

# Real-World Pile Management:



## I'm Buried in Paper and Email and Can't Get Up!

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## **Introduction**

The paperless office has been much lauded for solo and small law firm offices, an environment that has long been paper-centric. What does it mean to be paperless? The answer to that question will vary from office to office and requires that you figure out what it means to your firm rather than what someone else says it is. For some this means reducing the amount of paper filed and stored in and out of the office; for others this means eliminating paper files and records entirely, creating a law office based purely in an electronic realm. Start by looking at your office procedures and try and determine where you can eliminate or reduce the need for paper. Are there instances where paper must be handled vs. instances where looking at the information on a computer display will be acceptable. Most practitioners find there are benefits to examining their office procedures to find ways to reduce paper, and thus reduce costs in both time spent filing, storing, manipulating, and storing paper files and in hard costs associated with the purchase of toner, paper, file cabinets, lease space, organizational materials such as binders and tabs, and photocopies. One lawyer calculated hard cost savings of \$150 per month - \$1800 annually or \$5400 over three years.

The successful paperless office demands a plan which examines the process of moving from print to electronic documents and involves a combination of hardware and software that allows this to happen. Many attorneys are overwhelmed at the idea of going paperless by focusing on everything that will be involved in doing so; however, this is a problem that can be dealt with by good planning.

Planning can help break the process down into manageable chunks, and reduce anxiety. It allows you to approach this process in a logical progression which is easier to deal with in a step by step fashion. In fact, planning the methods and procedures to achieving a paperless office is essential to its success. In this paper we will examine hardware, software, and project scope to successfully planning an electronic environment.

## **Project Scope**

Many attorneys have called the American Bar Association's Legal Technology Resource Center and the State Bar of Wisconsin's Practice411 helplines and asked about going paperless. They are overwhelmed with the thought of, as one caller stated, "getting all this paper into my computer". If you tackle this process like you tackle a case, it will make more sense and help prevent you from being overwhelmed. If you are taking a case to trial, you don't start out by preparing for the hearing, you take it in phases such as initial review, preparing the pleadings, conducting discovery and then preparing for trial. You can do the same when deciding to go paperless. Consider the process as a project, and begin by

defining the scope. Typically, paperless office projects are divided into two separate activities. One is retrospective conversion of closed matters and historical paper files to an electronic format. The other is creating a process to go paperless with active and new matters. By dividing the project many lawyers will breathe a sigh of relief, and view the scope as manageable when they realize that they can focus on converting current matters, before addressing the unspeakable number of closed files. However, some firms decide to include retrospective conversion in their project so we will address that first.

### **Retrospective Conversion**

For those who would like to convert closed matters and files to an electronic format for storage and retrieval there are a few options. The firm could choose to take on this project internally. Done in-house, this project will take considerable time and money. To be successful in this conversion you will need to invest in high end, high speed scanner and document management system, ideally, one that can scan 50 pages per minute or more (faster is better in this instance) such as a Fujitsu fi-5650C. that's going to cost you almost \$4,000.00. Don't forget that the very act of loading the paper into the scanner will take many hours. It is possible to hire a temporary worker to help with this process, who will stand by the scanner for hours removing staples and paper clips, adjusting settings for legal and standard sized paper, and choosing which documents need to be indexed or OCRed (optical character recognition). We generally recommend that you outsource this part of the project. Many vendors will take boxes of paper files and convert them to electronic documents, delivering the end product on a CD or other electronic medium at a price that when you add up what it will cost you is reasonable.

If you consider outsourcing the project consider the options available. Vendors can simply scan files into an image format (such as .TIFF or .PDF), but would need to at least provide a file name for each document. The repository would not be full-text searchable, and retrieval would be more difficult. Another option would be to have all the documents scanned with OCR, resulting in text-based electronic files, which would be searchable and indexed. By creating a full-text searchable repository attorneys can make use of previous work product. How many times will an attorney pull up a pleading, motion, contract or real estate closing as a template to begin a new one? A searchable database of closed files will help reduce the time spent finding, and retyping prior work to use as a template. Another thing to keep in mind when converting closed files to electronic format is requirements under the law for records retention. Some legal documents still require a "wet" signature under the Digital Signatures Act and ELECTRONIC SIGNATURES IN GLOBAL AND NATIONAL COMMERCE ACT such as wills, codicils, or testamentary trusts to name a few. Make sure to review the files and the records retention policies before shredding the paper files returned from the vendor

While a search through the local yellow pages for "document imaging" will turn up local companies, you can box the docs up and ship them off, so you are not bound to use a local company, although that might be the cheapest. Below are some examples of national companies that provide scanning and indexing:

ScanGo

<http://www.scango.com/>

IronMountain

<http://www.ironmountain.com/records/rms/special.asp>

Thuriam

<http://www.thuriam.com/Legal-Consulting/Scanning-OCR-Services.html>

Xerox

[http://www.xerox.com/downloads/usa/en/f/FILE\\_CONS\\_XGS\\_BRCH\\_IS.pdf](http://www.xerox.com/downloads/usa/en/f/FILE_CONS_XGS_BRCH_IS.pdf)

IKON

[http://www.ikon.com/services/professional\\_services/](http://www.ikon.com/services/professional_services/)

Wisconsin resources include:

Datastore Record Management

<http://www.datastoreweb.com>

DocuInnovations

<http://www.docuinnovations.com>

These are not recommendations, but examples. Keep in mind also that many files will be confidential. Check your applicable ethics rules on how to deal with outside vendors when allowing them access to client files.

### **Current and future matters**

For the ongoing process of creating a paperless office for current and new matters, law offices will need to invest in some hardware and software to convert paper into electronic format and manage it. While the law office can control the amount of paper created in the office by generating only electronic document, paper will still come into the office and thus must be scanned and stored. The original paper files can be returned to sender for their records.

### **Scanners, OCR, and Document Management Software**

Scanners, optical character recognition (OCR) software, and document management software can be time saving organizational/storage & retrieval methods in the legal setting. In order to make informed decisions about purchases, a review should be made to establish who, what, when, where and how the product(s) will be used.

Scanners come with many functions. Dependent on work load and type of document it is possible to auto-feed documents, scan over-size documents, or lay them on a flatbed scanner. Compatibility with graphics and color is another choice to be made when comparing scanners. Questions such as "will we be scanning documents as text files or as image files?" will determine whether OCR software is necessary. If documents are saved as text files (thus enabling text searching, editing, etc. in the future) the OCR software should be compatible with the scanner and the word processing program. Many scanners and OCR are integrated (bundled) to begin with, thus making it easy to buy a package that will suit the needs of the practice. One caveat is to check the OCR software that is included with the scanner: oftentimes this is a "lite" version and doesn't offer the full range of functionality that the full package does. OCR software also often includes a rudimentary document management component. If the need is for keeping track of the scanned-in text only, then be sure to look for this function in the description.

A popular format for storing documents is to convert them into a PDF (portable document format). A PDF can either be an image file (a picture of the original document) or an image file with a text layer added (made possible by further manipulation of the file with optical character recognition). [Adobe](#) introduced the PDF format and the software needed to read PDF files ([Adobe Reader](#)) is available for free from the Adobe site. Because the Adobe Reader is free, and many scanners come with the software to create PDFs, PDF has become a standard for archiving information since it can then later be retrieved. The PDF is now an open standard so many different companies are providing software to create, edit and manage PDF's. The format also allows all of the original notes and markings on the document to remain intact.

## **Scanners**

Scanners range in price from a few hundred dollars to thousands of dollars. Understanding your options will help you determine what is reasonable to spend.

### **Types of Scanners**

#### **Flatbed**

Flatbed scanners look similar to a small copier. They allow you to lay pictures, odd sized papers, books, and other objects on the glass platen over a scanning element.

## **Sheetfed**

Sheetfed scanners work like a fax machine to scan original documents. Look for sheetfed scanners with automatic document feeders (ADF). ADF capacity refers to the number of sheets that can be loaded at a time. Consider what your needs will be and purchase appropriately.

If high speed scanning of unbound documents or pages is critical, then sheetfed scanners will be the machine of choice. If a combination of a sheetfed scanner with a flatbed is another good option for firms that need to scan bound and unbound documents. You may buy one of each, but the pairing is readily available.

## **Multifunction**

Multifunction scanners typically incorporate a copier, printer, fax, sheetfed, and flatbed scanner in one machine. For small offices you may be able to do away with a number of devices in favor of this all-in-one device. Keep in mind that this machine will be a workhorse and purchase a higher end device.

## **Portable**

Portable scanners are great tools for road warriors to quickly scan paper documents while out of the office. They are quite small and typically take one piece of paper fed in at the time.

## **Scan pen**

Another mobile scanner, the scan pen, allows the user to sweep a pen device over a piece of paper and capture the text. These are useful for scanning text from books and other discrete text on the fly.

## **Card Scan**

Card scanners come in several flavors. Some have software that allows you to scan business cards directly into Outlook or other contact management software. Other multipurpose devices allow you to scan business cards, receipts, and other small pieces of paper for management purposes.

## **Scanner Functions**

### **OCR**

Optical character recognition software allows the user to scan documents as text, rather than an image. This provides a searchable, editable document that can be manipulated.

### **Scan to...**

Some scanners support scanning to PDF, MS Word, CD, and other options. Keep in mind your needs when selecting a scanner. Scanners that will be used to send directly to common office applications will often need specific drivers, such as TWAIN or ISIS.

### **Networked**

Consider whether you will want the scanner to be available to multiple users on a network or simply scan to a single workstation. Keep in mind compatibility with your operating system in either case.

## **Scanner Options**

### **Duplex**

If you will be scanning two-sided materials consider a scanner with built-in duplexing. Unlike many copy machines, duplex scanners scan both sides of the document simultaneously rather than using a reverse document feeder to physically flip the page. This results in faster scans with fewer mechanical parts to wear out and break. Duplex scanning will often be referenced in terms of images per minute (ipm) rather than pages per minute (ppm).

### **Color/grayscale**

If you intent to scan high-resolution color images pick a scanner that will support this function. The cost will increase, but if you plan to scan materials for evidence presentation the increase will be worth the investment.

### **Monthly output**

Called "duty cycle", this refers to the number of scans per month per unit. Try to anticipate scanning volume in advance, as mechanical failure may result in an output that exceeds the scanners abilities.

### Scanning Protocol

How the scanner interfaces with your computer is important. Low priced scanners usually use a proprietary protocol to keep costs low. This has the effect of allowing you to only use the scanner with the software the scanner manufacturer includes rather than any program that may be industry compliant. The 2 most common protocols are TWAIN and ISIS, with TWAIN being the standard you will most likely encounter in desktop or small workgroup scanners. Many applications are TWAIN compliant which means that they can directly control the scanner and scan a document directly into that program.

### Physical Interface

How the scanner will physically connect to your computer is also important as it has an impact on speed and whether you will need to buy an additional interface card. Most scanners today include a USB 2 connection and may also include a SCSI (Small Computer Standard Interface) connector. For many years, SCSI was the connection of choice for high speed scanning, but with the advent of the USB connection, you no longer need to deal with buying an additional card or fighting with the SCSI software.

Maintenance and support of your scanner will also be a consideration in price. While these contracts will add to the initial cost of the product, consider the cost of downtime, repair, and replacement.

When searching and purchasing new peripherals and software never hesitate to call the company and ask questions. Also, before purchasing anything, contact a consultant or expert for advice, finalization, and potentially implementation. This is intended as a guide only. Below are some of the major vendors for these products and some reviews.

This review of scanners is cursory. Below are resources for buying scanners and optical character recognition software. Also consider resources such as [Technolawyer](#), [ABA Lawtech](#), and [ABA Solosez](#) for word-of-mouth suggestions and advice.

### Scanner Product Reviews & Buying Guides

[ZDNet](#) - Scanner Reviews

[PC World](#) - Scanner Buying Guide

[Scanners](#) - Yahoo! Tech

PC Magazine - [Dynamite Desktop Document Scanners](#)

### OCR

Nuance OCR Products (OmniPage, Paperport)

[ABBYY](#)

[Adobe Acrobat](#)

## Digital Copiers

Digital copiers can do the traditional work of a copier, with added network capabilities such as printing directly from a digital document or storing a scanned-in document to a network. It will be important to keep in mind for scanning purposes, what capacity feeder is required and whether OCR is used. If the scanned documents are stored as graphic files then the ability to do full text searching will not be available. However, if the documents only need to be accessible by keywords or title than the digital copier, with its myriad functions, could be a good choice. Also remember to be aware of maximum paper size and capacity of auto-document feeder.

[XEROX copier/scanners](#)

[OCE Digital Copiers](#)

[Konica Minolta Digital Copiers](#)

## Software

In order to maintain both the scanned in documents and new documents you may either create your own file management system or purchase software that will streamline the process.

## Electronic Indexing/Managing Paper Files

For firms with paper files and a paper based indexing or management system, there are several ways to create an electronic file management system. Creating this type of index will allow greater access to paper files and pave the way to add and maintain electronic documents and retrospectively converted documents. Often document management software will come bundled with a business appropriate scanner, although there are options for purchasing software separately. Keep in mind that many of the software options below are for larger organizations and can be quite expensive. However, it is always good to know what is available.

Options include:

### 1. Use a Records Management System

Opentext

[Infolinx](#)

[Interwoven Records Management](#)

[QRMS Record Management Software](#)

**2. Create a personalized file management system using database software:**

[Microsoft Access](#)  
[InMagic's DB Textworks](#)

**3. Invest in a case management program:**

[Abacus Law](#)  
[Time Matters](#)  
[Amicus Attorney](#)

**4. Document Management Software**

[Interwoven Document Management](#)  
[Worldox](#)

**5. Other**

Nuance Paperport  
Roll Your Own by creating a standard folder and file naming convention

**Electronic Fax**

Another source of paper in the law office is the incoming fax. There are a number of electronic fax options available to eliminate the need for a fax machine. Some electronic fax services will send the fax to your email inbox, perfect for mobile lawyers.

**eFax**

[http://www.efax.com/en/efax/twa/page/homePage?CMP=OTC-us\\_il](http://www.efax.com/en/efax/twa/page/homePage?CMP=OTC-us_il)

eFax Free – receive faxes

eFax Plus – Allows you to send and receive faxes. Receiving is free at a local number, page charges apply if you want a toll free number.

**MaxEmail**

<http://www.maxemail.com/>

30 day free trial with a non-local number

MaxEmail Lite - \$24 a year but non-local fax number. Can send and receive faxes (up to 500 pages per month).

MaxEmail Plus - \$84 per year and can choose area code for fax number or 800 number. 250 incoming fax pages per month.

**jConnect**

<http://www.j2.com/jconnect/twa/page/homePage?CMP=OTC-US>

Receive only account is free.

jConnect Premier - \$165 per year with free sending and receiving of faxes from a local number. 800 number has extra charges.

### **FaxMicro**

<http://faxmicro.com/>

\$4.95 per month – unlimited fax receipt and 5 cents per page for sending

### **CallWave**

[http://www.callwave.com/landing/wam\\_business\\_faxOnly.asp?ct=CW\\_lmFax](http://www.callwave.com/landing/wam_business_faxOnly.asp?ct=CW_lmFax)

\$7.95 per month and user can choose their fax number

### **Fax2Mail**

<http://www.premiereaffinity.com/sbw2/>

Special pricing for State Bar of Wisconsin Members

Allows you to send and receive faxes. Has an Outlook plug-in. Provides you with an 800 number.

## **Storage Devices**

Other considerations when converting paper documents into a searchable digital archive include digital copier/scanners, outsourcing, and storage options

## **CD & DVD Recordable and ReWritable Drives**

Rather than storing documents on the network, another option would be to burn information onto CD or DVD. A separate drive will be needed and an index will have to be created in order to access files on the CDs or DVDs once they have been created. Most computers come with a CD or DVD burner or these drives can be purchased as an external add-on for the computer.

[PCWorld's Info Center for DVD Burners & Recorders](#)

[CNet's Review Center for CD-R/RW Drives](#)

Another option would be to store documents on an external hard drive connected to a computer or a Network Attached Storage (NAS) device.

## **Backup**

To quote David Masters, a solo attorney who has written the book on the paperless office, "if you commit your files to the digital realm, you must back them up. Perform full daily backups, keeping one complete set of up-to-date backups offsite. Test your backups occasionally to make sure they are actually being recorded and can be restored.

## Conclusion

The paperless office can be a reality in a small law office. The initial expense of hardware and software may be daunting, but the cost savings will show a return on investment over time. Make sure that staff is all trained on the necessary procedures and processes. Enjoy the benefits of knowing where files are and never having to change printer toner again.

## Paperless Office Resources

- [The Lawyer's Guide to Adobe Acrobat, Second Edition](#) - by David Masters
- ["PDF Your Practice!"](#) - LTRC presentation from the 2004 Midwest Law & Technology Conference
- ["Setting Up the Paperless Office"](#) by David Masters - GP Solo Magazine, December 2003
- ["Reorganizing the Digital Law Office"](#) by Joe Kashi - Law Practice Today, January 2004
- ["Reducing Office Staff Requirements with "Enabling" Technology"](#) - Part 2 by Joe Kaski - Law Practice Today, April 2003
- ["Solos Profit by Going Paperless"](#) by Scott Brede The Connecticut Law Tribune, June 30, 2005
- ["Scanning for Business"](#) By M. David Stone
- [Reinventing your File Management System](#) – GP Solo article
- You might want to check CNet <http://www.cnet.com> for reviews and products.
- [The Paper LESS Office](#)™ by Ross Kodner
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