

So Much Information, So Little Time – Managing Consumer Cases in the  
Electronic Age

Joseph E. Cohen  
Cohen & Krol  
105 West Madison Street  
Suite 1100  
Chicago, IL 60602  
312-368-0300  
[jcohen@cohenandkrol.com](mailto:jcohen@cohenandkrol.com)

Valuation of Assets for Consumer Cases

I. Valuation of Real Estate Sources On-Line

- [www.zillow.com](http://www.zillow.com)
- [www.realestateabc.com](http://www.realestateabc.com)
- [www.cyberhomes.com](http://www.cyberhomes.com)
- [www.homesmartreports.com](http://www.homesmartreports.com)
- [www.domania.com](http://www.domania.com)

II. Use of Assessors or Treasurers Office to Determine Value

- Can look at Assessors Office website online to determine value for real estate tax purposes
- Local newspapers have websites showing recent real estate transactions; for example [www.chicagotribune.com](http://www.chicagotribune.com)
- Compare real estate bill for recently sold property to your clients property

III. Use of Satellite Imagery To Identify and Value Property

There are several free websites available that allow you to examine satellite imagery to view real property.

- Microsoft Visual Earth – [www.visualearth.com](http://www.visualearth.com)
- Google Earth – [www.earth.google.com](http://www.earth.google.com)
- Flash Earth – [www.flashearth.com](http://www.flashearth.com)

There are also for pay sites which can provide higher resolution, for example;

- Global Mapper – [www.globalmapper.com](http://www.globalmapper.com)

IV. Ability To Verify Proper Ownership of Real Property

- Examine Local Recorder of Deeds Websites. Many Counties have images available for free or for a small fee. Some examples are as follows:
- Cook County, Illinois – [www.ccrd.info](http://www.ccrd.info)
- Wayne County, Michigan – [www.waynecountylandrecords.com](http://www.waynecountylandrecords.com)
- Kenosha County, Wisconsin – [www.co.kenosha.wi.us/rod](http://www.co.kenosha.wi.us/rod)

V. Valuation of Automobiles

- Kelley Blue Book – [www.kbb.com](http://www.kbb.com)
- Vehix Corp. – [www.Vehix.com](http://www.Vehix.com)
- Black Book – [www.BlackBookUSA.com](http://www.BlackBookUSA.com)
- Edmunds – [www.Edmunds.com](http://www.Edmunds.com)

VI. Alternative Sites For Asset Valuation

- [www.ebay.com](http://www.ebay.com) can be a valuable site to determine the value of assets that cannot normally be found in some of the sites listed above.
- Trustees or other bankruptcy professionals will use a website created by ABI and the National Association of Bankruptcy Trustees (NABT) to sell assets – [www.BankruptcySales.com](http://www.BankruptcySales.com).

VII. Bankruptcy Software for Filing of Cases

There are several vendors that the majority of bankruptcy filers use in their office. These programs are available for a single user or for use by multiple users on a network.

- Best Case – [www.bestcase.com](http://www.bestcase.com)
- EZ Filing – [www.ezfilings.com](http://www.ezfilings.com)
- Collier Top Form – [www.law.lexisnexis.com/collier-topform](http://www.law.lexisnexis.com/collier-topform)
- New Hope Software Inc. – [www.bankruptcysoftware.com](http://www.bankruptcysoftware.com)

VIII. Creation of PDF files

As you are hopefully aware, in order to file a case or a pleading through CM/ECF requires the use of pdf files. There are two types of pdf files usually encountered in our legal environment. The first type is an imaged pdf file. When you scan a document through a scanner it typically creates an imaged pdf file. These are often very large files because the imaged pdf file is like a high resolution picture. If you are scanning a long document or use a high resolution setting on your scanner, you may have to break your document into several smaller pdf's in order to file it with the Court. This is especially true for attachments to motions, complaints and other pleadings.

The other type of pdf file is a text file pdf. When you create a document through a word processing software, i.e. Word or Wordperfect, the software allows you to save or print that file as a text pdf. This results in a much smaller file size than an imaged document. These word processing software programs and others have the ability to create pdf files as part of their normal capabilities.

The primary software for creating, editing and modifying pdf files is known as Adobe Acrobat and is available for retail purchase online or at retailers. Many computers come with this software preloaded at the time of purchase. You can also go to [www.adobe.com](http://www.adobe.com) for further information. It is necessary to use the full version of Adobe Acrobat to scan, edit or modify documents. There is a free program called Adobe Reader which is used only to review existing pdf files, not create or edit pdf files.

#### IX. Ability to Access Your Office PC from Remote Location

There is now software available that lets you connect to your office computer across the Internet from your laptop or desktop at a remote location. This allows you to access all of your programs, files and network resources as though you were actually sitting in front of your computer at work using your own mouse and keyboard. There are many providers for the necessary software. Many of the providers listed below have free downloadable basic software along with more sophisticated versions on a fee basis.

- Go To My PC – [www.gotomypc.com](http://www.gotomypc.com)
- Cisco Webex – [www.webex.com](http://www.webex.com)
- LogMeIn – [www.logmein.com](http://www.logmein.com)
- SymantecPCAnywhere – [www.symantec.com/horton/symantec-pcanywhere](http://www.symantec.com/horton/symantec-pcanywhere)

#### X. Tax Transcripts from the IRS

Section 521 of the Code requires a debtor to provide a copy of the federal income tax return for the most recent tax year or a transcript of such return.

There are two ways to obtain tax transcripts from the IRS. First of all you can call the IRS at 1-800-829-1040. Secondly you can order tax transcripts by mail by using IRS Form 4506T (Request for Transcript of Tax Return). This form is available online from the IRS at [www.irs.gov/pub/irs-pdf/f4506t.pdf](http://www.irs.gov/pub/irs-pdf/f4506t.pdf).

### XI. Advantages of Electronic Filing of Consumer Cases

- You can input data for clients from any location on a laptop or by accessing your server.
- You can file cases, amendments, motions, etc through CM/ECF from any location worldwide.
- The Bankruptcy Court is now a backup storage site for all of your filed cases and documents.
- You can now go “green” in your office since most documents can be stored electronically instead of printing on paper.
- Service of process can be accomplished electronically instead of mailing motions and pleadings to parties.

**Bankruptcy 2.0: How one small firm used technology to increase efficiency, organization and productivity on a reasonable budget**

By Ryan B. Moran, *ryan@ryanbmoran.com*

Allow me to begin by stating that I don't have all the answers. I can't tell you what the best way to run a law practice is, nor will I tell you how you should run yours. Everyone works differently. My own practice is still growing, and as it's developed I've had the opportunity to experiment with some technologies that have worked for me. I'll tell you about them, as best I can, with the hope that my experience can help you.

The following document details some of what I've learned while bending technology to serve my law practice. My goals have been to increase efficiency, organization and productivity without spending too much money. In other words, technology should enable me to minimize wasted effort and eliminate errors; help me keep track of tasks, documents, appointments, clients and cases; and enable me to do more work in less time or with fewer people. The icing on the cake is that the right technology can help you do all this at little or no cost.

It is important to maintain your perspective when evaluating new methods or tools. I've made the mistake of buying software or hardware, or spending hours researching a technology without really asking myself what good it would do me or how it would help me run a better practice. These are the principals I try to keep in mind when evaluating technology, in no particular order:

- A. The systems I implement should be transparent, and the data I create should be interoperable
- B. The systems I implement should be simple and robust
- C. The systems I implement should be scalable if my business expands

The first principal, involving transparency and interoperability, stems from a pet peeve of mine. I don't like investing so heavily in any one proprietary technology that I can never abandon it if something better comes along. I sometimes think of this as the "WordPerfect problem." Most of you know that the legal profession has historically favored WordPerfect for word processing. This one word processor, capable as it may be, is now an entrenched, de facto standard. A lot of attorneys have their life's work locked away in thousands of WordPerfect files. Sure you can convert your documents to another format, but the inconvenience of doing so probably prevents a lot of people from trying something new. I try to avoid any technology that doesn't provide an easy and obvious way out.

The second principal, regarding simplicity and robustness, is a matter of practicality. The more complex a system is the more difficult it is to maintain and the more likely it is to break. I favor simple solutions that are resistant to error --particularly human error. Sometimes this means forsaking a fancy solution for a low-tech one, but what you lose in sophistication you often make up for in resilience. For instance, a little while ago we were trying to eliminate paper faxes in our office. I wanted something that would send me a PDF instead of printing it out every time. We looked at some online services that promised to do this, but they were complicated and had a lot of trade-offs. In

the end we found a fax-printer that did exactly what we wanted, no fuss, no fees, and no headaches. We lost some features and some of the luster of greater sophistication, but the solution we have in place now works and has its own fail-safes.

The third principal, that solutions should be scalable, is a matter of necessity. I want my business to grow, and the technology I bring in should make it easy to do that. Often this means keeping your end goals in mind, and building toward them. For instance, when I was just getting started it was enough that I had one generic email address for all my electronic correspondence. When I brought on another attorney and then a paralegal it became clear that we needed individual email address. But this raised a question. Some wanted to use only their first name, others argued for first initial and last name. So you could have *ryan@ryanbmoran.com*, or *rmoran@ryanbmoran.com*. The first is casual and friendly, but does not scale well. The second is formal and a little cold, but accommodates people with the same first name. Often it is less about what you choose, and more about building flexibility and scalability into the system.

These three principals help me stay focused and objective while evaluating new methods or technologies. I'm not such a stickler for rules that I would categorically reject a tool because it violated one of my principals, but I need a good reason to discard a principal. For instance, in the email example described above one of my highly valued employees was very attached to the idea of using only her first name for her address. We made an exception for her because I would rather keep her happy than conform inflexibly to principal.

In the six sections below I try to capture the major areas where technology can help your practice. I cover the philosophy, so to speak, of digital files and the major conflicts between digital and physical documents. Second, I suggest some free but effective online sources for information that can streamline bankruptcy case processing. Third, I cover calendaring and communication, probably the most challenging area of business technology, or at least the area most difficult to get right. Forth, document management, including file servers, paperless faxing, collaborative document editing, and electronic version control. Last, but as important as anything else, I discuss backup systems to make copies of all your data and restore it if and when disaster strikes.

### **I. Philosophy**

Real isn't so real anymore. It used to be that we defined real by what we could hold in our hands --something physical and tangible, with weight and substance. Decades ago we recognized a distinction between the original and a copy; the original had a certain inherent significance, and because copy machines could make only imperfect reproductions, copies rarely had the luster or legitimacy of the original. We always knew which one was the copy because, if nothing else, it wasn't the original. Today, physical versions are copies from electronic sources and it's difficult or impossible to say which of several electronic sources the original is. Keeping track of which document on which computer is the most recent, and which one has the changes you made last week, and which one you modified for your client last night has been a constant struggle. It's been a problem in my office, and I'm willing to bet that it's a problem in yours. The solution, or at least part of it, is to redefine what we mean by "real."

I know I just lost a few of you there. I don't mean to bring up old memories of undergrad philosophy class. Think about it like this: the old concept of original versus copy worked because only one document had authority and legitimacy, so to speak; but electronic documents are all the same, and produce identical, flawless physical copies. We need some way to distinguish between them, and some way to assign priority to document versions. Very large corporations like, say, Ford, also sometimes called "Enterprise" environments by the IT industry, have developed solutions to this. Their insight is that paper copies are unequivocally not the original, only the electronic version is "real," and all printed copies are uncontrolled.

Where more than one version of an electronic document exists, particularly where there are one or more variations among them, we need a way to tell them apart and to assign priority to the "original." You probably experience this more than you realize. When you email a document to a colleague at least three copies are made. One copy in your email, one copy on the email server, and another copy delivered to the recipient. If your colleague makes revisions and sends it back to you, there are now at least six copies of two versions. Send your document back and forth a few times and you can easily end up with a pile of variations. Sometimes I work from home and tote documents back and forth on a USB drive. I can have different variations at the office, on the drive and at home. Finding the version I need --even if it's just the latest version-- has been a problem for me, and I'll bet I'm not alone. Big companies have strategies for electronic version control to address this that involve recognizing document ownership. For instance, whoever made or maintains the document is responsible for keeping track of revisions, and only their version is the real one. The motion you wrote last week is yours, and the priority of electronic version control defers to your authority. It follows that edits from all other various and sundry sources should be collected in the maintainer's version, and it is their responsibility to keep the official version.

This all sounds great in theory, but in practice it can break down. This principal does not account for documents for which there is no electronic version, documents with original signatures or scribbles in the margins, or documents that are somewhere in between physical and electronic, such as faxes and scanned documents. Nonetheless, my policy is that the electronic version supersedes printed versions. In my eternal quest to realize the dream of the paperless office, I typically discard printed documents for which an electronic version exists.

Bottom line: an electronic version has priority over a printed copy, and printed copies are uncontrolled; keep track of variations among electronic documents and recognize the priority of the primary copy.

## **II. Information**

There are a few nice websites out there that help me run a better practice. You probably already know about these, so I won't spend too much time talking about them. The thing to keep in mind is that the Internet offers a lot of great resources, databases and tools and you can often get what you need for free or --at best-- a small fee; don't be afraid to take advantage of them.

*Paycheckcity.com* is a handy, free site that helps you calculate federal and state tax rates from salary or hourly pay rates. I often use it to calculate a more reasonable tax

withholding when my clients elect deductions for, like, 13 kids. I don't use it all the time, but when I need it it is very helpful. For instance, when clients have no tax withholding on their pay advices I can use this site to get a very accurate estimate of what their actual tax liability will be at the end of the year. Or, when clients claim more dependents than they actually have I often ask them to correct their withholding on their checks. I use the site to give them an idea of what their checks will look like in the future. There are some features which require an account and a small fee, but I use the free utilities.

*Annualcreditreport.com* is indispensable, and I know I'm not sitting on a secret with this one. For anyone who doesn't use it, this site lets you pull down a free credit report from any or all of the three credit reporting agencies. Getting through the identity verification questions can be tricky, but this tool is worth investigating. It will not show you a credit score for free, but you can get a complete credit report from one or all of the three agencies. This can be helpful when clients do not have recent statements from all their creditors, and very often a credit report will show creditors that the client was not aware of, or forgot about. Of course, credit reports are often inaccurate, but as another source of information they help me out enormously.

*Nada.com* is a useful website for valuing a debtor's personal property, including cars, trucks, motorcycles and boats. Though in my estimation the values reported on the NADA website are high, especially in the current economy, the website provides a good starting point when valuing vehicles as well as a debtor's "toys."

Bottom line: check out *Paycheckcity.com*, *Annualcreditreport.com* and *Nada.com* if you're not already using them; keep an eye out for other resources that may come on the scene.

### III. Calendaring and communication

Calendars and email are probably the hardest things to get right. There are a lot of products that claim to solve the problem, but most fall short. I want a simple, fast collaborative environment. I want everyone to see the same thing and edit it in real time. Everyone should have their own personal calendars, but everyone else should be able to view and edit them as necessary. I want to be able to overlay calendars so we all know who is handling what and when. I want everyone in the office to have their own email address and be comfortable sending attachments and notes inside and out. I want to be able to work from home and see the same email as in the office. I want a shared address book so everyone can add, modify and delete contacts as necessary. There are solutions that can remedy most of this, but they can cost thousands in licensing and are simply overkill for a small law office. Happily, there are some free alternatives that do most of what I want with little hassle.

Google is more than just the de facto Internet search provider. Google offers free email addresses and a great calendar service. All their services are free, supported by unobtrusive advertisements. The one concern I have is that ads are selected by scanning your email and calendar entries for keywords, which is fine as long as you don't mind an automated advertisement system snooping through your email. That said, their services have made my life a lot easier and helped me get my practice off the ground.

Their email service, called Gmail, is as good or better than the other major free email providers, such as Yahoo's email service or Microsoft Hotmail. One of the first

things I did when I started my practice was establish a Gmail email address, and I still use it today. Emails from the local bankruptcy court are directed there, where they are filtered, flagged and forwarded. One of the best things about Gmail is the flexibility and power with which it can filter incoming messages and execute other actions based on sender, subject line or message body keywords. For instance, every email from the court that specifies a meeting or hearing time triggers a simple filter that forwards the message to another computer, reads through the message, teases out the meeting time and client, then adds it to my calendar of upcoming court dates. It's so simple and effective that I often forget it's even there, but it saves us time and eliminates confusion. Maybe it's just me, but sometimes it's too easy to let a court date sneak up on you if you're only relying on yourself or others in your office to maintain your calendar. Better to let the computer do what it's good at and handle it for me.

Gmail can do a lot of other fun things too. You get nearly 10 GB of free storage for messages and attachments, with more space available for a small fee. That is a huge amount of space if most of your messages are just a few sentences of text with the occasional PDF or image attachment. With all that you may never want to leave Gmail for another provider, but Google makes it easy to do so if you want. Unlike Yahoo or Hotmail, Gmail lets you easily access your account using standard desktop email clients like Outlook, Thunderbird or Apple's Mail client. From there you can archive and backup your messages or run the more powerful filters and rules available on those clients. The automatic calendar system I mentioned is handled in part by a small program running on a computer in my office. Gmail is pretty powerful by itself, but sometimes desktop email clients are needed to do the really wild stuff. The great thing about Gmail is that it lets you do what you want with your email instead of keeping it all inside its own system. And from there you are only limited by your imagination.

Google also offers a free calendar system. Google Calendar, often shortened to Gcal, is a fast, simple and powerful calendar system. It is more capable and flexible than Yahoo's calendar, which is the only other free calendar in its class. You can have multiple calendars under the same account, which means everyone in your office has their own calendar and everyone knows who is responsible for what. At my office each attorney and each paralegal has their own calendar; I can assign tasks to a paralegal, or someone else can add an event or reminder to my calendar. Gcal lets you overlay all the calendars so you can see everything going on that week, or turn calendars off so you can focus only on your events. My favorite feature is the ease of collaboration. Everyone in the office can be in the same calendar, and a change by one person will instantly reflect on all other screens. Much like Gmail, Gcal lets you easily sync your calendar to other calendar clients where the data can be manipulated further. Best of all, Gcal makes it easy to sync your calendar with a mobile phone or other device. Yahoo's calendar can also do this, but Gcal's mobile sync and alert features are more powerful and easier to set up.

Google Docs is an under-appreciated collaborative document editing system, which I promise will be my last Google commercial. It lets you create and edit simple office documents within your browser. It handles word processing, presentations and spread sheets. It isn't as powerful as Microsoft Office or WordPerfect Office, but it's pretty good for basic needs. The simplest thing you can do with Docs is access and edit the same files at home or at the office, which itself is nice. But you can also invite other users to access and edit your documents too. Unlike emailing revisions around the office,

Google Docs lets everyone edit the same version at the same time. It is a truly collaborative editing environment, and changes from other users show up on your screen in real time. I can write a letter to a client or draft a motion, and have another attorney and a paralegal both working on different parts of the same document, revising the language or reworking the structure all at the same time.

Bottom line: Google email is great, but may look unprofessional; Google Calendar is fantastic, and your clients don't see it anyway; Google Docs and real-time collaborative document editing is useful at times. All are free, if you don't mind looking at a few advertisements.

#### **IV. Document management**

So, now that you have a ton of electronic documents, how do you sort them, store them, and make them useful? This question breaks down into two major issues: 1) making documents accessible across computers or over a network, and 2) manipulating documents to take full advantage of the data they contain. Accessibility as a technical problem has largely been solved in the modern era. Networks are easy to set up, and the proliferation of cheap USB drives makes it trivial to carry data around with you. Manipulating the data and making it do what you want can be harder. PDFs can be particularly difficult, as the format is quite inflexible --but there are options. Text is much more malleable, and lends itself to templates, forms and automated document preparation systems. Remember: don't work for your data --make it work for you.

The simplest and most powerful thing you can do with your files is share them with your coworkers. Windows and the other major operating systems make it so easy to create simple network shares that you're probably already doing it. If not, you should establish a central repository for all electronic documents, such as 341 documents, scanned paperwork, credit reports, correspondence and so on. It doesn't have to be fancy to be effective. All you have to do is decide which machine will host which files. As long as you're consistent your efforts will mean less running around, less confusion and greater productivity within your office. Best of all, setting up simple file shares doesn't cost you anything, provided you already have a few computers and a basic network.

My favorite kind of printed documents are the ones I can shred. To that end, I scan just about everything to PDF and get rid of the paper copy if I can. Scanning printed documents is a chore, but I see it as an investment that pays off in improved organization and easier case processing. Of course, you are probably already scanning documents. But I'll bet you keep your client's originals at least until their case closes, and possibly longer. I say, why bother? Our policy is to scan all 341 documents and other paperwork and give our clients back their originals then and there. I don't like digging through stacks of ratty, torn, mismatching, unsorted papers any more than you do. Computers are much better at keeping things neat and organized, and I would much rather let my computer search for that errant pay advice. Electronic documents are easier to file, sort, copy, email and keep track of than printed versions. The only printed documents you really need are those bearing original signatures --shred the rest and you'll be well on your way to realizing that modern utopia, the paperless office.

I don't like faxes. They're messy, unreliable, hard to read, and difficult to work with. And yet, for various reasons, I need a fax machine. If I have to get a fax I prefer to

get it in electronic form, where it becomes basically just another scanned document. There are services, namely eFax, that can take over your incoming and outgoing fax operations for a small monthly fee. When your number gets a fax the document is emailed to you as a PDF; you can email documents out and they will be faxed to the number you specify. It's not a bad solution, all things being equal. The alternative I've employed is a multi-function printer, scanner and fax machine that receives incoming faxes and sends them to a computer on our network as an image file. This solution means we retain control of all our faxing, and get another printer and scanner along with it. The real advantage from my perspective is less paper and more PDFs.

With hundreds and thousands of PDFs on our network it pays to invest in the software to work with them. There are many free software packages to create PDFs, the most capable of which are probably doPDF and CutePDF. Both are virtual printers that let you "print" a PDF. Thus, anything that can be printed can be turned into a PDF. But once made they can be cumbersome to work with. I recommend Adobe Acrobat Professional to modify, splice, optimize and compress PDFs. Acrobat can perform optical character recognition (OCR) on files to read text from a scanned image or fax, which allows you to select and copy text out of images; it can also delete, extract or rearrange pages, rotate and flip pages, export to other formats, and other fun stuff. Acrobat is, however, not cheap. A full license for Acrobat Professional starts at \$449. But from there you can fold, spindle and mutilate PDFs to their greatest advantage. PDFs are more flexible than they are given credit for; you just need a package like Acrobat to do it.

One of the reasons WordPerfect became popular was its Mail Merge function. This let you create generic templates, such as motions, letters, certificates and so on, apply unique information such as a client's name and case number, today's date or some future date, the judge in the case, and language reflecting the chapter they were filing under, and output a formatted, ostensibly personalized document. WordPerfect can still do this, of course, but a more advanced, more capable competitor is HotDocs. HotDocs requires an investment in time to create and tune your templates. But once it's up and running it can be an enormous time-saver. Much like Acrobat, however, HotDocs is not cheap; licenses can reach \$500 or \$600. WordPerfect Mail Merge can be complex and error-prone; HotDocs is so simple to use I could trust a high school intern to churn out perfectly formatted and personalized letters, motions, and other documents. You supply readily available information such as a client's first and last name, their gender from which an appropriate pronoun is chosen, address, case number, bankruptcy case, judge, court address, upcoming hearing dates, and so on. Then, with the template supplied, HotDocs builds a document, complete with formatting and conditional text; for instance, a letter regarding a Chapter 13 case could get an additional paragraph, and a Chapter 7 letter might get a lower quote for legal fees. It is a very powerful package that lets you make the most of the information you already have on your clients and cases.

Finally, a productive office is a happy office. Your coworkers and staff (probably) want to do their jobs and to do so well. If you give them the tools to access, view and manipulate the data crucial to their job functions they will be more productive and happier to perform their duties. An office that standardizes on electronic documents should also invest in computers that are up to the task. I try to make sure all our workstations are powerful, fast and upgraded as necessary. I invest in large monitors, and we are now experimenting with dual-monitor configurations in an effort to make

everyone's life easier. Fast computers and big monitors seem like indulgences until you consider that you and your people will be staring at them all day, and that it is the primary interface through which they do their jobs. I don't see any reason to make it any harder than necessary for my people do their jobs.

Bottom line: make your files available on your network, where appropriate; scan everything you can and get rid of the paper copy; get your faxes as electronic files for even less paper; invest in the tools and hardware to make the best use of your files and data.

### **VI. Backup and data recovery**

It's not a question of if, but when. Your hard drive will die, your dog will eat your USB drive, and you will find all your email inexplicably deleted. It's important to establish a backup strategy early on and stick with it. It doesn't have to be sophisticated to be effective. The enduring principals of effective backups, as practiced by large IT departments, are consistency and redundancy. Backup your data often and keep several copies on media that you trust. It's an even better idea if you can keep copies at a site other than your office, such as under your mattress. The frequency of your backups should be commensurate with the value of your work. That is, if losing a day's worth of work would cost more than the minor effort of backing up your data, then you should back it up every day. If it would be easy for you to reproduce a day's worth of work, then maybe a week is a better interval. In either case, if you're not backing up your data now then you're living on borrowed time.

You don't need expensive hardware to do an honest job of backing up your data. Probably the easiest and cheapest thing you can do is copy anything valuable to a CD or DVD. You can do this every week or every month, label the disk with the date and keep the old archives some place secure. A hundred high quality DVDs will cost you \$30.00, and you probably already have a DVD burner in your computer. Another option is to copy files to a USB flash drive of some kind. These drives are cheap and portable, but notoriously unreliable. They can save you in a pinch, but I wouldn't rely on them. External hard drives, which can connect to your computer via USB cable, are very reliable, can have vast storage, and can be had for a few hundred dollars. A somewhat more sophisticated option is to install a second hard drive in your existing computer. This saves a little money over an external hard drive, but unless you're comfortable installing it yourself may not be worth the trouble. You just need some medium on which to copy your data. I'm not saying I'm not guilty of this myself sometimes, but any lawyer who isn't backing up their client data and case work is risking their practice and reputation to the fickle winds of fate.

There are a lot of software products that can backup your files. But unless you have lots of people working for you or vast stores of data you probably don't need anything too sophisticated. No doubt the cheapest method is to backup your files by hand. It's really just a matter of copying your client files, the database used by your case management software, and anything else you consider valuable onto some other storage medium. As long as you can remember to do that every day or every week you don't really need software to do it for you. But I'm not that reliable, and I don't know many people who are.

Happily, there are free, quality software options that will backup your data for you. Apple's latest operating system and Windows XP and Vista both come with automatic backup software installed, though you must enable and configure them before they will backup your files. The backup functions built into Windows are basic but functional. You can create a schedule to copy files over to another drive on daily intervals. SyncBack is a more powerful commercial backup package; they charge for their latest version, but give out the older version for free. It handles incremental backups and can compress and encrypt backups for added security. Finally, my favorite, Mozy, is an online backup service that stores your files online. Everything is password-protected and you never have to worry about the safety of your backup. I use this on my home computer, and it works like a charm. A small client program uploads files of your choice every night. I can retrieve the files through the same client or on their website. Best of all, Mozy offers free accounts with 2 GB of storage. If you have less than 2 GB of data to store, Mozy won't cost you a dime. Additional storage can be purchased for a small fee.

Bottom line: get something on which to backup your data before you lose it; unless you need a lot of fancy features, free, simple backup software may be all you need.

## **Conclusion**

These are the lessons I've learned: 1) There is a philosophy to the electronic office, or at least a conceptual framework, that begins with the belief that computer files are "real" and printed versions are merely copies, and that the electronic versions are preferred over printed ones. 2) There are a lot of great websites and resources out there. I try not to be afraid to go out looking for new tools. 3) Getting calendars and email to work right can be a lot of trouble, but Google has some great, free services that do just about everything I need. 4) Keeping my documents sorted and getting the most out of the data they contain isn't easy, but the rewards in terms of increased organization and efficiency make it worth it. 5) Backup your data. It's only a matter of time before disaster strikes.

I operate under the assumption that technology can help me run a better practice. So far, I don't think I've been wrong. But technology has limits and finding the right tools is never easy. I hope my experiences can help you run a better practice. I'd like to hear about your experiences and suggestions for how I can run a better practice. If you find a technology or procedure indispensable send me an email about it. I don't have all the answers, and I don't think I ever will. But continual improvement and refinement is our goal.