In Search of an Archiving Solution

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When the work is done and the file is closed, what do you do with the paper?

Despite the promise of technology and the digital age, we lawyers remain experts at killing trees. Moderately complex litigation files span three to four bankers boxes; the big ones fill dozens. Simple bankruptcies and real-estate transactions generate more paper than seemed possible 50 years ago. And with the advent of fax cover sheets, printing of e-mail for the file, and receipts for electronic delivery of documents, the size of files has grown, rather than shrunk.

Storing all that paper is expensive. A small storage unit may cost $50 to $100 per month ($600 – $1,200 per year). Records-retention companies charge even more. This is an expense lawyers must pay for clients and matters that no longer generate revenue for the firm, sometimes for decades. Few attorneys factor this cost into their overhead or fees.

Is there a better way? My answer is a lawyerly one: maybe, maybe not.

The problem isn't a lack of options. There are plenty of services that will scan and digitize your files. The problem is whether these options make sense.

Our firm (three lawyers, five staff) is unwilling to go to purely digital files; therefore, we still have lots of paper. Call it 20th-century thinking, but there is comfort in paper and original documents. Plus, out here in West Texas, storage space is cheap.

But that doesn't mean we want to keep everything. Aside from the hassle of cataloging and moving files and boxes, conventional storage makes retrieval of files difficult. It's even harder to find individual documents in a file.

What we want instead is a system to archive and retrieve essential documents, such as executed wills, that a client or her family may need 10, 20, or more years down the road. Even if we destroyed the paper file after 10 years (most bar associations require that attorneys keep client files at least six years after the file is closed), we'd want to keep signed wills available. We currently do this via a will safe in our office. But after years and years of practice, the safe is getting full.

What we need is a digital, indexed solution.

I assume in this article that a firm has not gone "paperless" with digital copies of all documents. I'm not sold on the "paperless" law office and whether the time and expense of digitizing everything is worth it. But even if the firm has gone "paperless," the discussion of archiving executed documents remains important. After all, if a firm saves its entire digital file to a CD, and stores that CD with any paper file, the retrieval difficulties remain similar. Also, the issues regarding format, obsolete media, and obsolete hardware are the same.

1. What to Save?

I suggest attorneys who are not "paperless" not electronically archive entire closed case files, which entails scanning everything. Why? Cost, mainly. The expense of manpower and hardware likely exceeds the cost of storing a single file for six years. To scan a single file – even a small one – takes time. It's not just putting documents into the scanner. It's removing staples and paper clips, scanning the documents, and babysitting the scanner in case of misfeeds. To be

really careful, someone would need to make sure the feeder didn't grab two pages at once, no pages are double-sided, etc. Then, you have to reassemble the originals for storage or dispose of them, by shredding or otherwise.

As documents are scanned, someone has to name and save each one. While there are programs that will automatically name and save documents, such systems defeat the chief benefit of digital archiving – the ability easily to find documents years later. You could use optical character recognition so you could search the documents, but this would create huge files that would need to be indexed, and those indices would have to be saved with the documents themselves.

In my litigation practice, I always scan my most important exhibits, pleadings, and discovery in a case, for three main reasons. First, I want a backup in case the original is destroyed. Second, I refer to them often, so I want easy access. Finally, I know I'm going to project them at mediation/trial, so I need digital versions anyway.

The same holds true when archiving estate documents. Scan the wills, powers of attorney, and other important papers you may need to retrieve later. Don't bother with the worksheets, old tax returns, etc. The likelihood of needing a will is moderate, but the likelihood of needing the backup is minuscule. Use the digital method for easy retrieval of documents you may need. Use the paper method for everything else.

But knowing what to scan answers only the minor question. The big questions: What file format to use, and what medium. The big fears: obsolescence and physical breakdown.

2. File Format.

Our firm's goal is not to save documents we can later edit or search. Our goal is to save images of documents so we can print out a true image of the original, signed paper (such as a will).

Thus, we don't need optical-character recognition. But we do need a format that still will be used in 20 years. That means most picture files, such as JPEG, TIFF, bitmaps, and similar formats probably are not a good idea. I'm not convinced that these formats won't be abandoned as better compression and rendering programs become available. And even if they hang around, it may become difficult to find software that will recognize the format and that will run on future operating systems. Imagine if you'd saved a file in a format that could be read only a DOS-based program, but which wouldn't run under Windows 2000 or Windows XP!

Finally, we need a format that once scanned is difficult to alter.

So we need a ubiquitous, accurate, secure format. Our choice: Adobe Acrobat's "PDF" file.

Adobe has shown a history of leaving the basic file format the same, even while it enhances its programs' ability to work with the file.

A scan directly into Acrobat creates an accurate image of the document. And with use of Acrobat's security functions, the scanned image is about as secure from manipulation as possible with today's technology.

3. What Medium?

When I bought my first Apple IIe in 1983, it had a 5¼-inch floppy disk drive. Now, you're lucky if you can find a 5¼-inch drive on eBay, and even luckier if it works – assuming the disks I used to save that poetry I wrote in college are still good (I know the poetry's not).

How many law offices still have old files and forms on 3½ disks? Most computers now don't even come with anything other than a CD/DVD. If you had stored important documents on

a floppy drive, and then bought new computers, how could you access your old data?

So even if you know what file format to use, you still have to know on what media to save it. But media present two major problems.

First, the media can't become obsolete. Will the medium still be used in 20 years? After all, 5¼-inch disks are gone, and 3½-inch disks are disappearing. The same holds true for Zip disks, magnetic tape, punch cards, etc. The problem is advances in hardware that make the old media unnecessary, and the hardware to read them becomes impossible to repair or replace.

Second, the medium needs to be reliable. That means the medium itself can't degrade.

I started by looking at CDs or DVDs. After all, they're relatively cheap. Everyone has burning software. And they're easy. Scan to PDF, save to CD. Done.

But then I started to look into the life span of CDs and DVDs. I remember the claims that CDs would last until after I'm dead. But then a funny thing happened: Some of the music CDs I'd burned stopped playing in my pickup's CD player. Then some that I'd bought stopped playing.

So I did some research. Turns out that those estimates of 100-year life spans for CDs were a bit . . . optimistic. FujiFilmUSA's web site still says CD-Rs (record once) will last 70 to 100 years, and CD-RWs (multiple writes) will last at least 30 years. But the estimates depend on near-perfect control of storage conditions, such as light, humidity, and temperature.

More important is the quality of the discs themselves. But according to articles published in the Journal of Research of the National Institutes of Standards and Technology (http://nvl.nist.gov/pub/nistpubs/jres/109/5/j95sla.pdf) and by Media Sciences, Inc. (www.mscience.com/longev.html), quality of the media is impossible to determine, even if you buy only the most expensive brands. Quality differs from lot to lot, even among the best labels.

Some of the most expensive CDs and DVDs tested degraded beyond repair in sunlight in as little as a few weeks. Unless the environment is well controlled, and the disks are seldom read, disks stored in a typical storage unit may become unreadable in two to 10 years. That's much too soon to be reliable for archiving any legal documents, much less wills and the like.

And, these results mask a bigger problem: You won't know the data's unreadable until it's too late.

I also considered microfilm/microfiche. But the cost of the machines is prohibitive, as is the expense of outsourcing. You can't "random access" data on microfilm or microfiche. Indexing is expensive. And, the machines will become obsolete or unable to be repaired.

The same is possible with CDs and DVDs; that is, machines and drives to read the discs may become impossible to find when new storage formats arrive. Remember 8-track tapes?

So CDs, DVDs, and microfilm/microfiche were out, due to concerns about obsolescence, cost, and/or degradation of the media.

My final solution? The one we already have: Our server's hard drive, for five main reasons:

First, we back up our server nightly and store the backup off site, so there's no worry about losing data. Second, if a hard drive fails, we know it immediately, before we need to access a document. Restore the server from a backup, and the files are back. Third, hard drives are by nature random access. Fourth, hard drive storage is as cheap as any storage available. Finally, there's no worry about obsolescence of the medium or the ability to read it. If a new drive or storage method arrives, just transfer the old drive to a new drive, which we'll have to do anyway.

4. Conclusion

So now, we scan signed wills and other documents to PDF. The document is named by client, document type and date executed, with the date expressed as four-digit year, two-digit month, then two-digit date. Example: "Smith, John Will 20041002.pdf" That way, if John Smith signs more than one will, each will be easy to find and organized by date signed, rather than date scanned. We save the documents to a special folder on our hard drive called "Archives." The "Archives" folder is backed up nightly. This gives us an accurate, secure, and reliable archive solution.

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