Moving Away From the Paper Mess
Save Money and Time by Going Paperless
Moving Away From the Paper Mess

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AIIM Best Practice - Going Paperless

For many years we have heard the mantra of going paperless. Business organizations of all sizes and industries of all types have sought to minimize their paper use and reduce costs and carbon footprint while at the same time increasing operating efficiencies and profitability. This is no small task and it requires not only the proper use of technology but also change. Change in our Ways of Working (WoW) and change in our corporate culture. It requires change in the way we think. This is perhaps the hardest challenge of all. Going paperless and the change required to get there.

The technology is here but is your corporate culture ready for it? That is the true question and the reason we have put this simple guide together for you. We have identified a few simple things you can do today that will help you move toward a paperless business operation and help the world go paperless. Help us to improve this list of tips.

Add your tips, comment on these, and modify them. Let’s make this practice into a ‘best’ practice together!

1. Use document scanners to convert paper documents to electronic format through document scanning then shred them – if allowed by law and industry – and send the shredded paper for recycling
2. Do not print or copy any documents unless absolutely required. Send all documents via e-mail or electronic fax as the preferred method to your customers.
3. If you do have to print, be sure to spell/grammar check before you print to eliminate reprinting. Also, try saving or printing to PDF instead.
4. Use Web 2.0 technologies like wikis and blogs for internal communication and collaboration
5. Use single source repositories and shared digital workspaces to develop, manage and refine documents like contracts, marketing materials and any other type requiring review and refinement
6. Use web interfaces and forms for online applications and order placement, replace paper forms with eForms
7. Sign up for e-bill delivery or online billing from your suppliers rather than paper statements, and pay your bills electronically
8. Develop and deliver all promotional materials in electronic form rather than paper using links and downloads for online and thumb drives or CD media at tradeshows and seminars
9. Map, design and manage all business processes electronically. You can begin by mapping the processes and assessing how they can be improved as they are, then address process automation using what you currently own and/or may purchase
10. When a signature is required, match the signature solution to the signature requirements. While “click-wrap” is the easiest and most common, there are numerous options. Electronic signature tablets similar to those used in retail are one option; you can even get them sophisticated enough to capture the unique biometric characteristics of each individual for future comparison if the signature is questioned
11. Sign up for the digital versions of all trade magazines and newsletters, and make sure others in your organization do the same
12. Use direct Printed Barcode on the corrugated boxes or on the Product manual or use other Emboss technique for object tagging & retrieving on the product itself instead of separate Paper based barcode stickers.
13. Paper is widely used between Business to Customer, Business to Business, Government to Business Vise Versa, and Customer to Business for day to day transaction purposes. Government & Corporate has to frame policy & implement paper less processes. Elevate, educate and provide Hands-on support to the non IT savvy customers to use self service applications. This Reduce paper transaction cost, Increase customer base through customer satisfaction.

14. Outsource paper document digitization to a document imaging company. You may get more cost benefit outsourcing to a company that focuses entirely on scanning than trying to keep the scanning in house.

15. Where possible convert your paper based data capture to e-Forms.

16. Encourage end users to upload scanned copies instead of mailing the documents

Use the above tips and join us for World Paper free Day, October 27, 2011.

[Source: AIIM Tips and Techniques, Bob Larrivee]

Join the conversation in the AIIM Communities
8 things you can do to avoid “Paper Crunch”

Paper still dominates in business, whether by choice, need, or human reluctance to give up the personal level of comfort delivered by being able to hold onto something. The paperless mantra, which began in the 1980s, is still alive and yet still in its infancy. In my view, cutting the paper waste is indicative of the continued effort to streamline operations, increase efficiency and establish better governance over information. Getting acceptance and moving away from tried and ‘true’ old ways is the battle. We must face the fact that we still wrestle with the “Paper Crunch” that tends to choke business processes and fill physical storage areas where costs for space and administration are rapidly rising. Want to avoid the Paper Crunch, you can begin with these 8 things.

1. Email and Fax: do not print
As with any initiative, the challenge is to change the cultural mindset of your organization. Take a close look at the amount of print materials being sent out of your organization. Now ask yourself if this is in fact needed or could alternative delivery methods be used-like email or fax. Rather than print and mail information to customers or suppliers, ask them if it can be sent to you electronically. In many cases, one of these will be acceptable. This could lower your paper consumption considerably not to mention costs for toner, mailers, and postage. It has been reported that if the U.S. cut its office paper use by roughly 10% or 540,000 tons, greenhouse gas emissions would fall by 1.6 million tons — equivalent to taking 280,000 cars off the road for a year.

2. Put electronic content, not paper, in your processes
Aside from the costs of paper, toner, and other elements related to paper documents, the process and cost of moving it through an organization can be considerable, not to mention the amount of time wasted for action to be taken. Think about a review process where the options are to move a single copy in serial fashion through the process from person to person or produce multiple copies for a parallel review followed by a compilation of edits and another review cycle that follows. Using a collaborative workspace, perhaps something like SharePoint, allows reviewers to access the document 24/7 from anywhere in the world incorporating their comments and revisions that are recorded as updated versions—with the result being a finished product. All without paper.

3. Maintain security and integrity
ECM technology is a tool that can be used to secure your corporate information while maintaining its integrity. Corporate users now create and have access to more information than ever before leading us to ask questions like, ‘Do they have the right to see it? In a paper world the average document is copied 19 times and we will not know who copied it, where it went, or which is the official version?’ In the world of ECM, we have controls to prevent unauthorized access and audit trails that track activity related to our information. Not only can we stop someone from seeing it, we can tell you who accessed it and what they did with it.

4. Stop paper loss
Filing cabinets not only take up space, they pose a challenge in delivering the right information to the right people at the right time. Studies by PricewaterhouseCoopers indicate that on average, 7.5% of all documents are lost and that 3.5% of the remaining documents will be misfiled. In short, you will not find 11% or more of your paper-based information. Imagine if you have warehouses full of paper and the total is near 50 million documents. If you lose 7.5% completely, that is 3.75 million lost documents. If you consider that of the remaining 46.25 million documents 3.5% or an estimated 1.6 million documents will not be where they are supposed to be. The cost in finding your information is staggering. Electronic content and records are not only less likely to be lost or misplaced, they can be retrieved in seconds and accessed simultaneously which, in turn, lowers your operating costs and significantly increases your operational efficiencies.
5. Prepare for chaos
Watch the news and you will see that chaos is ever present. Floods in the Middle East, fires in Russia, mudslides in China; all of these could happen at anytime and in any region. Chaos does not have to be a natural occurrence; it can come in the form of human actions like war, and intentional or unintentional destruction. No matter the circumstance, once chaos strikes, paper may not be recoverable. Electronic information housed in a well planned and maintained ECM environment is recoverable, bringing vital information back online, and ensuring business continuity is a reality.

6. Embrace the Digital Workplace
There are many reasons companies are moving toward the acceptance and inclusion of remote work practices or telecommuting. Expertise can be hired and leveraged on a global scale giving employees more flexibility to work entirely from home or perhaps several days per week rather than being tied to a physical workplace. ECM systems using secure Web-based interfaces, provide 24/7 global access to the information they need to complete their daily tasks. The result is lower costs for a physical plant, increased productivity, and a positive overall impact on the employee and environment. Due to reduced stress from less commuting and lowered carbon emissions, the environment is altered.

7. Prove authentication
You need a signature on a contract and in the physical world that means a wet ink signature with the additional caveat that in some cases it be with blue ink. The idea being that the blue ink is a visible form of authentication that the signature is real and authentic, not a copy. Even with the blue ink signature, how can you be sure the document itself was not changed after it was signed? The use of digital signatures incorporating cryptographic technologies provides a means to ensure the integrity and authenticity of a signed document. If you need to have an actual signature, electronic signature tablets like those found in the retail industry, using this same cryptographic technology combined with the ability to capture biometric characteristics like pen pressure, acceleration and deceleration, are a good choice.

8. Establish consistency
Consistency in the filing of your corporate information is essential not only from a findability standpoint but also defensibility. Imagine that you are faced with litigation or pending audit and as part of this you are required to produce all of the related information. Given the previous example, you have over 50 million known paper files to sort through with an unknown amount of paper stored in desk drawers and personal file cabinets located in numerous offices. Now imagine that you are given two weeks to produce this information. If you can find the paperbased information and sort through to find only those requested items, you will now have to make copies that will then be handed over to the auditors or lawyers. Using an ECM philosophy with designated repositories and official taxonomic structures and metadata, minimizes the risk of being non-compliant. This will also increase speed and accuracy in retrieval and provide predictability that all requested information will be located and made ready in electronic form. No hardcopy required.

Conclusion
Moving your organization away from the physical paper-based form to electronic media helps improve efficiency, lower costs, minimize risk, and remove the strangle hold of the paper crunch. Flexibility, reliability, and security along with positive ecological impact are all results you can gain by going paperfree.

By Ken Neal, a Certified Enterprise Content Management Practitioner and Director of Corporate Communications, for Océ Business Services.

As leading economic indicators continue to signal a global economic slowdown, companies are looking for effective steps to take – such as lowering costs and streamlining operations – in order to weather the storm and achieve a competitive edge in the eventual recovery. At the same time, recent industry research shows that businesses also want to be more environmentally responsible.

There are several document management practices that can help companies reach both their environmental and cost-reduction goals. From the sustainability perspective, these practices can significantly reduce the use of paper, thereby saving trees, gas in shipping the paper, physical space to store it, and halting the eventual destruction of many files that end up in a landfill. According to the Environmental Paper Network, “If, for example, the United States cut its office paper use by roughly 10 percent, or 540,000 tons, greenhouse gases would fall by 1.6 million tons. This is the equivalent of taking 280,000 cars off the road for a year.”

Here are eight guidelines highlighting document management practices in the office that can benefit the environment and reduce costs:

1. **The workgroup alternative**
   To the extent possible, replacing personal desktop printers with workgroup MFPs (multifunction peripherals that combine print/copy/scan/fax functionality in one machine) shared by departments can have a strong positive impact. One financial services company replaced 1,100 copiers and printers and 1,000 fax machines with 400 MFPs. The initiative eliminated 1,700 machines that no longer consume resources based on their manufacture, transportation, operation, maintenance, and eventual disposal.

2. **Adopt scanning practices**
   Instead of copying and storing physical documents, organizations can scan and store electronically. Employees can retain digital copies that they can distribute electronically, and at the same time avoid accumulating files filled with paper.

   As a conservative estimate, scanning can reduce paper consumption by one to three percent. In a recent industry survey, senior executives involved in document management indicated that document scanning has a high impact across the greatest range of business goals that include reducing costs, increasing competitive advantage, enhancing regulatory compliance, and improving customer service.

3. **Default to duplex**
   Most multi-page documents don’t require the text to be printed on one side of the page. Newspapers, magazines and books use both sides (duplex printing). With effective fleet management it is possible to change office practices and make duplex printing of multi-page documents the norm. This can potentially decrease paper use by up to 50 percent.

4. **Eliminate printing banner pages**
   A banner page is the extra page that prints before an employee’s file prints with username and machine name information. Gartner’s research estimates that organizations can reduce their consumables cost by up to 20 percent by eliminating banner pages from office print jobs. Banner pages can represent up to a quarter of pages printed for some typical office print jobs. A 1,000 person organization could cut up 1.6 million
pages and save $33,500 per year by eliminating banner page printing ("Cost Cutting Initiatives for Office Printing," Sharon McNee and Ken Weilerstein, Feb. 2008.)

5. Bulk up
Buying paper and toner in bulk can reduce transportation, packaging, and storage resources. Buying in bulk also often results in cost savings.

6. Leverage “smart”technologies
Enterprises can use MFP “smart”technologies such as Personal Mailbox, Fax-from-Desktop, Scan-to-Email/File Folder, and Document Routing in order to decrease paper and chemicals used in printing. This can reduce paper usage by up to three percent.

7. Implement user authentication
With as many as one in 10 documents sent to the printer and uncollected or sent again before collection to correct user errors, enterprises could reduce ad hoc print costs by up to 10 percent by implementing a PIN authentication system.

8. Put more text on each page
Paper usage can be reduced by changing a few default settings that will result in more text on each page. For example, in MS Word, you can go to “File,” then to “Page Setup” and set the margins to accommodate more text. Compared to the normal settings, this could use up to 14 percent less paper. Additionally, when printing, you can reduce font size to 10 point to decrease the amount of paper required.

8 steps to going green with ECM

**Paul Mullon is the Managing Director of COR Concepts.**

ECM is uniquely positioned to help organizations reduce the impact they make on the environment. And yet, if this is the case, then why haven’t we seen thousands of case studies flooding the press touting the environmental benefits of ECM?

The answer probably lies in many of the same old reasons we’ve heard before about slow adoptions of ECM. There is no doubt that is implemented properly and with a clear focus, ECM can assist in reducing carbon footprints. It is not the silver bullet. But it can be one of the tools that should be used as part of an organization-wide environmental drive. Think “Less-Paper” rather than paperless, and look for processes in the organization which could be changed to become more environmentally friendly. Adopting an incremental step-by-step approach should assist in building trust and acceptance of the value of ECM in this regard.

1 **Build a team that is committed to the initiative.**

Senior executives should be a part of this team, and need to be committed to making sure that the staff under their employ know and understand the rationale and benefits of the environmental drive. Included in the team should also be members of the compliance or corporate governance unit, legal, IT and affected user departments. If an environmental champion has been appointed, they need to be a key figure in this team.

2 **Make sure a robust framework of policies and procedures is in place that supports the drive.**

These corporate instruments should send a clear message of commitment, so that “green” becomes embedded in the ethos or culture of the organization. The policy framework is essential if staff members, clients and suppliers are to be comfortable about conducting business electronically.

3 **Implement scanning into processes which will deliver clear benefits.**

Chose processes carefully so that quick wins are derived, and which improve productivity, lower cost and improve service delivery at the same time. It must be highlighted that scanning alone does not improve the environment, as the source documents are still in paper format. The source documents need to be formally destroyed and recycled for benefits to accrue. Before destroying originals, ensure that rigidly developed and applied policies and procedures are approved by the legal team. Other than recycling, scanning does play an important role in that it gets staff used to conducting business digitally, and may allow staff to telecommute.

4 **Find a relatively risk-free internal process, and go digital from start to finish.**

Once staff members (and the organization) are comfortable with handling digital documents instead of trusty old paper, find a process which can be completely digital. This will normally be an internal process such as applying for leave, or claiming expenses. Implement e-forms processes, and make it impossible for staff to...
revert to printing and signing the forms. Many organisations already have e-forms technology as part of their corporate platforms, so the cost of implementation could be slight.

5 **Implement digital signatures.**
Many complex processes, or those which involve multiple parties, may require signatures of some kind. Note that the regulatory environment surrounding digital signatures needs to be thoroughly understood first. The legal team and all participants involved in the process must agree to the use of digital signatures. Involve major suppliers and customers, and identify where digital signatures can be used. Signing of contracts, and agendas or minutes of meetings may prove to be ideal opportunities to use this technology.

6 **Implement e-forms technology where possible.**
Steps 4 and 5 above should have provided a clear indication of how a process can be implemented digitally without ever producing a paper document. Take a process approach, and find a process that will benefit all concerned by making it easier to populate forms via the internet. It is unlikely that all customers or suppliers will be willing to move to a purely digital world, but a large percentage is likely to embrace the new processes.

7 **Implement output management.**
Reduce the volume of paper printouts by offering customers electronic invoices and statements. Once again, involve the legal team to ensure that this meets any regulatory requirements, and then encourage recipients of your output to receive electronic information. Look for opportunities to reduce any internal printouts, by saving the output directly to the ECM repositories.

8 **Monitor, track, evaluate and market the benefits.**
If the organization is deriving benefits, and no-one knows about it, it will have little value. Look for methods of monitoring the effectiveness of the changed processes, and report these benefits to the compliance and environmental officers. Apply the principles and technology to new processes, and roll out across the organization.

The focus of these improvements has been on the environment, and ECM can make a difference. Couple this to the fact that customer service, productivity, lower costs of doing business, and compliance will most likely also have been improved, should prove a strong motivation for introducing these new facets of ECM into the organization.

Join the conversation in the AIIM Communities
8 things you need to know when using ECM to go green

By David Smith, Vice President and General Manager for Xerox

Our guest blogger today is David Smith, vice president and general manager for Xerox DocuShare enterprise content management (ECM) software. Since formation of the DocuShare Business Unit in 2001, Smith has been committed to offering businesses of all sizes, from midsize to global enterprises, an affordable, multi-environment, rapidly deployed solution that can grow to meet the content requirements of the organization. He has actively participated in AIIM as an Advisory Member since 2004.

Have you been to the AIIM Green ECM Microsite www.aiim.org/green-ecm?

8 Things You Need to Know When Using ECM to Go Green

Remember when placing the blue recycling bin next to the copier and encouraging employees to duplex their print jobs made you feel like you were doing your part to help the environment? The sustainability expectations set for corporations today has never been higher and many are realizing that the benefits of going green with ECM extend beyond being viewed as a good corporate citizen to significant cost savings and increased worker productivity.

1. Paperless or Paper Light - A little goes a long way

At AIIM this year, we gathered industry analysts, press and customers for an intimate discussion about the elusive paperless office and how even with the best ECM system, going completely paperless may not be a realistic goal for most companies. However, according to a 2007 State of the Paper Industry Report, the benefits decreasing paper use slightly or going “paper light” should not be overlooked. In fact, if the U.S. cut its office paper use by roughly 10 percent or 540,000 tons, greenhouse gas emissions would fall by 1.6 million tons — equivalent to taking 280,000 cars off the road for a year.

Canada’s Niagara Catholic School District Board (NCSDB)’s implementation of an ECM solution proved just that. The school’s dependency on paper led to high transportation costs and a large carbon footprint as courier trucks drove around the district for daily pick-up and delivery to and from a central office. With its ECM system in place, NCSDB no longer needs to transport hard copies between various locations, in turn reducing wear and tear on local roads and cutting down of fuel usage and costs.

2. Greening your office means more green on your balance sheet

The average office worker uses 10,000 sheets of copy paper each year and wastes about 1,410 of these pages. With the average cost of each wasted page being about six cents, a company with 500 employees could be spending $42,000 per year on wasted prints.

Direct cost and environmental savings will be immediately realized by driving paper out of core business processes and systems through deployment of an ECM solution.

3. Keep paper usage in check

An ECM system alone will not miraculously eliminate or decrease your paper consumption. Now that more people have access to each document than ever before, it will be important to set permissions that go beyond security access within your ECM system. Which documents should be print friendly or read only? Who needs to have access as an essential part of their business duties?
4. Less filing cabinets could be the secret to lowering energy consumption
Filing cabinets do more than take up precious real estate. Offsite document storage spaces require additional costs to rent and energy to light, heat and cool the facility.

California’s Manteca Unified School District eliminated 200 filing cabinets by using ECM to digitally store documents, reducing the district’s energy consumption, freeing classroom space and saving up to an estimated $400,000 in storage costs.

5. You can go green using existing assets
It’s a misconception that when putting an ECM system in place to meet sustainability goals, you also have to buy expensive scanning equipment that consumes more energy or places wear and tear on the roadways being shipped to your office. You can use the multifunction printers currently available in your office to scan documents directly into your ECM solution without requiring a new investment.

6. ECM makes telecommuting easier on employees and the environment
Many companies are moving toward telecommuting policies that allow employees to have more flexibility or work entirely from home to lower the impact that commuting has on both the workers and the environment. An ECM system with an easy-to-use, secure Web-based interface gives employees instant access to the information they need to complete their daily tasks from any location. Accessing documents outside of the office via the Web can also eliminate the need to print large amounts of information and reduce a substantial amount of waste.

7. Keeping customers happy
Many customers are looking to do business with companies that are committed to sustainability. But using ECM to green your business will keep companies happy in more ways than one. The solution can unlock employee productivity and increase customer satisfaction, by digitizing as much information as possible and letting employees collaborate more effectively. This not only pumps up productivity in the office, but also allows workers to better service their customers by having important documents such as contracts, completed invoices or customer service manuals at their fingertips.

Take OwnerGUARD Corporation for example – using an ECM solution, the company, a small insurance administrator, has reduced its turnaround times by 47 percent through scanning legacy documents into their system for fast and easy retrieval online - in turn providing quicker customer services and increased customer satisfaction rates.

8. Don’t forget to connect the dots
An ECM solution is not going to impact your company’s green initiatives if no one is using it. Roll out new online workflows to all levels of your business and educate employees about ECM and its role in your organization’s overall document management strategy. It may be difficult to break paper-dependant workers of their printing habits, but once the benefits of ECM are understood, they will become more comfortable with electronic documents and more apt to take advantage of them.

ECM offers a real solution for any company looking to take its green initiatives to the next level. But the benefits can extend far beyond lightening the paper load and reducing emissions; it will increase the effectiveness of your core processes, which inevitability makes for a more profitable business.
8 reasons to abandon paper signatures

By Daniel O’Leary VP, Global Solutions for LincWare

Since I work with electronic forms daily, one of the main questions that are asked by our customers is “what about the physical paper signature?”. Since going paperless means not making paper, here are 8 reasons why you should abandon paper signatures forever.

1. The law is on your side

Digital signatures are as legally binding as a physical, hand-written signature in every circumstance where a signature is required. The E-SIGN law and the Uniform Electronic Transactions Act are supported by the federal government and have been adopted by 47 states. It clearly states “(c) If a law requires a record to be in writing, an electronic record satisfies the law” with the purpose “to facilitate and promote commerce and governmental transactions by validating and authorizing the use of electronic records and electronic signatures.” Further refinements by the EU, PIPEDA and the FDA recommend making sure the signature is unique to the signer, and that the signer’s identity is linked to the document. When combined with good governance and unalterable file formats, you can easily meet the guidelines for legality.

2. Mistaken expectation of vulnerability

Basic education about the legality of electronic signatures is severely lacking in the marketplace. Organizations remain inappropriately afraid of legal challenges to an electronic signature, however, the challenges to electronic signatures “valid and legal” have never been sole cause for overruling a contract or signed document. (See http://en.wikipedia.org/wiki/Electronic_signature) Ultimately, the legality of an electronic signature and electronic document lies in the underlying business process.

3. Inherent problems with paper signatures

A central question of paper and electronic signatures involves how to deal with forgery and spoofing. If you currently rely on paper signatures, how do you know a document was forged? Do you use notarized documents with raised seals? Do you have documents sent out for forensic handwriting analysis? How can you prove that it was me that signed a document, and not my assistant, or someone forging it using a scanner or an image editing program?

With an electronic signature, we can exercise much greater control over access to a document by using things like unique hyperlinks, usernames and passwords, and even biometrics to identify a person. Depending on your industry, additional levels of security can be applied using a digital signature, such as cryptography and the use of digital certificates for document verification.
4. You have already abandoned paper signatures

These days, you can apply for social security, file your taxes, and purchase a new car without ever creating a paper signature, or even printing paper. Every time you buy something from eBay, download a song from iTunes, or install a program on your computer, you are entering into a legal agreement without physically signing anything.

Imagine for a moment that after you win a coveted eBay auction, you had to download, print, sign, and send back a form or contract agreeing to terms of the auction ... would you continue to do business with that company or seller? Probably not. Digital signatures apply the same ease of use to the overarching business world.

5. There’s an app for that!

For less than a blended ice-coffee, you can start signing documents electronically on your iPhone or iPod touch. The Zosh application ($2.99) is a perfect example of how the marketplace is creating tools to solve this problem. All you have to do is sign using the touch screen, and e-mail the completed document. Before applications like this, you had to purchase expensive signature pads that often ran into the hundreds of dollars.

6. The cost of processing paper forms

In a typical document’s lifecycle, 5-10 minutes will be spent in its manual routing, the verification of information and entering data into an content management system. Multiply that by the number of documents, per person, per day, and you should arrive at an reasonable expectation of lost productivity in your workday as a result of managing paper.

Forget for a moment just the cost to store paper in a file cabinet and consider that paper has to be routed, scanned and have its data re-entered. Documents also get lost and versioning becomes a nightmare. As organizations focus more on their environmental impact and look at going paperless, the creation of paper for signatures must be addressed. Going paperless doesn’t mean scanning, it means not making paper in the first place.

7. To improve workflow

These days, almost every document is born digital; starting as a word document, e-mail, spreadsheet, PDF, or Web page. When you create paper, chances are that at the end of the process, the document will be scanned for archiving. If you are starting with an electronic file, and ending with an electronic file, why create paper in the middle just to add a signature? When you combine electronic signatures with electronic forms, you can create a truly paperless workflow.

8. Impact and Likelihood of forgery, and what vendors aren’t telling you

Are you getting signatures on major financial documents with large sums of money involved? Or, are you dealing with an internal process that has always involved having a signature simply because “that is the way we have always done it?” Are there documents that are being processed as paper simply to get a signature when there is only a remote likelihood that someone would ever forge such a document?

The dirty little secret in the industry is that there is big money in manufacturing fear and telling you how much you need a vendor’s proprietary widget, storage technology or secured warehouse to keep your paper. Vendors on both sides—paper and electronic—are committed to a fear-based sales pitch. I encourage you to do your own research, and combine it with good governance to abandon paper signatures forever.

Join the conversation in the AIIM Communities
8 tips for selecting a Digital Signature Solution

John Marchioni is currently the Vice President of Business Development at ARX - The Digital Signature Company.

As the traditional “paper-based” world gives way to digital documentation and transactions, enterprises are demanding innovative solutions for digitally signing and authenticating such documents, files, and forms with iron-clad protection against forgery. Solutions must guarantee non-repudiation and promise the same level of security and trust that exists with conventional documentation. At the same time, such a solution should be simple to use, easy to deploy and offer a rapid Return on Investment (ROI). With the rise of global digital businesses, transactions and documents may need to be signed by many people in different parts of the world. Users should be able to sign documents directly from their desktop or via a zero technology footprint using any web browser.

Digital signature solutions should be able to: 1) Verify recipients outside of an organization; 2) Enable employees to sign documents while traveling; 3) Enable cross platform capabilities; 4) Enable the use of numerous applications, such as Microsoft Word®, Adobe Acrobat®, and TIFF images.

1. Sealing Documents

Digital signature systems should allow you to seal the document using standard technology, allowing you to add your graphical signature to the document.

Some solutions add a graphical signature image to any document created in Microsoft Word. This signed document can be easily changed by any recipient while the graphical electronic signature remains intact. This security flaw opens the door to fraud and forgery. The solution used has simply placed a digitized “picture” of the signature on the document, it doesn’t seal the document, verify the authenticity of the person signing, or guarantee the transaction cannot be altered.

In the traditional paper world, transactions are validated by signing them either on an accepted form, such as a check, or in front of a trusted third party. A notary or lawyer, then “stamps” the signatures, so that they cannot be changed. In the virtual paperless world, digital signatures must perform the same function. A digital signature must be able to seal any electronic document and guarantee that it is tamperproof. It uses a one-time “fingerprint”, unique to both the signer and the document to ensure that the signer is indeed the originator or owner of the document. This “fingerprint” cannot be reused or reassigned and proves that the message has not been altered in any way.

2. Multiple Application Support

A digital signature system needs to support multiple applications. Many electronic signature systems enable the signing of documents created with the most commonly used applications, such as Microsoft Word or Adobe Acrobat. However, many electronic signature systems do not support popular applications like AutoCAD, ERP, and others. Traditionally, when signing paper documents, it doesn’t matter what type of document it is, be it a form, an invoice or a typed contract. The paperless world requires the same flexibility.

3. Multiple Signatures

It should be possible for more than one person in more than one place to sign a document. There are some electronic signature systems that only allow one signature and when the document has been signed and sealed, and it is impossible to add more signatures.
Traditional document-intensive organizations, such as insurance companies or financial institutions, have large volumes of many different types of documents that must be processed every day. Many of these documents must be reviewed, approved and signed by more than one person. In some cases, one part must be approved by one signatory while another section needs approval by a different person. With a traditional "wet" signature, it is a simple matter of signing or initialing any place in the document. In the virtual world, an effective digital signature system should enable "sectional signing", which allows signatories to edit and sign their portion of the document.

4. Compliance
To be considered legally binding, documents and transactions – paper-based or electronic – must meet many basic requirements and strict standards. A digital signature solution must meet the same criteria as a "wet" signature. These include the following basic requirements:

1. **Authenticity** – the signature can be authorized by a secure process.
2. **Integrity** – any tampering during transmission can be detected.
3. **Privacy** – the signature cannot be accessed by unauthorized sources.
4. **Enforceability** – the signatures must be verifiable by all parties.
5. **Non-refutability** – the signature cannot be denied or disavowed.

The first two requirements prove that the recipient and the sender are authentic and authorized to perform this transaction. The next two provide methods to prove that the message content is authentic and that the recipient can be certain that the data has not been altered or lost in transit. The last important requirement is that the message must be able to "stand up in court". Referred to as "non-repudiation", this means that the digital signature must ensure that the parties involved in the transaction cannot deny sending the message or its contents. In addition to the above general requirements, some industries such as finance or pharmaceutical have specific requirements.

5. Transportability
An effective digital signature system should ensure transportability. If a company implements a digital signature solution and sends a signed document to a client who has not installed the same digital signature system, they will not be able to verify the document. In the traditional paper world, signed documents sent to third parties can be read and understood without a problem. In the paperless world, however, documents must be recognized by the software application. To be truly versatile, a sender must know that a digital signature will arrive unaltered anywhere in the world and that it can be easily verified without the need for complicated, proprietary third party applications.

6. Seamless User Sign-Up
In the traditional paper world, people who need to sign documents are identified in one of several ways: via a signature card, in-person or through a photo ID. In the virtual paperless world, signatories register electronically and obtain a digital certificate. The certificate provides electronic identification similar to a birth certificate or a passport. Digital certificates contain information about the user, such as the certificate holder’s name, e-mail address and other specific identifying information. Digital certificates verify that the user is who he or she claims to be. Certificates are generated by the Certificate Authorities (CA) immediately after the identity of the user is validated. Once a digital signature system has been deployed, it should be both simple to use and as transparent as possible. Neither the users, nor the IT person, should be aware of how a certificate is generated or maintained.
7 Simple-to-Use
In the traditional paper world, signing a document is simple, intuitive and quick. In the virtual paperless world, signing a document should be just as easy. It should take no more than 10 seconds or 1-2 mouse clicks – to ensure that the document is signed, sealed and legally compliant. Users should not be required to learn new technologies or require assistance from a Help Desk.

8 Total Cost of Ownership
Traditional paper signing leaves mountains of paperwork. This requires physical storage in archives that often mushroom to warehouse proportions. To reduce costs and improve efficiency, companies should move into the world of electronic processes. Standards-based digital signature systems enable companies to become totally paperless. However, when considering a digital signature solution, it is important to look into the potential hidden costs. Many traditional digital signature systems are difficult to deploy. They involve complicated software requiring a heavy investment in IT support and development. Sometimes, a Help Desk needs to be created or additional staff employed to support the system. Other costs that need to be checked include registration and renewal fees for digital certificates, cost for smart cards, etc.

Join the conversation in the AIIM Communities
What is driving organizations to be paperless?

Submitted by Bob Larrivee, AIIM Director/Industry Advisor

Whether you are a fan or foe, believer or naysayer, the mantra of paperless office is still here and to a degree, getting louder. A couple of questions come to mind when I hear this. First, what is driving the move to paperless? There are mandates out there like the one we in the US heard from President Obama, that all patient records will be digital by 2014. This is certainly something the healthcare industry must address as there are fines associated with noncompliance, but there is still a grey area in how everyone will move in that direction. The Electronic Health Records industry has its view and other business entities theirs not only in how to make it happens but more fundamentally, what constitutes a patient record.

Then there is Check21 which took effect October 28, 2004. In simple terms, this US Law enables recipients of paper checks, to create a digital version of the check eliminating the need to handle the paper check. Now banks can simply scan the original and use the scanned image for future processing needs. It is estimated that 70% or more of US banks are now taking advantage of this process. So, even though this allows banks to move closer to a paperless environment, it is still not completely paper-free.

In the insurance industry, I have seen a move toward paperless environments from the agent perspective. Agents combine ECM with specialized electronic signature tablets to transact business and the claims offices are now converting their materials into digital form for processing. While there are no mandates here that I am aware and it seems completely voluntary though accepted, State by State there are differing views as to what is acceptable and what is not. One State may accept the electronic signature while the next still requires retention of the original wet ink signature in hard copy.

When I do research on this topic, I cannot find conclusive evidence that it has happened within any specific sector only that small segments of a business have moved in this direction. In my view these are indicative of the continued effort to streamline operations, increase efficiency and establish better governance over information, yet I am not seeing the surge and wide acceptance that many hope for. So the questions I have for you are:

What mandates do you have driving you to become paperless?
What steps have you taken to be paperless?
What definitive research is available that demonstrates a move toward the paperless environment?
What say you? Can the paperless office become a reality or do you know of research demonstrating its probability or impossibility? Do you have a story to tell? I want to hear from you.
Let’s Go Paperless

By Daniel O’Leary, VP, Global Solutions for LincWare

The beginning of my career in ECM and content capture involved helping organizations “go paperless.” You all know the phrase, right? Many of the other bloggers worked with me on projects as vendors, partners, and friends to help people navigate the paperless journey.

But no one really knew where we were headed.

Quite frankly, something about the “paperless effort” felt very, very wrong. Fast forward a number of years and the path to the paperless effort is still dark and hard to find. Too many processes remain dependent upon static PDFs that have to be printed, manually returned and their data re-entered, creating countless operational bottlenecks. How exactly did “going paperless” equate to scanning paper? Isn’t that like preparing for a flood by planning the cleanup? Instead of filling sandbags, let’s just gas up the backhoes.

couldn’t help but wonder how we could plug the leak or in some way divert the raging torrent. Primarily, I felt we needed to find the source of what was causing the need for all this paper. Where did it come from? Where was it going? That quest led me into the world of electronic forms and document assembly, which involves capturing content and information free from paper.

With the realization that the content on paper could be accurately captured and put to use, the shackles came off. Finally, business processes could be greatly accelerated without relying on the byproducts of dead trees.

As a primer on eForms and document assembly, here is what I’ll be educating the community on in the future. Instead of printing documents, you focus on using your existing electronic documents, like Word documents and PDFs, and enable that process to be completed 100 percent digitally. The goal is to make content capture as easy as buying something on the app store—it just works. Instant gratification is yours.

On the backend, you can connect that information automatically to a variety of systems in a read/write fashion. Thus, not only can you reuse data, but you can automatically import it into repositories. Finally, once you have content captured, how do you put it to work? How does it filter through the seams of progress for which it was initially intended?

We all know that the instances of data impurities rise exponentially with the number of times it interacts with us error-prone, heavily YouTube-addled cubicle drones. So, let’s find a way to break our co-dependency on manual data input. We should just let our data fly into its own, pre-designated environments of market research, sales, operations, HR and any other department that starts its day with the information we collect on forms. After all, if our data doesn’t need us anymore to be routed, we can just spend more time watching stuff like Chocolate Rain.

Join the conversation in the AIIM Communities.
When Two Worlds Collide: The Paperless Office and Twitter

By Joe Budelli, Senior Vice President of Sales at ABBYY USA

Achieving a paper free lifestyle often times seems unattainable. But, from a technology standpoint, we are certainly moving towards a point where it is possible to rid our offices of paper invoices, bills, files, receipts, client records and more. Many organizations are looking at the paperless office as a way to become more efficient, reduce costs and minimize risk. To make this a reality, OCR technology quickly becomes a necessity.

From the personal use and small business perspective, creating a paperless environment requires only a small investment in OCR software and scanning solutions that are widely available at your local computer store. These solutions make converting hard-copy documents into searchable and editable digital images simple and immediately useable across the organization. The solutions also remove the need to retype paper documents when a digital copy is no longer available, or shuffle through stacks of paper.

The enterprise OCR usage scenario in most cases isn’t quite as easy as going to your local store and getting a box from the shelf. However, it is by no means difficult – it just requires a different technology approach and some key considerations to be made. First and foremost, in the enterprise environment, it will be critical to make OCR and data capture an initiative that spans the organization. Additionally, identifying the operational needs of your organization will ensure you take full advantage of the technology. Does your company need OCR capabilities at the front lines? If so, equipping your front line staff with mobile applications that leverage OCR can expedite information flow. Do you need widespread data capture capabilities that multiple users can use simultaneously? Then server-based capture solutions are the way to go over multiple box copies. These are just a couple of the considerations you need to make, however, with a concerted effort to automate data capture and the OCR-ing of all document types at the beginning of their processing, any organization can quickly minimize the amount of paper floating between departments or stuck in filing cabinets. This will also lead to overall organizational efficiency getting better due to improved information flow and easier communication of information.

To get you started, there are many tools, tricks and ideas available online when it comes to moving towards a paperless environment. There was a two series post in MacWorld that took readers through the process of going paperless, including basic tips, management solutions, and scanning and software options. Taking it a step further in the second post, author Joe Kissell brings up the idea of a virtual mail room, which is definitely an interesting extension. The Need Office Space blog recently provided five simple tips on creating the perfect paperless office. While the author’s tips did not include the use of enhanced OCR technology, I consider them to be the first steps towards the larger goal. If you are looking for some insight into what OCR can do when actually in use, I recently read an article about how going paperless and using electronic filing has helped the Minnesota judicial system improve efficiency and reduce mistakes in court data. Additionally, Gotta be Mobile author Kevin shared his experience with going paperless, and ways that his iPad has saved him thousands of dollars by ditching hard copies.

When you apply the aforementioned steps and tips to your organization and transition to a paperless office environment, the process creates some very interesting avenues for information sharing. It generates new ways to take common documents and garner additional value through the use of social media tools. I previously wrote on this topic in my post on the AllM Community Capture Blog about OCR for the social...
networker. The post discusses how technology is coming face-to-face with the real time world that we live in, including mobile OCR apps that conduct quick and instant searches across Twitter, LinkedIn and Facebook. And I’m not the only one that believes this to be true. Interestingly enough, Kissell is the author of a popular ebook, “Take Control of Your Paperless Office,” posted the entire contents of the ebook to his twitter account, in a series of approximately 1600 tweets. With this approach, Kissell made his ebook freely available to all people in a sequence of brief segments, which allowed the dialogue of the paperless office to expand on Twitter. You can learn more about the project on Kissell’s homepage.

In this day and age of social media, how do you think OCR, the paperless office and social networking will collide?

www.aiim.org/community/blogs/expert/When-Two-Worlds-Collide-The-Paperless-Office-and-Twitter
Going Paperless: Take 2

By Alex Visser – Independent Consultant

At the turn of the century we saw many slogans about the paperless office and clean desk policies, but in most case these efforts did not provide the benefits that they promised to deliver. More recently I have seen renewed focus and effort on this paperless working environment. The good news is that it seems these new efforts have had more success in meeting their goals. These efforts however have also started from a different concept than some of the early paperless offices and I believe that has been the key to the difference in success rate.

The first implementations often focused on just getting the paper off the desk. So at that point it was often more about scanning paper. For example one approach to the clean desk was that you had to throw out your printed version of a word document at the end of each day and then print it out again the next day to continue. Well off course the last part also has to do with our preference of reading things from paper rather than from a screen.

Nowadays however we look more at the value digital workflow can bring to the organisation and the paperless office as a consequence not the other way around. In research facilities for example documentation varied greatly by who would write them and the readability of these paper documents varied greatly too. So this led to a business problem, the learning effect for the organisation was not there because of inconsistency of the materials and the process efficiency was not there either. If you had to ask about some note that was written down you would have to disturb the person who wrote it.

Workflow solutions and use of template based documents solved this problem greatly and by having the document in a digital format the benefits were enhanced even more. The template “forced” all of the researchers to write similar type of notations. Because of this it was easier to compare research. The template enforced that notes were made which meant that there always some note versus the blank pages of old. The fact that these notations were digital meant that they were always accessible at all times without having to disturb research.

It seems to me that we have matured a bit in the last decade in regards to content management and paperless offices. We are now looking at process improvement and the benefits this brings versus the feeling of it being a fad that was around 10 years ago. Now I just hope it does not take another 10 years for this way of thinking to become mainstream.
Going Green – One Step Closer to a Paperless Office

By Simon Wieczner (swiezner@snowbound.com)

AJAX technology plays an important role in an organization’s effort to create an electronic document workflow. This feature will focus on how AJAX can be implemented to reduce an organization’s carbon footprint, provide statics about paper usage in the office, and discuss how organizations in the ECM community are banning together to create The Paperless Office Coalition to create education materials and methods for a company to deploy ‘green solutions’.

A huge amount of writing and effort has gone on for the past 20-30 years describing the “future” paperless office which has yet to materialize for many of us. But we are all seeing trends and significant changes towards this future vision. Some like the Kindle or online newspapers are dramatic reductions of paper usage.

Some of them are as follows:

- Insurance claims are now often done totally in a paperless manner once paper documents are stored
- eTickets for airline travel minimize the complex paper tickets that used to be necessary.
- Boarding passes now can be displayed on your iPhone or Blackberry rather than printed out
- Handheld PDA’s are used for taking restaurant orders
- The Amazon Kindle and clones allow many to read books and newspapers without ever going to paper
- Newspapers are now totally available online
- Banking, credit card, and stock portfolio statements are accessed online
- Checks can be created online with by using electronic fund transfer, no paper is ever used
- Mortgage and other loan applications are submitted electronically with minimal paper documents
- Class papers for college and high school students are sent via email
- Workflows are created using document repositories accessed electronically – routed to necessary workers with little paper being generated
- Doctor’s insert their observations and prescriptions into a PDA or laptop, creating no paper at all
- Sending corporate or neighborhood emails rather than printing memos or bulletins

Where are We Today?

But we have a long way to go. We can point to many more examples of where paper is still used than to paperless office examples:

- 15% of an organizations revenues are spent creating, managing & distributing documents
- 60% of employee time is spent working with documents
- 85% of business documents are in paper form
- 5 - average number of times a document is printed
- 90% of a business’s information is in documents
- $4,500/year - at $30/hr, the amount that knowledge workers waste working w/paper

* From www.thepaperlessproject.com
**What more can be done?**

One factor inhibiting adoption of electronic versions of paper documents is the current set of vendors and installed base of applications. Systems that were put in place 10 or 15 years ago continue to dominate the computerized workplace for small businesses like auto dealers, doctor’s and dentist offices, accountants and small to mid-sized banks. Due to the huge effort and expense involved, there is vast reluctance to change the “standard scenario” of client software that was created in DOS days still used to access a simple server repository. Sure, the client software has been upgraded to seem Windows-like but much of the latest imaging technology has been shoehorned on, making the systems hard to modify or update, fragile and difficult to provide support for users.

With the complex and varied array of client systems out there including Windows 2000, Windows XP, Vista and Macintosh of various flavors, most middle-scale content management system vendors are both reluctant and unable to upgrade and support these systems. So changes are relatively small – improvements in UI, for example – and dramatic changes to reduce the use of paper records via adding scanning systems and methods to view and manipulate the images of documents are hard to find.

This is where powerful technologies like AJAX are possible solutions. With no client software, the ability to utilize any browser, minimum bandwidth requirements, a small but robust set of easy use to functions and no installation effort, this is a true avenue to progress.

AJAX technology (defined very loosely to be asynchronous JavaScript and XML) can be implemented in a variety of ways so there is some disagreement of what constitutes an AJAX application. The point behind AJAX however is simple - programming that utilizes the capabilities of most modern browsers without additional software. This means an application can be deployed to a diverse client base with any kind of hardware and operating system as long as they have a browser. The functions can be as simple as displaying an image to manipulating documents, marking them up, conversion or even the creation of new documents.

Why isn’t this happening more widely? Well it depends on technology that utilizes browser capabilities but which has only recently become accepted. Google is credited with the first AJAX applications (Gmail and Google maps) in 2004-2005. In fact the name AJAX was only coined in 2005. And as with all new technologies, adoption depends upon knowledge that something can be done and then finding the people who can actually do it successfully. This kind of revolutionary solution to client software issues is still in its early stages.

**How Do I Envision the Future?**

I see workers accessing, reviewing, proofing, marking up, forwarding and storing a multitude of documents using any web accessing device they have available – whether iPhone, Blackberry, a netBook, a PC, Mac or other device. Documents will be primarily in electronic form such as PDF, RTF, Word, JPEG or TIFF or scanned to electronic form as they’re received. Routing of documents will be done electronically through a workflow system accessing documents stored in a central repository.

The job of the content management solution vendor will be to take care of the server-based backend and use AJAX to display the stored documents on a standard browser. Once the backend is complete, getting users working should be a training issue, not a client software development, QA, installation and update issue.

Development and maintenance costs of such systems should become much more affordable, allowing more vendors to create useful and innovative solutions, thereby allowing small and mid-size offices of all kinds to utilize them.

*As originally published on ECM Connection, reprinted with permission.*
Cut Paper, Cut Government Spending

By Bob Larrivee, Director/Industry Advisor at AIIM Professional Development Center

In 1980, the United States passed a federal law called The Paperwork Reduction Act. This law was amended in 1995 recognizing the substantial increase in electronic information and additional requirements for security of that information and the need to make it accessible by the public. The name is a clear indication of the purpose for the law, the Paperwork Reduction Act. The intention of this law was - notice I said was - to reduce the amount of paperwork handled by federal agencies, businesses, and private citizens. In 1998 we saw the Government Paperwork Elimination Act come into play. This law established guidelines for electronic data collection and management. While this Act did not mandate the use of electronic archiving and data collection it did set out to specify policies and guidelines as an enticement for government agencies to consider paper in lieu of electronic methods. Let’s now move to the year 2010 and the Congressional Finance Committee debates aired last night on C-Span.

I was a bit restless and found myself channel surfing. For whatever reason, I happened to stop on the live broadcast of this debate and began watching but also wondering why each of the members sitting around the table, had a stack of paper – the budget document – sitting in front of them as few if any were actually looking through it. These stacks in my estimation were approximately 1 foot in height. Since 2 inches of paper is equal to roughly 500 sheets of paper, a quick calculation indicates a 1 foot stack could be approximately 3,000 pages per stack. Now we multiply this by the estimated number of members at the table, which was by my count roughly 20, the number of pages now increases to 60,000. As the discussions progressed, another stack of paper was being handed out which by the comment from the Chair, was one of the amendments to the original budget document. This stack I estimate at roughly 1 inch thick placing it at about 250 pages per stack or an estimated total of another 5,000 pages bringing the estimated total now to 65,000 pages and that does not include the count of copies given to others not seated directly at the table. I know these are rough estimates but I think the point is clear, we have laws enabling paper reduction and/or elimination yet our lawmakers, the ones who enacted these to begin with, do not practice it themselves. What I presented to you was merely the paper aspect of this discussion. There are additional costs associated with all of this for printing, distribution, management of all these paper files and more. If you look at the total cost for just this one session and topic, and then extrapolate it to what the potential could be, it is staggering.

In my view, the paper scenario I witnessed on TV is merely the tip of a huge iceberg of cost. Technology is such today that information of this sort can be shared digitally – after all it was born digital - and can be accessed from anywhere at any time. Search capabilities combined with bookmarking would allow these individuals to find and reference those elements they wish to highlight in their discussions, quickly. Annotation allows them to comment as they would in paper, in fact much better because they could place links from one item to another and traverse the corpus of information with greater ease, speed and efficiency. Perhaps it is the human factor hindering this type of automation and paper elimination. Perhaps the technology is ready but the human element is not.

I think this is an area where government can seriously take steps to cut paper and cut costs. How many millions of dollars are spent each day printing and distributing copies of documents to how many Senators, Congressmen, administrators and more? How many copies are really needed and what savings would we see if more of this information were created and managed intelligently while maintaining its digital form? I am not saying this is the answer to our deficit issues, but I am saying it may be time that serious consideration is given to the possibilities.

www.aiim.org/community/blogs/community/Cut-Paper-Cut-Government-Spending
University of Arkansas for Medical Sciences, 
Expediting enterprise information flow with 
electronic records storage

By Bonnie Hipp Senior Documentum Support Analyst for UAMS

Introductory Overview

UAMS was growing so fast that trying to accommodate the expansion was creating a serious challenge to its operations. As old buildings were being torn down to make way for larger, more modernized facilities, individuals and sometimes whole departments ended up in cramped, temporary quarters with no place to store all their documents. As departments outgrew their facilities, satellite locations were commandeered to handle the expansion. Filing cabinets of paper and microfiche storage were multiplying at such a rate that in some cubicles there was barely room for an employee’s desk. Not only was space becoming an issue, but the lengthening delays and growing expense in filing and retrieving information from one location to another was becoming unacceptable.

For instance, human resources housed its records two miles off campus, which created a document retrieval delay of up to two days when employees wanted to review their files. Because the OB/GYN department had expanded into three separate facilities, it had to pay to have huge filing cabinets hauled back and forth between the labor-and-delivery facility and the main facility every night so that patient records would be available for after-hours births. Other departments with space constraints, such as finance, were paying tens of thousands of dollars a year to have paper records sent off site and converted to microfiche.

The initial goal of the project was to reduce paper files and create a more efficient system for managing and retrieving documents for its human resources, finance and support services department—the Division of Administration and Fiscal Affairs. Ultimately, the solution had to support medical records, lab results and other healthcare, educational and administrative processes. The implementation had to support COLD (the storage of data on optical disk) and imaging capabilities and facilitate information sharing across geographically dispersed locations. Since UAMS is both a teaching hospital and a medical institution, a new solution would need to store volumes of academic and patient-related records for many years. The solution also had to provide easy access to historical information for departments such as purchasing and accounts payable and satisfy state and federal regulations regarding scanned documents to be viewed as originals.

UAMS chose to implement an EMC Documentum ApplicationXtender solution to cost-effectively scan paper documents of all kinds and store them in an easily searchable electronic repository. With the addition of ApplicationXtender Web Access, users both on campus and at affiliated hospitals, medical centers and health education centers could access and view documents they needed through their Web browser. To further facilitate productivity, ApplicationXtender is being integrated with UAMS’ SAP environment to allow users to access electronically-stored supporting documents directly from their SAP screens.

The Importance of Technology

How did the technology you used contribute to this project and why was it important?

EMC Documentum ApplicationXtender provided UAMS with a cost-effective way to scan paper documents of all kinds and store them in an easily searchable electronic repository. The first department to use the technology was human resources, which hired a third party to scan records for all current employees into the system and used its full-time staff to index the results for accuracy. Human resources found that managing
employee records electronically was so much easier and faster than paper-based filing, not to mention freeing up more than 18 filing cabinets of space, that the department scanned in records for all past employees as well.

As word spread of this success throughout UAMS, more than 300 departments within the institution decided to convert their paper records to the Documentum electronic file storage system. These critical paper documents included invoices, contracts, plant operations information, building plans, construction bids, patient records, intern and residency information, grades, reference letters, signed HIPAA privacy forms, employee personnel information, purchase orders, property service information, grants, receiving and packing slips, and much more. All of these documents are now scanned into the ApplicationXtender system where they can be viewed instantaneously by over 850 UAMS employees from their desktops.

With EMC Documentum ApplicationXtender Web Access, information sharing now extends beyond users at the UAMS main campus to include authorized users at affiliate hospitals, medical centers and area health education centers. The Web access tool enables users to view images from the repository through their Web browser. In the case of one employee confined to bed rest for three months, ApplicationXtender Web Access enabled her to continue working from home.

UAMS is integrating the ApplicationXtender system with its SAP environment to allow users to view documents stored in ApplicationXtender from within their SAP applications. Currently, the purchasing, accounts payable and travel departments download SAP transaction information nightly. These transaction reports become cover sheets that are scanned on top of supporting documents—emails, bid proposals, receipts, hard copy invoices, trip expense reports, purchase orders, etc.—so that all documents related to an AP invoice number, purchase order number or trip number are linked together within ApplicationXtender. Once the integration is completed, users will be able to click on a transaction on their SAP screen to automatically launch ApplicationXtender Web Access and display all supporting documents for that transaction.

To address issues of disaster recovery, UAMS uses EMC Documentum DiskXtender each night to back up over one terabyte of information to two Xiotech storage area networks (SANs)—the second SAN being a mirror of the first—and an HP Surestore optical tape. The SANs provide easy access to historical information and the optical tape provides immutability and reliable disaster recovery.

Benefits

Has your project helped those it was designed to help? Yes

Has your project fundamentally changed how tasks are performed? Yes

What new advantage or opportunity does your project provide to people?

The transition from paper and microfiche to electronic document storage has saved enormous staff hours in filing and retrieval. It has even eliminated the need for several staff people and freed up hours of other employees’ time for more value-added activities.

In addition, UAMS has slashed the cost of offsite storage, as well as the delivery costs and time delays associated with shipping and carting documents back and forth across different locations such as the multiple sites that house OB/GYN records. Scanning current and past employee records into ApplicationXtender enabled human resources to eliminate paper document storage entirely, freeing up 18 file cabinets and numerous storage boxes, as well as eliminating the cost of microfiche for 100,000 documents annually. In 1997, when only three administration divisions were using ApplicationXtender, UAMS estimated that the solution was saving the organization approximately $30,000 per year. Today, with its use now widespread throughout the campus, the savings have grown appreciably, allowing the institution to allocate those funds for other projects and supplies.
Converting to electronic records management has also eliminated the fear of misplacing documents when departments move to new facilities, an activity that happens with some frequency as UAMS continues to expand. The OB/GYN department no longer has to haul files back and forth nightly; patient records can be viewed online at any time from any of the department’s three locations. Having campus medical offices scan in their human resources information (time sheets, leave forms, verbal disciplinary, certificates, licenses, and so on) has helped tremendously with satisfying Joint Commission on Accreditation of Healthcare Organizations (JCAHO) audits. Campus audits are performed offsite using WebXtender so as not to inconvenience employees or disrupt their productivity during the business day. Images can be quickly copied to a single CD and sent to lawyers’ offices instead of printing and shipping reams of paper. Because physical space for documents is no longer an issue, electronic documents can be kept on the system longer for historical research and easier trend analysis.

Many departments have been able to go entirely paperless. They might start by storing 10 years of paper documents, but once they realize they’re paying for this storage but not accessing the records, they gradually reduce and eventually eliminate paper storage because they can find documents—whether for internal use or audit requests—much faster and more easily in ApplicationXtender than they ever could from a paper filing cabinet or microfiche.

If possible, include an example of how the project has benefited a specific individual, enterprise or organization. Please include personal quotes from individuals who have directly benefited from your work.

With all the construction and expansion activity happening on the UAMS campus, ApplicationXtender has allowed departments to reduce or eliminate paper storage, alleviating the concern of losing critical documents in a move. Coordinating activity among multiple locations and lack of space for paper storage were the initial impetus for departments to adopt ApplicationXtender. Once the online repository became part of daily routine, however, users found the ease of accessibility to information invaluable in doing their jobs.

Jane Benton, finance manager in the accounts payable and employee travel group said, “In the past, all documents were filed manually after processing. Retrieval was challenging and records were expensive to store. Now we have a permanent, accessible document retrieval system. We’ve quit shuffling documents manually across campus. And we’ve decreased the copying and marrying of documents that went to our Treasurer’s Office to send out with checks. The Treasurer’s Office can retrieve and print out required documentation as needed. This has saved the department $500 a month in storage rental costs and freed up 15 percent of our floor space which we now use for work cubicles.”

Betty Foster, director for procurement services, added, “This application has made our jobs so much easier. Simply having the ability to bring up every document associated with a purchase request/order enables us to assist users and vendors expeditiously and accurately.”

Jerry Higginbotham, business officer for the OB/GYN department, commented, “Before ApplicationXtender, we had to call the purchasing and accounting departments for information about receipts and payments. Now we can look that information up ourselves. We save ourselves an inordinate amount of time and no longer interrupt purchasing and accounting employees from their work. The old process took approximately 15 minutes for every request but now with it at our fingertips departments’ questions and issues are resolved in a timely manner.”

Mary McClain, the director of admissions for the College of Nursing, said, “Before we began using this program, we relied on microfiche to archive our records. We’d have to go to two separate locked rooms to retrieve a transcript and print out a copy—a process that took 15 minutes for each search. Now we scan the information and access it from every computer in our office without leaving our desks. We can quickly call up student information, even inactive records, without rifling through filing cabinets or searching microfilm sleeves. It’s a real time-saving asset because we can instantly share information among departments without
having to copy and mail files. It’s greatly shortened the time between receiving and processing application information in one college and accessing the information in another. It adds up to several extra days of productivity every year."

With ApplicationXtender, more than 300 UAMS departments have not only eliminated vast drawers of paper storage, but have saved countless staff hours in filing, retrieving and sharing valuable information across the campus and greater healthcare community. Productivity has risen while the cost of creating, storing and delivering microfiche records has been virtually eliminated.

In addition to the various UAMS departments, university auditors have also realized some concrete benefits in adopting electronic document storage. Digital fixed images stored in a secure, robust system are making their jobs a lot easier because electronic files are easier to track and retrieve and are less likely to be lost or misplaced than paper records.

**Originality**

Is it the first, the only, the best or the most effective application of its kind? Most effective

**What are the exceptional aspects of your project?**

While many organizations have deployed the power of EMC Documentum ApplicationXtender to streamline document management, few have done so to the magnitude of UAMS. Today, Documentum supports 448 applications across the UAMS campus—everything from accounts payable/receivables to patient medical files, clinical trial reports, admissions applications, equipment repair manuals and construction management blueprints. Web access tools have enabled users at affiliate hospitals, medical centers and area health education centers to retrieve documents from the more than one terabyte Documentum repository and share information with as much facility as on-campus users. UAMS continues to scan approximately 144,000 pages into the system monthly and has virtually replaced paper archiving and microfiche campus-wide.

Human resources alone has eliminated the cost of microfiching 100,000 documents a year, including mainframe-generated reports. The department has eliminated 18 paper file cabinets, freeing up valuable office space for employee use. Accounts payable and employee travel has saved $500 a month in storage rental costs and freed up 15 percent of its floor space formerly occupied by filing cabinets.

Other savings include eliminating the expense of delivery services to transport documents among buildings and the cost of hiring temporary clerical staff to handle filing and back logs. In addition, employees spend less time on clerical activity—filing, sorting, copying, faxing and tracking down missing documents—and more time on value-added projects.

**Difficulty**

What were the most important obstacles that had to be overcome in order for your work to be successful? Technical problems? Resources? Expertise? Organizational problems?

Initially, there were concerns about the accuracy of the scanning process since the responsibility was given to a temporary employee. Various departments were reluctant to destroy the original paper documents for fear that valuable information might have gone astray in the scanning process and the original document would be needed to recapture it. As the temporary employee became more proficient in the scanning process, departments became more confident that the process was accurate.

Another other issue was the need to bar code documents scanned into a patient’s medical record to avoid data entry errors. Medical record numbers are fairly long, so the concern about transposing numbers when designating a document’s association with a particular patient’s file was justifiable. UAMS solved that issue by creating a unique bar code for each medical record that could be used when scanning documents. The bar code would serve as an index, linking all associated documents to the right patient file with no hand keying of the medical record number.
Often the most innovative projects encounter the greatest resistance when they are originally proposed. If you had to fight for approval or funding, please provide a summary of the objections you faced and how you overcame them.

There was some concern about job security when paper records were replaced by electronic files, but once employees saw the benefits being reaped by the pilot program in human resources, they were eager to realize the advantages of faster data retrieval and relinquish the inefficiencies of paper file cabinets. Auditors who were initially reluctant to rely on digitized documents were won over by the speed with which information could be accessed without having to interrupt busy department employees to pull paper records.

**Success**

Has your project achieved or exceeded its goals?  Exceeded

Is it fully operational?  Yes

How do you see your project’s innovation benefiting other applications, organizations, or global communities?

Because of its broad adoption institution-wide, UAMS has served as a model for many outside organizations on how to expand their own use of electronic data storage technology. Officials from the Department of Finance and Administration for the State of Arkansas and the city of Fayetteville as well as other institutions of higher learning have come to UAMS to observe a live Documentum environment and learn how to use the solution to make their own departments run more efficiently and cost-effectively.

Ken Williams, Assistant Administrator for the State of Arkansas Department of Finance and Administration, Office of Information Services, attended a UAMS presentation on its imaging system and learned the pros and cons of centralized scanning, how campus offices work together to share documents, and how to set up and administer security.

“We saw the many ways their system changed their procedures and processes to save time, effort and space,” said Williams. “We plan to apply these lessons learned from UAMS to our newest imaging expansion project.”

Felicia Held, Division of Information Technology project manager at Creighton University, said, “We talked to other universities and you [UAMS] had the model we would most like to emulate. We are still in the pilot phase, but the feedback so far has been really great.”

Held reported that ApplicationXtender is enabling Creighton’s Medical Student Affairs Office to import electronic student files and eliminate paper altogether. Once the university goes into live production and is able to put historical information into the system, Held predicted the system will save staff significant time in gathering information and an exceptional amount of file cabinet space.

How quickly has your targeted audience of users embraced your innovation? Or, how rapidly do you predict they will?

Once the pilot program was launched in human resources, other departments across UAMS jumped on the bandwagon very quickly. Part of the rapid adoption was driven by rampant physical expansion at UAMS and space issues: with so many filing cabinets stuffed to overflowing, there simply wasn’t room to grow. Departments forced into temporary quarters during construction of new facilities were facing the risk of losing valuable documents while in transition. In addition, those groups whose operations sprawled across multiple buildings were finding it hard to do their jobs because the records they needed were invariably stored elsewhere and difficult to access quickly. Documentum satisfied an immediate need to free up space, provided easy and instantaneous access to information from a desktop, and alleviated time-consuming and costly file and retrieval procedures that interrupted productivity.

Join the conversation in the AIIM Communities
Reasons Why You May Need to Keep Some Paper Records After Digitization

By Susan Goodman Senior Vice President, Bank of America, Enterprise Digital Records Program (EDRP) for Bank of America

In my first blog post last week, I talked about foundational requirements that, in my opinion, support maintaining trustworthy electronic records in lieu of paper - unless there is a specific requirement to maintain hard-copy. I mentioned, for example, UETA and the E-Signature Act in the US that I believe establish the equivalency of trustworthy hard-copy and digital records, unless there is a required exception. Here are some reasons that would/might justify the retention of paper and other hard-copy records:

**Laws, regulations and industry standards that require hard-copy for specific functions or content.**

Existing contracts that require maintaining and/or providing hard-copy records to external stakeholders (e.g., customers). Of course, if you are contractually bound to maintain or provide hard-copy records, then you must comply with this requirement. In these cases, though - unless hard-copy or a "wet signature" is prescribed by law - I suggest conducting a cost-benefit analysis to compare electronic with hard-copy record-keeping and provision. The analysis may reveal that converting to digital record-keeping and eliminating paper in these cases would provide major financial benefits without incurring unreasonable risk. If so, then I strongly encourage working with your attorneys to examine the possibility of renegotiating and amending the contract to eliminate the hard-copy requirement. Going forward, I recommend executing contracts that do not include a hard-copy stipulation (better yet - that stipulate that you will provide digital records) unless there is a legal or strong business case for hard-copy.

Expectations of key stakeholders that – while not stipulated in law – might influence whether or not paper retention is advisable. For instance, your company may receive funding. If your funder expects the documentation evidencing collateral for the funds to be maintained in hard-copy, you may not want to convert to digital record-keeping if you believe that doing so would jeopardize your funding.

If other unreasonable risk would be incurred by not maintaining hard-copy records. Risk should be assessed for each unique business scenario.

Situations in which it is more cost-effective to maintain existing paper records rather than to digitize them and destroy the source documents. This is often true related to legacy records stored offsite that have relatively short remaining retention periods. It may be cost-effective to let these existing paper records live out their remaining retention periods. In those cases, you would create and retain the content electronically only on a go-forward basis.

Please note that, even when hard-copy is required for specific records, it is often beneficial (when the media permits) to also retain those records digitally. There are several reasons for this.

A given rule requiring hard-copy records for specific content may be eliminated. If the impacted records are already maintained digitally as well as in hard-copy, the organization will be positioned to quickly eliminate paper from the process when those rules do change.
It is usually more efficient to retain records that should be maintained together (read "records series") in the same format. If the other records in that file are maintained electronically, it doesn’t make sense (and can be problematic) to not digitize a sub-set of records (sometimes only a few record types) that are needed in hard-copy.

Having the records digitally stored can provide important efficiencies related to distribution. And….

Storing records electronically enables workflow functionality to be used, as needed, related to all pertinent records related to a process.

Best regards,

Susan

The opinions expressed here represent my own and not those of Bank of America (BAC) or AIIM.

Join the conversation in the AIIM Communities
The Art of Capture, Step 2: Convert from Paper to Electronic Forms

By Daniel O’Leary VP, Global Solutions for LincWare

Part two in a series that examines the process of electronically capturing in Web-based forms the information trapped in today’s paper-based processes.

As Sun Tzu says, “Success in warfare is gained by carefully accommodating ourselves to the enemy’s purpose. By persistently hanging on the enemy’s flank; we shall succeed in the long run in killing the commander-in-chief. This is called ability to accomplish a thing by sheer cunning.”

You gotta love Sun Tzu.

Capture warriors, today we flank the enemy, and in doing so, fundamentally alter the rules. If your problem right now is the paper capture, we turn the tide by eliminating paper capture entirely. That’s right. Entirely.

So here is the question: If your forms and documents start as electronic documents and eventually get scanned and archived, then why do you need to have a paper lifecycle for them? (If this just blew your mind, go ahead and take a minute.)

If your goal is to capture information rather than paper, your first step will need to be preparing your documents to convert them into electronic forms. Creating a fillable PDF or converting from paper forms to a Word document is really easy. Chances are, you already have your forms in these file formats anyways. This is how we change the fight, this is our “sheer cunning.”

Based on my experience with LincWare, here is what I recommend as a best practice:

1. Avoid proprietary tools.

Unless you loved getting locked into long-term agreements with vendors, you should focus on using your existing forms and programs. Make it work first using your existing tools and resources before assuming a new tool will make things easier.

2. Take inventory.

Look at what forms you have and note those that create the most headaches. Focus on those forms first.

3. Analyze the form’s life-cycle.

Currently, where is that information being captured? Are you scanning? Doing manual data entry? Do you need to collect payments or signatures?

4. For a Word document, make sure that you have all the relevant fields that you want to collect and process.

Focus on things that will become metadata; SharePoint content types, for example. When you are done, save the document as an .ODT or .DOC to ensure portability. The formats of .DOCX from Office 2007 and 2010...
are not universally supported. And, make sure you take into account pagination, so if someone enters a lot of text, the format stays consistent.

5. **For a PDF document, you will be limited to the actual document itself unless you are able to modify things.**

Most likely though, the PDF will be more aggressively locked down. Again, ensure that you have all the relevant fields. You can then save the document as a PDF-A if you prefer that format. A fillable PDF is only a partial solution, since you still need to access the data, and avoid manual data entry.

6. **Save all of your newly prepared forms in a secure, version controlled repository.**

We use a combination of our ECM system and a repository built into our eForms application that we access using a Subversion (SVN) client to manage check-in and out and all revisions. That way, if we need to make changes, we can easily update forms and maintain an audit trail.

7. **Next steps: What do you plan to do with your newly built forms? I suggest over-taking the enemy. But that’s up to you.**

Next week, we’ll talk about the different methods of capturing signatures electronically. One of the most common reasons I hear from people about sticking with paper is the FALSE assumption that a handwritten signature is required. (Man, that is getting to be a tired discussion.)

So AIIM community, how did you prepare your first eForms project? Did you blow millions on a proprietary product before realizing you could have done it using Open Office, your iPad, and a summer intern? Still trying to figure out how to transform paper into electronic?

Join the conversation in the AIIM Communities
Behind every successful Process lies a prudent Capture...

By Sanooj Kutty Internal Consultant for National Health Insurance Company – Daman

Although, ideally, a process starts from the intent to do a particular task to achieve a specific objective or deliver a service, most of your processes would find itself literally commencing with the entry of data like filling an application. In short, it commences with the capture of information.

Filling an application is probably the father of all capture methodologies. Even with the paradigm shift from pen & paper forms to GUI data entry, forms have been the leaders in information capture.

Yet, under the prevailing perception of information management, capture is either scanning or scanning using Bar-codes, OCR, ICR, etc. And in most cases, it’s a simple scanning task followed by a manual indexing exercise.

While it is indisputable that all the methodologies described above can be classified as capture, it is disputable whether they can be applied in every circumstance. Also, the increasing requirement and implementation of BPM technology to manage your processes requires one to implement a capture system.

“The OCR isn’t working.”

“The Bar-code’s throwing an error.”

Both OCR and Bar-code’s are proven and established technologies, yet, it is also common for you to hear the above two statements quite often. You may have also gone ahead and bought a more expensive software because you thought the cheaper software was ineffective. Remember, sometimes the carpenter can be bad and not necessarily the tool.

You don’t carry a ‘screwdriver and nail’ or a ‘hammer and screw.’, do you? I am sure it is an emphatic NO!

Over 90% of the information projects I have been fortunate to work on have seen itself attempting to replace paper with electronic content. And 100% of those projects have budgeted themselves scanners and OCR software even before you know your requirement. Just because you need to capture does not mean you rush ahead and get yourself a scanner and print yourself a bar-code or extract via OCR.

An interesting case I encountered had been an attempt to convert a paper-intensive process to a paper-less process. Hundreds of thousands of dollars were budgeted and invested in buying scanners and OCR software, for a process that starts with a hand-filled application form. Millions of dollars were then spent on automating this process where further documents were needed to be physically signed.

Neither were the scanners helpful nor did the process go paper-less. Instead, the project went into a complete loss and also half-baked implementation adversely affected the operations. The very same operations that was error-free when running on paper, although, expensive and slow.
While many a reason contributed to the demise of the project, the core reason was the lack of understanding that it’s not always scanners that mean capture. Most applicants involved in the process were computer-illiterate. ICR was the technology to be used and not OCR. Then again, when the forms are received bilingual, English may be competent on ICR but, Arabic still has a long way to go.

The physical signature could not be made redundant because the regulatory environment was not ready for electronic or digital signatures.

Remember, when one assumes, one makes an ASS out of U and ME. Hence, it is advised to bear in mind when identifying one’s capture method. A spoon of research, a cup of analysis and a jar of prudence is advised. As they say, “Look before you Leap.”

Join the conversation in the AIIM Communities
Trends Towards Higher Resolution Scanning

By Kevin Neal Sr. Product Marketing Manager for Fujitsu

Napster, MP3, YouTube, iPhone and MySpace. You may be asking yourself “what does this have to do with document scanning?” In reality, not much, other than large file sizes, however when we draw an analogy between large audio files like those found on Napster such as wav files or mp3’s, video files like those found on YouTube and MySpace which you can utilize on a mobile device like the new iPhone then we can get an appreciate of the challenges of sharing large files. And because viewing document images has become just as important, if not more important from a business perspective, we need to have a clear understanding of the general technological trends of information sharing and the Trends Towards Higher Resolution Scanning.

In the perfect world of scanning technology someone would drop a document into the scanner’s automatic document feeder, scan the page and “voila”, all the vital business data has been automatically extracted for immediate use by an Enterprise Content Management (ECM) system or for general retrieval via a keyword search. This is similar to using a search engine to find the information we are looking for. Sounds like magic? It nearly is but there are many underlying technologies that create this magic. Technically speaking advanced forms processing, or the ability to perform these sophisticated tasks automatically, is a reality that is available today and this ‘magic’ starts with high quality scanned images which most closely resemble the original document. In Automated Forms Processing applications there is a lot going on behind the scenes where a poor or good quality image dictates the success, or failure, among other related processes in the grand scheme of the document imaging system. These features need to be highly functional, extremely accurate and transparent to the users themselves.

In a recent study of scanner users Susan Moyse of Moyse Technology Consulting summed up the current trend quite well, “Scanner users need applications that do more automatically. This requires vendors to deliver sophisticated functionality almost invisibly. The less these users know of the underlying technologies the better. Business users just want their scanning solutions to solve their problems.”

Traditional Obstacles Addressed By Advanced Technology

Advanced features are great from the standpoint that custom systems can be designed by systems integrators, value-added resellers or a professional services organization to fit individual business needs. An effective document capture system is a system that operator’s don’t have to think about. Capturing more dots per inch at scan time gives your scanning solution the greatest chance of automation success. Most likely no solution will be absolutely perfect, nevertheless, giving your capture solution the greatest chance at success through good image quality, more dots per inch and great paper handling can dramatically increase your level of automatic document capture.

There are advanced techniques such as automatic document classification, document separation and free-form processing, all of which greatly depend on the computer being able to read the dots on scanned pages to make intelligent, and critical decisions about these images. After all, garbage-in is garbage-out and your document capture solution is the on-ramp to transform paper to useable electronic data. Most often you get one chance to capture these images before they are filed in a permanent archive or the physical paper is destroyed forever.

To understand these trends and to develop our hypothesis for the future of document scanning we must evaluate what inhibited the sharing of large files in the early days of file sharing. While the ability to share audio, video and document images has been around a long time, this sharing was limited due to some
rather common factors. The cohesion between all file formats is they have historically been large file sizes and difficult, if not impossible, to use over computer networks. Let’s take a look back into the not-so-distant past and get a glimpse at what ultimately made the likes of YouTube, MySpace and Napster, successful and what will drive the trend of scanning higher resolutions for automation. One of the most obvious drawbacks to sharing large files was the lack of bandwidth. Whether it was a remote user on a dial-up connection or corporate networks that hadn’t had the foresight to plan ahead for the sharing of large files, customer dissatisfaction was high and people were reluctant to use these services due the impending frustration of waiting for large downloads to complete. Likewise, video sharing had been, until recently, slow to adopt for many of us, however times are changing on the increased bandwidth forefront and we need to refer to history to understand what limited the adoption rate of these technologies.

**Contributing Factors to the Trends Towards Higher Resolution Scanning**

Most leading Automated Forms Processing software companies recommend scanning at a minimum resolution of 300 dots per inch for effective data extraction. In other words, for every square inch of paper the scanner is capturing 300 dots horizontally and 300 dots vertically or 90,000 total dots \((300 \times 300 = 90,000 \text{ dots per square inch})\). This automation reduces manual intervention tasks such as ‘key index values from images’ which in turn decreases costs and improves efficiency. Some techniques, which you might be familiar with, include Optical Character Recognition (OCR), Intelligent Character Recognition (ICR) or Optical Mark Recognition (OMR).

Presume we settled for scanning at 200 dpi resolution. We would have captured only 40,000 total dots per inch versus 90,000. Why is this important? Below is an illustration which demonstrates how incrementally larger file sizes due to scanning higher resolutions or utilizing color. Higher Resolution Scanning equals Improved Automated Accuracy.

“The accuracy of the OCR systems declined dramatically when the resolution of the images was reduced from 300 to 200 dpi…”


“Scan resolution: The number of dots per inch can affect the clarity of the image and accuracy of OCR. Recent tests found that reducing from 300 dpi to 200 dpi increased the OCR error rate for a complex document by 75%…”

Source: http://epe.lac-bac.gc.ca/100/202/301/netnotes/netnotes-h/notes37.htm
So the question is “why wouldn’t everyone simply scan documents at 300 dots per inch?” Traditionally there have been several legitimate concerns that made higher resolution scanning unattractive to users and systems operators. This includes limited bandwidth, (as in the audio and video file size scenarios), lossy image compression technology or the physical scanners themselves might slow to two-thirds or less of their rated speed at 200 dpi scan resolutions. Lastly, the larger file sizes created by scanning at higher resolutions. Now, through advanced technologies and innovation, the document capture industry is addressing all of these obstacles, which should truly enhance the adoption rate of higher resolution scanning. Let me be specific about each:

- **Increased Bandwidth for Remote Users and Corporate Networks** –
  For those of you that have tried sending a large file via your e-mail client, you can certainly relate to the ‘pain’ involved with sending even one file using a low bandwidth connection. Now, just imagine a customer service operator who has to retrieve hundreds of images per day during the normal course of their work day. Decreased costs and better availability to higher bandwidth networking components affords network administrators, or even remote users, to upgrade to high speed networks such as T1 internet lines, DSL, Cable Modem, Gigabit routers/cabling or even fiber optic networks. All of which bodes well for the future of sharing large size files types including audio, video and scanned images.

- **Improved Image Compression Techniques of Scanned Images** –
  Many new image compression techniques have been introduced recently which drastically decrease file sizes of both color and black & white images while still retaining great image quality. Previously some compression techniques caused poor image quality that would drastically decrease automatic forms processing accuracy. In addition to better images and highly compressed images, technology such as Automatic Color Detection can determine whether to save the scanned images in a black & white or a color format at scan-time, thus eliminating the need to separate documents into stacks of bi-tonal and color pages. It’s much more desirable to compress a bi-tonal image than color which is an ideal example of combining emerging technologies for the benefits of users and systems administrators.

- **Scanning Higher Resolutions at Rated Speed** –
  Just as your car’s engine is designed to perform at a maximum speed based on the combination of aggregate parts, your document scanner is only as good as its weakest link. Certain document scanners these days have been highly engineered specifically to perform at rated speeds while scanning in higher resolution modes, thus excelling at Automated Forms Processing tasks eliminating the need to sacrifice accuracy for throughput.

- **Decreased Storage Costs** –
  When the expense per megabyte of storage cost dollars, or several dollars, per megabyte, businesses had to make a serious decision about their choice of a data storage medium. At the time, it could have been in the form of low-capacity/high-availability hard disk drives, which were expensive, optical disks for moderate-capacity/moderate-availability at a mid-range price, or tape drives which were typically high-capacity/slow-availability although the most affordable. Times have changed quickly with the evolution of CD-ROMs, DVDs and extremely high-capacity hard disk drives. The storage industry has reached the ‘critical mass’ stage where vendors are creating great technology but competing for market share which drives costs to users down. Businesses and individuals are consuming data storage devices at a greater rate and the end of this trend seems to be nowhere in sight. Increased storage capacities, smaller forms factors and decreased costs are a clear trend and portend well for storage of large file sizes.
Benefits of Higher Resolution Scanning to Automation

Consider that Automated Forms Processing involves computer-based intelligence to make crucial decisions concerning your scanned images. For example: Classification- What type of document? Separation- How many pages is the form? Anchor Points or Free-Form- Where is the information on the page? Quality Control- Are these characters meeting my defined accuracy criteria? Essentially, scanning hardware and software technologies have progressed to a level of automation that allows for sophisticated document capture, advanced forms processing and mission critical data extraction, all of which could be completely transparent or invisible to the user. However, this high level of automation beings with high resolution scanning. The ability to drop a document into the scanners automatic document feeder and perform these advanced tasks has become a reality without the traditional sacrifices inherent to Higher Resolution Scanning.

The trend towards more and more distributed scanning is obvious. As more document scanners find their way into the workplace, the demand for more invisible sophistication to the user must continue. Appreciate the technology; yet allow the user to be experts in their respective professions instead of having to become scanning experts as well. Capture more dots per inch with higher scanning resolutions and give your document capture system the greatest chance for success.

Join the conversation in the AIIM Communities
Is that a scanner in your pocket?

By Daniel O’Leary VP, Global Solutions for LincWare

Do you have an iPhone, Droid, Blackberry Storm, or any newer smart phone with a decent camera? Well then congratulations, you are ready to wade into the world of mobile capture.

Here is a typical scenario where mobile capture makes sense:

A receipt from my last trip

Your flight is delayed, and you have 2 hours at the outer Ethiopian airport to kill, and wifi costs $15. You have a giant stack of receipts from your trip, and dread filling out the expense report on Monday morning when you get back to the office. While you contemplate your fate, you can take advantage of your smart phone’s camera and free mobile capture apps to immediately start capturing and processing all of your receipts and documents.

I’ve personally been using mobile capture for receipts, and handwritten meeting notes among other things. Mobile capture is perfect for other things too- field service representatives, home health aides, consultants, and anyone who doesn’t want to wait to get back to an office to scan documents. After looking at the various options, I decided to use a combination of Evernote and Genius Scan (both free in the app store) to handle my capture on the go. Take pictures of documents using the built in camera on your iPhone, then immediately turn them into properly named, tagged, multi-page PDF’s. All of that data is then stored in Evernote, and backed up to the cloud, and to all of my synced devices. Once all of the data has been captured, you can easily e-mail it for approval and routing. The best part about this is, you can stop lugging around paper, and accomplish more in less time. If you don’t have a smart phone yet or your organization is considering purchasing them, you should plan on getting devices with cameras.
Mobile scanning best practices and features to look for:

- Support for JPG and PDF, so you can take pictures and convert them into a PDF document
- Documents can be automatically straightened and enhanced
- Files can be sent or e-mailed from the application, and will connect to your external repositories and systems
- OCR. This will depend greatly on the types of things you are capturing. There was a great post from Joe Budelli that talks about mobile OCR

Are you ready to start scanning with the device in your pocket? Have you already tried it? Think that the only scanner in your life should be the size of a Minicooper and operated by a trained scanning professional? Leave a comment, send a tweet, and let me know.

Join the conversation in the AIIM Communities
Capture Forms on your iPad? As Steve Jobs Says, “BOOM!”

By Daniel O’Leary VP, Global Solutions for LincWare

Hello fellow Apple lover! Tired of using your iPad for marathon session of Angry Birds and streaming Netflix? Are you ready to put it to work? The iPad is the perfect device to help eliminate paper, capture information, streamline your electronic forms, and look cool while doing it.

A few months ago, I was at the dentist for my regular checkup, and had to update some of my paperwork. After 15 minutes of painstakingly filling out paper forms, I handed back the clipboard to the office manager, who spent another 15 minutes sitting and typing my information back into their patient system. There is nothing like using a $5 clipboard to fill out forms before taking an X-Ray on a $95,000 machine. We’ve all been there right?

Now, look at your own organization and the capture scenarios you face. In terms of forms, how many could you replace with not only eForms, but with your iPad? They have Wi-Fi and 3g, weigh less than 2 pounds, and cost less than a laptop. For scenarios like patients or client intake, field reps, attorneys, or battlefield commanders, the iPad allows us to capture information and extend the functionality of this incredible device.

So based on my unpleasant experience, what we wanted to build was an application that guides a user through filling out forms and capturing data, integrates with a ton of different repositories and systems, collects payment and digital signatures, and “just works” so that anyone could use it. The result of this dream is called LincDoc mobile, and is available for free today in the app store. You can download it today for your iPad. You can also check out Zosh, which allows you do something similar on your iPhone.

In the new reality when you walk into your doctor’s office, you are handed an iPad or walk to a kiosk, spend 2 minutes being walked through a dynamic eForm that captures all of your information and your signature, and then transmits the data to an EMR system, puts a copy of the form in your SharePoint repository, and e-mails you a PDF copy. BOOM Indeed!

Join the conversation in the AIIM Communities
6 steps to streamlining your Accounts Payable processes

By Lidia Basson Training Coordinator for NokusaEl

Given the current economic climate, most organisations are looking for ways to increase efficiency through the reduction of wasteful resource expenditure. The Accounts Payable (AP) process is a very good example where substantial efficiency improvements can be made, and real quantifiable bottom-line savings realised!

Current inefficiencies can often be linked to slow, inaccurate, and poorly defined paper-based workflow and capture processes. The result is: re-work when processing duplicate invoices, ‘lost’ vendor payment discounts, poor working capital management, and a poor vendor feedback and experience when querying the status of an invoice. The question is – Where to begin?

1. Free yourself from paper

Invoices and credit notes are often received in paper format, even though we all know that the use of electronic documents have many advantages over paper. Of course, vendors should be encouraged to send invoices in electronic format by rewarding them through speedy feedback, processing, and payment. Where organisations do not have the ‘luxury’ of Electronic Data Interchange (EDI) systems, other, less costly solutions are available! It must be noted that it is best practice to scan and capture all received paper invoices and credit notes as early as possible in the AP process.

2. Scan, capture, and identify duplicates as early as possible

Vendors often send the same invoice via multiple channels (in their enthusiasm to be paid). This can be the cause for a lot of unnecessary re-work as part of the AP process before discovering that an invoice is a duplicate and discarded. The early capture of fields that uniquely identify the invoice, such as the Invoice number and Vendor number, enables duplicates to be identified at a very early stage in the AP process.

3. Use the invoice information that you have in the capture and validation process

Information that you already have in the back-end accounting system such as outstanding PO numbers, and anticipated invoice amounts from a specific vendor can be used to increase the accuracy and reliability of the captured invoice information. In the case of manual capture processes, this information can be used as default values or selection lists to minimize the impact of human error. When capture automation is used, such as Optical Character Recognition (OCR), and the automation technology is closely integrated with the back-end accounting system, this information can be made available to the automation technology and used to increase accuracy - this lends to faster AP processes and less human error!

4. Provide immediate feedback to the vendor

Feedback to the vendor at appropriate stages in the AP process is crucial for improving the vendor experience, decreasing vendor queries and duplicates received, and assisting the vendor to identify issues as these arise. Feedback can be typically via SMS or e-mail. The vendor information must be maintained to ensure that the correct people or systems receive the feedback in the desired format, again lending to faster and more improved AP processes.
5. Don’t underestimate the AP process

The AP process is a little trickier than it may seem at first. Some of the curveballs that you may encounter, and which should be catered for by the AP solutions are:

- Multiple PO numbers on a single invoice
- “Standing” PO numbers which are to be used many times for an indefinite final amount
- Partial deliveries where the PO number may, or may not, be received again from that vendor
- Invoices to be paid without PO numbers such as consignment stock invoices

All of the above can and should be managed by the AP process solution, thereby ensuring integrity and speed within the AP process.

6. Don’t underestimate change management and the culture of the organisation

Culture, or “The way we do things around here” is not easily changed, and yet the human factor is often ignored - to the detriment of efforts to implement and anchor process and technology changes. Those who find security in paper are not easily convinced to give it up. NokusaEI has for example encountered a wide range of organisations from those in which the staff print and courier memos internally and do not know what scanning is, to those that insist on the use of workflow, content management, and scanning technologies. It goes without saying that the change management efforts in these organisations should be and are worlds apart. Often when an AP management solution is implemented, the important ‘people-aspect’ is ignored and the success of an AP solution is hugely dependent on whether or not the solution is used!

If you would like to find out more about the AP capture process, have any comments, or would like to discuss solutions offered by NokusaEI, please send an e-mail to Bruce.Williams@NokusaEI.com.

Join the conversation in the AIIM Communities
Tackling the Home Office Operation

By Joe Budelli Senior Vice President of Sales for ABBYY USA

Last week I wrote about how our government agencies can streamline their mammoth processes with OCR and, in turn, help the people they were set up to help more quickly and effectively. Turning the government into a paperless operation is going to take time, literally years, but there are smaller operations that can be converted into a digital, paperless operation in the matter of hours – businesses operating out of your home.

Today’s computer technology, broadband, and mobile devices is allowing for more people to set up their own shop from their homes. Most home entrepreneurs start working out of a small space, perhaps a spare bedroom, but quickly run out of room when paper boxes filled with invoices, incoming bills, accounting files, receipts, and client records take over. We have all seen those offices with bludgeoning files everywhere and we wonder how they will ever be able to find anything when a client calls and needs to see a document immediately or when the elusive receipt is needed to complete tax forms. Okay, admit it, I’m probably describing your office space at home.

Instead of filling them away in a paper file-based system, and I do call that “system” loosely, you can make your office a digital, paperless office. Even Bryant Duhon, editor for AIIM International, has started a Messiest Desk competition — check out his blog post at Messiest Desk — A Competition | Capture Blogs – because too many of us still have too much paper in our offices.

We are becoming more and more digital in the other aspects of our lives, why not make the office in our homes more digital. Instead of filing away those invoices and receipts, you can place them in a digital format, making them easier to access. Thanks to searchable PDFs you can find what you are looking for with a few clicks instead of rummaging through that so-called filling system that you have now. And I dare say, you could also start going green within your office space.

All you need to start is your computer, office software suite, scanner, a digital camera, and OCR software to convert paper documents into digital images, specifically into Word, Excel or searchable PDFs. Simply scan invoices, data tables, or whatever into a digital format and you can now search through those images directly from your PC. You can even attach those files in emails to your clients. No more retyping or shuffling through stacks of paper.

So after you submit the photo of your desk to Bryant’s messy desk competition, that’s if you have the courage, you can start to turn that office of yours into a paperless office. For hints of how to start, I recommend checking out this YouTube video, YouTube - Designing Spaces - ABBYY FineReader 9.0 Express. Trust me that better organized office is going to give you more time to spend on your business or on hitting those golf balls at the driving range.

Join the conversation in the AIIM Communities
Three Rules of Zero Calorie Donuts - “Unregulated Collaboration with Built-in Governance”

By John Brunswick Senior Solution Consultant for Oracle Corporation

Is it possible to enjoy eating fried dough, glazed with sugar, without consuming any calories? What if it was possible to enjoy all of the benefits of Enterprise 2.0, instant ad-hoc collaboration, but suffer none of the downside related to approvals and governance processes?

To maximize ROI from Enterprise 2.0 collaborative technologies people should be able to create online workspaces without as needed. E2.0 tools are well suited to ad-hoc collaboration and because an organization has generally already made an investment in a platform to provide them, require little or no upfront expense to create. Costs from this activity usually pile up as a result of a mass of ungoverned data that they create.

Given that a decent percentage of collaborative activity is undertaken for temporary endeavors, a solution is needed to enable creators to immediately make use of the E2.0 tools, but manage the complete lifecycle of content that they generate.

The following three rules provide a foundation for just this

**Three Rules**

1. Anyone can create a collaborative workspace at anytime
2. The process should not require any approval
3. Workspaces will be archived or deleted after X amount of time from their last usage

**More on Rule 3**

There is no approval for creating an online space with the collaborative tools, unless the user would like to have their collaboration space persist for more than a limited amount of time. After this limited time, potentially defined by an amount of time beyond the last activity, their content will be archived or deleted.

**The Implementation**

Using a simple, online registration process, users will be asked how long they will need to have their workspace available. This will indicate how Rule 3 is handled - defaulting to a mode that assumes the workspace is ad-hoc and temporary.

In order to cut down on any clutter that all of the ad-hoc workspaces create the space will reside in a node within a taxonomy that is based on the user’s business unit and or department. This makes it easy to locate the workspace and keep it out of areas that support global, persistent spaces.

When users generate content that will live beyond a default setting and desire to have it persist indefinitely, a higher level of approval will be required. This request will need to include additional information for consideration (The Minimalist Approach to Content Governance - Request Phase).
Zero Calorie Donuts

So - is it really possible to have “Unregulated Collaboration with Built-in Governance”? By following the third rule - yes. Enterprise 2.0 is a great enabling technology and to extract the most value from our tools and efforts it is important to lower the barrier to usage. A series of vendors offer Retention Management software that enables assets created during these collaborative processes to be archived or deleted based on a series of rules, making broader use of collaborative technologies possible, without cluttering the enterprise with their outputs.

Just as with donuts, there is a catch from overconsumption. As long as we ensure that the mechanisms above are in place, a measurable gain in ROI from E2.0 tools will be apparent in both the short and long-term within your enterprise.

Join the conversation in the AIIM Communities
A paperless office can boost your ROI

Davis D. Janowski (djanowski@crain.com) a Technology Reporter at Crain

Taking your firm paperless might seem as daunting a challenge as climbing Mount Everest, but it can bring significant return on investment over the long term.

A recent study and white paper (available on investmentnews.com) sponsored by Laserfiche, a Long Beach, Calif.-based document management unit of Compulink Management Center Inc., showed that the smallest of advisory firms can realize savings of $40,000 or so annually when they integrate a document management solution into their practices. For larger firms, the savings can reach into the hundreds of thousands of dollars.

It isn’t as if paperless is a new idea. For more than two decades, the technology world has championed digital record keeping as one of its Holy Grails (straight-through processing is another).

Solutions have come and gone, and the hype continues, but there remain many good reasons to embark on the paperless-office quest.

Aside from the considerable savings in square footage occupied by filing cabinets, going paperless improves customer service, enhances compliance and transforms audits into little more than minor data calls instead of multi-day office shutdowns. For owners considering retiring or selling, a document management system can add significantly to a firm’s value.

Even though it isn’t difficult to come up with a solid argument for going down this path, most firms aren’t biting, however.

Unfortunately, based on our research, less than 10% of [registered investment advisers] have adopted electronic document management systems, said Tim Welsh, president of Nexus Strategy LLC, a Larkspur, Calif.-based consulting firm to the advisory business. Despite the efficiencies it can introduce, the various savings in operational costs and the ease in terms of dealing with audits, some firms still won’t embrace the technology.

For many firms, this has more to do with the mix of infrastructure they already have than with the new technology itself.

We have not gone totally paperless as of yet, because of the myriad of applications we use and the constraints of outside custodians and carriers, said Pasquale J. Sacchetta, president of CFIG Wealth Management of Westport, Conn. We’re working now to try to find the best long-term solution.

One firm that has taken on the challenge is Friedman & Associates, a five-adviser wealth management firm in Novato, Calif. With 140 clients, $220 million in managed assets and 14 years’ worth of filing cabinets, going paperless was no small task.

Gregory H. Friedman, the firm’s president and a participant in a recent InvestmentNews technology round table, said the implementation required a lot of advance planning. Deciding on the technology, both for going forward with new clients and for the old hard copies associated with current and long-term clients, and how best to handle the physical labor of scanning documents were two crucial factors in the process.

Immediately, we realized this wouldn’t be a one-month or even a three-month deal. We did it by client, Mr. Friedman said. We made a list of the clients and we tried to do X number of clients a month.

The firm settled on the Worldox document management system, from World Software Corp. of Ridgewood, N.J. Mr. Friedman explained that several factors weighed heavily in favor of the solution, which previously had been used almost exclusively in the legal profession. These included how well it integrates with his Junxure customer relationship management system and how it handles every document, whether a scanned paper document, e-mail or other type of digital file.
Next, the firm addressed the manpower issue. Mr. Friedman decided early on that scanning documents wasn’t a prudent use of time for his revenue-generating professional staff. So he placed his office manager in charge of the project, and the firm hired a rotating cadre of high-school-aged sons and daughters of firm members and clients to do the manual labor. They were paid $10 an hour for 10 to 20 hours of work a week. Within a year, the project was completed, Mr. Friedman said.

Firms can take several routes, depending on their size. In addition to platforms that tend to cater to enterprise-size firms, such as those from Astria Solutions Group of Schenectady, N.Y. and its docSTAR suite; Conarc Inc. of Alpharetta, Ga.; Docupace out of Los Angeles; EMC Documentum out of Pleasanton, Calif. (EMC is based in Hopkinton, Mass.); IBM Corp. of Armonk, N.Y.; Interwoven Inc. of Sunnyvale, Calif.; Laserfiche; Open Text Corp. of Waterloo, Ontario; and World Software Corp., several solutions are more tailored to small firms.

A suite of applications from eCopy Inc. in Nashua, N.H., the Office SharePoint line from Microsoft Corp of Redmond, Wash., and PaperPort and OmniPage from Nuance Communications Inc. of Burlington, Mass., give smaller firms a more palatable starting point. While the former list of more-enterprise-focused solutions is centralized client server technology, PaperPort, for example, can be thought of as a desktop document management application that could reside on each adviser’s PC.

I wouldn’t say it’s pain free, but there is just no alternative to going paperless. I just can’t imagine that within five years, if you haven’t, I just don’t know how you can be profitable, Mr. Friedman said.

*Document management, content management*

The first practical step to achieving the Holy Grail that is the paperless office is coming up with a manageable plan. An important part of that plan should be to take the process in steps and thereby avoid overwhelming your firm’s employees and your technology budget. For many firms, especially smaller ones with limited personnel resources, it often makes the most sense to begin the process of going paperless starting first with new clients you add to your practice, adding older records to the mix at a later time. It also makes sense to come up with a realistic schedule based on how many staff members (or temporary workers you might bring in) are available, the capabilities of the hardware you have or plan to buy, and an assessment of just how many documents can be scanned and added to your system over a given period (X number of clients a month or week, or X number filing drawers, etc.).


*Reprinted with permission.*
8 things you need to know about getting rid of paper

An effective information management strategy begins with a focus and understanding of capture and imaging. Once thought of as simply a way to get rid of paper by scanning it into an archive, capture is now more realistically viewed as the key on-ramp to organizational processes. This e-book will get you up to speed on the dos and don’ts of an effective capture and imaging strategy.

13 Supporting Articles by Guest Bloggers
8 Factors to Consider When Preparing to Implement a Data Capture System
8 Benefits of a Digital Mail Process
8 Things to Look For In a Document Management Service Provider
8 Reasons to Consider a Document Management Service Company as Part of Your Information Strategy
8 Things to Consider When Choosing an Application to Scan and Capture Documents to SharePoint
8 Things to Consider in Selecting the Right Scanner
8 Things You Need to Know About Automating Document Indexing
8 Key Things to Consider When it Comes to Getting Paper into SharePoint
8 Ways to Reduce your Storage and Bandwidth Costs for Document Imaging Solutions
8 Hot Trends in Document Imaging, Scanning and Capture
8 Things I Learned About OCR from Small and Mid-Sized Organizations
8 Reasons to Abandon Paper Signatures Forever
8 Reasons Why E-Forms Can Transform Your Business

Additional Resources

5 Simple Tools for a Paperless Office
There are software solutions to some old paper problems that don’t require the network infrastructure of a large corporation. And making a small technology investment now could save your business a bundle long-term — not to mention reducing its wasteful reliance on paper products.

Read more:
http://mashable.com/2010/05/01/small-business-paperless.

5 More Simple Tools for a Paperless Office
There are still more services and apps that focus on reducing your paper consumption (and subsequently your costs) when it comes to external systems, like postal mail, invoicing, and in-person networking.

Read more:
http://mashable.com/2010/05/21/small-business-paperless-2

Becoming the Paperless Office
K.J. McCorry, an efficiency and productivity expert, discusses on how offices can reduce paper and begin "paperless" initiatives in their office.

Read more:

How Kaiser Permanente Went Paperless
Digital health records can improve care by reducing the incidence of medical errors and eliminating duplicative procedures.

Read more:
http://www.businessweek.com/technology/content/apr2009/tc2009047_562738_page_2.htm

Simple Steps to a Paper-Light Office
Several business practices can be improved to minimize impact on the environment.

Read more:
White Papers and Case Studies

Going Green with Enterprise Content Management – saving more than trees

ECM has been repeatedly shown to assist organizations in meeting many of the typical objectives they face today. As those objectives have changed over the years, ECM has evolved to meet these new demands. The latest executive mandate is to reduce the impact the organization is having on the global environment. Legislation, social pressure and good corporate governance are all demanding that every company takes steps to reduce its carbon footprints and better utilise resources.

In this white paper, we will first review the impact that poorly managed content has on the environment, and clarify exactly what is meant by “going green.” This will be followed by an analysis of the role that ECM can play in helping organizations improve this situation, and finally the steps that need to be taken to achieve this.

http://www.aiim.org/pdfdocuments/39849.pdf

Paper – great for the morning news, bad for workflow.

When a company’s business processes aren’t optimal, oftentimes employees never realize it. In this case study, you will find out how one company eliminated the expenses associated with 30 employees signing paper-based documents ($3,000 in paper-related costs annually per signer) and saved approximately $90,000 in their first year alone.

http://www.aiim.org/sharepoint/paper/Digital-Signatures-Expedite-SharePoint

Building a sustainable enterprise capture strategy. How to go from where you are, to where you want to be?

In its early years, document capture was used almost exclusively to “scan to archive,” a welcome replacement to storing paper documents in warehouses of file cabinets. Today, scanning documents for archival storage remains a safe, secure and cost saving alternative to holding paper. This brief road map provides a structured and phased approach to developing capture strategy that takes you from where you are to where you want to be.

http://www.aiim.org/sharepoint/paper/roadmap-to-enterprise-capture

Automating Document Driven Business Processes

Find out how document capture is quickly moving toward mainstream adoption and how the shift from scan-to-archive to scan-to-process is profoundly changing the strategic importance of capture as an enterprise standard. Learn how to extend existing technologies and operational investments efficiently and cost effectively through enterprise capture.

Online ROI Calculators

**Document Management Green Calculator**
The Oracle Document Management Green Calculator will enable you to see how your organization can effect environmental change by moving printed information online.

www.aiim.org/green-ecm/content-management-green-calculator.aspx

**Determine Your Capture Cost Savings with this Benefits Calculator**
In the time it takes you to answer a few questions about the use of paper in your office environment, you’ll receive a customized report estimating the hard and soft cost savings your organization could realize by using a document capture solution. Talk about ROI!


**EFACT USA**
This is a general ROI calculator for estimating your return on going a paperless direction

www.efactusa.com/roi.html

**MyPaperLessOffice**
Estimate your return on investment for making your Human Resources department paper free.

www.mypaperlessoffice.com/upgrades/roi_cal.asp

**eFileCabinet, Inc.**
Reducing the amount of paper within an organization translates to immediate bottom line improvements when implementing an electronic document management system.

www.efilecabinet.com/roi-calculator.html

**WorkflowGen**
The 3 examples show you how to benefit from a ROI with the implementation of the first workflow.

www.workflowgen.com/home/liblocal/docs/roi/roi_calc_en.htm

**Scan 123**
This form will assist you in figuring the real costs of filing everything with paper.

www.scan123.com/roi_calc.cfm

**Agreement Express by Recombo**
DOWNLOAD COMPLIMENTARY ROI CALCULATOR TODAY and in 25 minutes you will discover:

● How much your current paper-based contract process is costing your organization, per month
● The operational costs your company will save, associated with an automated contract workflow process
● Calculate your company’s immediate ROI, with your initial set-up fee

www.recombo.com/aiim-roi-calculator-download/
Webinars

Paper-Free Order Processing to Complete Your E-Vision

May 05, 2011 - Case Study Webinar
Sales orders are the lifeblood of any business – the more efficiently a company processes them, the better it performs. That means one thing: getting rid of paper order documents. Attend this live webinar and learn from experience on the front lines about the challenges of manual order processing, including high cost per order, errors and incorrect shipments, limited visibility, fulfillment backlogs and dissatisfied customers. Get up to speed on single-platform technology that you can deploy in the cloud or on-premise to automate every phase of order processing, from receiving the customer document to creating a corresponding sales order in your order management system, and reduce order processing time and costs by at least 40%. Find out how you can make every order electronic and instantly accessible, including orders received by fax and email, with full transparency to monitor and prioritize order processing. Along with insight from Steve Smith of Esker, a recognized leader in automated sales order processing solutions, Karen Rechenbach of Moen Incorporated will present lessons learned in her company’s real-life success story of fax-to-order automation. Find out how Moen gained visibility and control with intelligent data extraction, validation, automation into ERP and storage.

http://www.aiim.org/Events/Webinars/Archived/20110505-webinar

Afflicted by Information Overload? Content Management is the Cure

October 14, 2010 - Special Case Study Presentation
Whether you’re a healthcare facility or any other type of organization, you probably experience information overload. And, regardless if you have patients, students, clients, customers, or constituents, you need to manage the content that everyone creates and uses in order to simply do business.

This webinar combines multiple case studies to represent how innovative healthcare system users make the most of their content management solutions.

Common problems faced by healthcare facilities are clinician concerns (i.e., unavailable information, incomplete information, too much information, etc.) and issues affecting financial outcomes (i.e., patients staying past planned reimbursement, unnecessary paid procedures, discharge recidivism, etc.).

We will discuss how to use better content management business practices to:

- Facilitate patient admissions
- Streamline case management
- Protect clinicians and patients
- Enable the transmission of patient information
- Display meaningful information via dashboards and/or business intelligence reporting for healthcare staff

Even though this case study webinar focuses on the healthcare industry, the lessons learned can be applied to many organizations. Join us to learn how you can improve your enterprise with better content management.

http://www.aiim.org/Events/Webinars/Archived/20101014-webinar
Baylor Health Care Systems Advanced AP Automation: From Manual Headaches to Automated Accuracy

January 20, 2011

General Information
When the accounts payable team at Baylor Health Care System decided a paper-based system was an ineffective way to process more than 25,000 invoices a month, they took action. Baylor completely automated their AP process using enterprise content management (ECM) technology, bringing greater efficiency, control, accuracy and visibility to their daily processes.

In this webinar, you will discover how Baylor evaluated, selected and implemented its ECM system in order to increase accessibility, reduce manual data entry and efficiently distribute information. Using an advanced solution that leverages OCR technology, Baylor captures scanned invoices and the data within them, then automatically enters invoices into workflow to streamline processing.

Join this webinar to learn how Baylor is:

- Increasing visibility of invoices and creating timely distribution of information using automated workflow
- Reducing manual data entry and its associated errors using OCR technology
- Enabling quicker problem resolution with instant access to check images, invoices, delivery receipts and POs from any location
- Strengthening compliance with audit and legal requirements

Located in Northern Texas, Baylor Health Care System consists of 14 facilities, 133 physician offices and four sub-acute facilities.

http://www.aiim.org/Events/Webinars/Archived/20110120-webinar

Going Green with Enterprise Content Management – saving more than trees

July 14, 2010

“Going Green” has evolved from being environmentally fashionable to fiscally sound. And, ECM technologies and tools are leading this evolution. That’s because today’s savvy organizations realize that automating paper-intensive processes saves more than just trees. Driving paper from core business activities can result in lower real estate and storage costs, better integration of field operations, increased productivity, and improved employee morale. Join us for a highly practical and instructive webinar that focuses on these key points:

1. What exactly do we mean by “Going Green” as it relates to Document Management?
2. How can ECM components assist in the process digitization and automation evolution?
3. What steps can be taken to implement more environmentally- and fiscally- friendly processes?

http://www.aiim.org/Events/Webinars/Archived/410
Mountains into Molehills –
Reducing Paper Output to Go Green in Government Agencies

Feb 25, 2010 - Special Thursday Webinar for the Government Sector
All government agencies, whether federal, state/provincial, or local, produce mountains of paperwork each day. How can your agency turn that mountain of paper into a molehill and create more sustainable business practices?

Improving your business processes can help your organization, despite tighter budgets and increasing demands from tax payers for faster access to information and sustainable ecological practices. Enterprise Content Management can help you reduce your agency’s paper use, storage costs, mailing costs, and more.

Join this webinar as we discuss the cost saving and ROI of paper reduction and improved business processes. Get inspired as we learn some creative ways agencies like yours are going green and how that can translate into other initiatives at your agency.

http://www.aiim.org/Events/Webinars/Archived/395

Get Rid of Your Paper! Or not.

Jun 18, 2008

Despite years of talk about “the paperless office”, paper in our business processes is not going away any time soon. In fact, every piece of paper generated tends to generate more. This growing volume of paper is a business liability. Nevertheless, there are some situations in which it is not financially feasible to digitize all paper documents. What are the elements of an effective conversion plan? How can organizations manage their remaining paper and electronic documents together?

Join us for a frank discussion of best practices around managing paper and electronic documentation for cost savings, sound records management, improved business efficiency, and litigation preparedness.

http://www.aiim.org/Events/Webinars/Archived/169