming conventions for paperless initiatives, and establish network and server requirements to accommodate future expansion and technology changes.

"Mostly we want to set a standard so that everybody is using the same input, storage,

Latest News

- FCW GCN Washtech The most recent management and policy news from FCW.com Updated homeland security strategy emphasizes resilience DHS offers baseline for U.S. IT security skills DHS exploring integration of ID card standards FISMA forces business leaders to pay attention New wiki targets federal IT community The latest technology news from GCN.com VA expands electronic invoicing Web site guidelines Dell's on-demand desktop streaming Microsoft releases Excel patch Mich. school district washes the Web The latest industry news from WashingtonTechnology.com DRS to buttress Pentagon security SAP makes a grab for Business Objects New homeland security strategy underscores resilience McAfee makes all-cash deal for Safeboot Northrop wins law enforcement exchange renewal

ADVERTISEMENT

Catch up on the latest news and read the current issue.



Spice up your day with insight and observations about the IT community.

WE GET LETTERS

FCW.com wants to hear from you.

SEND a letter to the editor.

READER SERVICES

- About Us
- Contact Us
- Editorial Calendar
- Print Subscriptions
- Newsletters
- Advertise
- Media Kit

than simply automating the existing routine step for step. Automating the flow of information provides an opportunity to cut unnecessary steps, increase efficiency and improve interaction among departments.

For that reason, the earliest steps of an automation project can be among the most important, several sources said. At this stage, planners should thoroughly identify and analyze the organization's existing business processes, said Scott Swidersky, director of information systems at Quality Associates, a systems integrator that helped Anne Arundel County and other counties with paperless projects.

With that objective business analysis in hand, planners can then assess the feasibility of various workflow alternatives and determine the requirements for a particular technology solution. For example, Howard County, Md., officials had consultants from Quality Associates interview employees in every department to get a sense of how they interacted with one another, the processes they shared and the business rules they followed.

"It helps you understand what your departments are doing currently and what they could be doing in the future," Swidersky said. "Just the process of collecting all of that information and kind of mapping out the landscape puts you in a better place to make decisions about what your requirements really are, as opposed to just saying we should pick product XYZ because we've heard of it and it sounds good."

The information collected also enables governments to set up an overall long-term plan, even if they don't have the inclination or budget to undertake a paperless project immediately or all at once, said Steve O'Gwin, a systems analyst for Tulsa, Okla. With an overall plan in place, organizations can break down the larger implementation plan into manageable phases, O'Gwin said. "That way you have a road map that you can pick up at any time."

2. Pick the right partner

Another critical early-stage step is picking an integrator or vendor to help implement the initiative. Although selection criteria should involve price, technology and skill, Gray also recommends choosing a contractor who can work with users at their level of technical understanding and ask the right questions about process and job requirements.

Gray recalled that when she and her supervisor first began looking into digitizing paper records, they thought they wanted only an archival system. When they began evaluating vendors, however, Quality Associates officials suggested that they think in broader terms about possible solutions. They ended up adding a searchable database to their system, a move that changed the nature of Gray's job for the better. "For us, it was really a learning process, and they asked us a lot of questions to get us thinking about what was possible and to get clarity on

retrieval, archiving and workflow," Martin said. "Once these workflows grow to where we need to bring in, say, the law office or purchasing, we just link them in."

— Heather B. Hayes

Avoid recordkeeping woes

Converting paper-based records and business processes to electronic formats can save money and improve efficiency immediately, but those conversion projects usually disrupt established procedures for long-term recordkeeping.

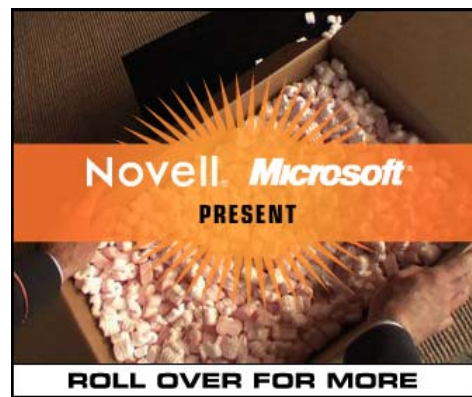
The National Association of State Chief Information Officers advises its members to be proactive in the proper management of electronic records and digital preservation to prevent automation efforts from causing more problems than they solve.

Eric Sweden, NASCIO's enterprise architect and author of a three-part series on electronic records management and digital preservation, said the increase in data and process consolidation and shared services is driving a need for more centralized records management routines. Another major catalyst is recent changes in federal rules of civil procedures that have made nearly every possible electronic record subject to discovery in a lawsuit, including e-mail, voice mail, text messages and handheld device communications.

"For these kinds of challenges, we've got to have both tactical and long-term strategies for managing all of this information," Sweden said. "CIOs have the big-picture perspective and the skills that are required to do that effectively."

NASCIO advised CIOs to:

- Understand their state's legal framework, institutional roles, responsibilities, authorities and existing services for managing electronic records.
- Be a champion of digital capabilities for managing and preserving public records.
- Develop collaborative relationships with those responsible for records management, archiving, library



1/8 G2 Ultrium 448
Includes 8 LTO-2 tapes

\$4769.99
Smart Buy

Learn More ▶

redhat | JBoss
a division of Red Hat

SOA REDEFINED.
SIMPLE. OPEN. AFFORDABLE.

▶ See what you can save with JBoss Middleware.

what we really needed," she said.

In some instances, sticking with a familiar application is the right decision when it comes to selecting a partner or solution. That approach worked well for some paperless projects that Illinois officials undertook, said John Rigg, manager of workflow automation for the state.

Illinois officials chose Adobe's Acrobat and Web forms technology for several projects, including automating a weekly federal reporting function for its community-based Temporary Assistance to Needy Family (TANF) providers.

services and digital preservation.

- Establish standards for project and capital investment proposals.
- Work with state centers for records management and digital preservation to establish goals, objectives and strategies.

— Heather B. Hayes

Adobe's Acrobat "was something that our users were used to and felt comfortable with," Rigg said. "We've found that it goes a long way towards easing a lot of your user acceptance and training issues."

3. Think big, but start small

The best way to achieve a paperless organization is to start with projects that provide the best return on investment, said Mike Wenzel, vice president of Americas sales and marketing at Esker, a document management company. "Simple implementations and immediate results facilitate organizational support for future expansion," he said.

That has certainly been the case for Tulsa, which started with a desktop faxing application that enables employees department-wide to fax mainframe-created purchase orders directly to their business partners. Before, everything was done by mail.

"Now they're faxed automatically every night, and there's no human intervention and no paper," O'Gwin said. The city is now working to implement a workflow application that will eliminate paper flow between departments, he said.

Wenzel agreed that internal forms, such as purchase requisitions, vacation requests, and expense and time sheets, are an excellent starting place for automation efforts. Those forms can be easily automated with Web forms and simple workflow to provide better visibility and faster processing. Processes "can be automated one at a time to minimize risks and change management," Wenzel said.

Even the smallest steps in a paperless initiative count if they move the organization toward greater efficiency. In Wichita, Kan., the Purchasing Department started its journey toward paperless operations by networking its multifunction printers, which have built-in scanners, and using eCopy document management software to digitize its paper-based contracts.

That move hasn't completely automated the workflow process. Employees still route contracts first to a user's e-mail inbox. Then someone has to forward the contract image to a laser fische machine for permanent storage. "Right now, it's really a two-step process, a workaroud of sorts," said Melinda Walker, Wichita's purchasing manager. "But we're working on the next phase, which is to have one-step scanning and a workflow process."

4. The more, the merrier

There can be many people involved in a typical government business process. Line-of-business managers, budget directors and front-line employees from multiple departments can each have different perspectives on the same process. Everyone can be a contributor to the project's planning and implementation, said Renee Thomas, director of field marketing at Esker.

"You really need to dig down deep, first to the process supervisor and then to the actual user, the person who will be physically using the system," Thomas said. "This group is often overlooked, but they are often the people who can offer the best ideas for improvements beyond merely automating the paper process."

5. Show, don't tell

Training and change management coaching are as important to the overall project and implementation plan as any technical requirements. "Giving up paper is often harder than it sounds for end-users," Wenzel said. "Without proper training and coaching, users will sometimes simply print electronic documents to maintain previous habits, thus eliminating the benefits of paperless automation."

Getting employees involved early can also smooth user acceptance of the new system. When working with state and local agencies, Esker holds project kickoff meetings for employees who will be using the system. Those

meetings include demonstrations of the technology and paperless processes.

In Tulsa, O'Gwin takes the most influential users with him to on-site visits so they can see the paperless system in action and ask questions of the people who have begun using it. "We can talk about and describe it all day, but there's nothing like actually being able to really show the benefits to them," he said. "It really makes a difference in their understanding of how it can help on a day-to-day basis."

6. Hire a specialist

Just as networks are important enough to warrant hiring a network administrator, government executives interested in implementing agencywide paperless solutions should weigh the benefits of having a dedicated in-house document management specialist.

Howard County and Anne Arundel County have created positions for a person to oversee operational issues and plan for future enhancements and expanded deployments in new areas.

"That is really forward thinking on their part, because it helps create a culture that supports a true document management environment," Swidersky said. "Plus it provides reassurance to the end user that they're on the right course, because they've got a member of their direct team who is involved in the planning sessions, who is working with the vendor and relaying requirements information and who is making recommendations along the way."

7. Just do it

Sometimes the best course of action is to carefully pick a project and then jump in, Rigg said. With that mind-set, Illinois officials were able to implement a Web-based application for its TANF project in four weeks. During the first week after project managers completed the system, it received more than 18,000 hits.

"There's nothing magical about what we did," Rigg said. "We just did our homework and then got it up and running, figuring that any bugs would, in time, take care of themselves."

The results include increased data accuracy; less time and cost involved in filling out, mailing and processing paper forms; and decreased resolution time, Rigg said. "We're on to picking out our next project now," he added. "Our hope is to eventually make everything paperless. Just the sheer volume of filing cabinets that would go away over time and the number of trees we would save is staggering to think about."

Hayes is a freelance writer based in Stuarts Draft, Va. She can be reached at hbhayes@cfw.com.

UPCOMING EVENTS
E-Gov Institute: The 5th Annual Program Management Summit October 10-11, 2007
GIT Rockin' October 18, 2007
E-Gov Institute: Security 2007 - The 8th Security Conference & Exhibition November 7 - 8, 2007

TOP JOBS ON WASHINGTONPOST.COM

[Software Engineer](#) / CONSTELLATION SOFTWARE ENGINEERING, CORP



[Technical Security \(IA\) Manager](#) / ARTEL, INC.

[Java Developer](#) / CONSTELLATION SOFTWARE ENGINEERING, CORP

[VB/VB.NET Developer](#) / SYMBIONICS, INC.

[Database Developer](#) / CONSTELLATION SOFTWARE ENGINEERING, CORP

[All Top Jobs](#)

	<h3>Have what it takes?</h3> <p>Walk away from the RFID Academy with the building blocks for success.</p>	 <p><i>Resources for RFID success</i></p> <p><small>A Division of Allen Technology Corporation</small></p>
---	---	---

Marketplace: [Products and Services from our sponsors](#)

[Moving your COBOL to SOA and Web Services](#)

Micro Focus software solutions enable government agencies to assess, manage and modernize critical applications while reducing cost, gaining mission agility and flexibility. Download a white paper [Extending COBOL to SOA, Web Services and Beyond](#)

[Serial Attached SCSI RAID to 45 Terabytes](#)

SecurStor Astra for High Availability RAID 6 protected data storage using SAS and/or SATA drives.

[Stay Out of the Headlines! Mobile Data Protection](#)

Lost and stolen mobile devices demand a new approach to information asset protection. New mobile data security approach fills security gaps of file-based products, avoids management, recovery, data corruption and productivity issues of FDE.