Techo Retro
What I've Learned in the Last 20 Years
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It seems so long ago, but it's only been about 20 years. I'm not a lawyer. I'm actually an electronics engineer by education and practice. I am also a self-educated legal technology consultant, independent, and have personally consulted with more than 350 law firms, law departments, law schools, courts, and legal vertical companies in my 15 years in this industry. I've written two books: *Computerized Case Management Systems* (ABA Law Practice Management Section) and *WordPerfect Solutions for Law Offices* (James Publishing; multi-author book). I've created a couple of successful newsletters: *The Law Office Automator* and *The Internet Lawyer.* I've published several major national studies on legal technology: The Internet Study (1998), The ASP Study (2001), and The Knowledge Management Study (2003).

I've made more than 220 presentations to attendees all over the country and written more than 100 articles during these years. I've had the honor and privilege to be the chair of the *ABA TECHSHOW* (2000 and 2001) and the co-chair of the *LegalTech Conferences* (2000 - 2007). But most important, I've been so very blessed with being a part of an industry for which I have such a passion. I have tried to make a difference through my various forums and activities, and from what I can tell, I have not burned out and I still have a message to deliver.

When I Started
In 1989, two major events in my life happened, both within a few weeks of each other. I earned a master's degree in electrical engineering from the University of Florida. I also lost my dad after a year's battle with cancer. I had grown up in Gainesville, Florida and after my dad passed away, I couldn't leave—not yet. I needed to stay and help my mom, but also to work through my own emotions after losing my father. He was a lawyer—a good, old "country lawyer," as he often described himself. He had been a solo practitioner, practicing real estate and probate law for 36 years.

Keep in mind at this time, the PC had been born only a few short years earlier, the PC/AT was *the* computer to have with a 10MB hard drive, 640KB of RAM memory, and running on Microsoft DOS 3.3. If my memory serves me, the cost was just under $2,000. The 3½" floppy disk was *not* yet available, Microsoft *Windows* was but a twinkle in Bill Gates' eye, and HP's main printer was the *HP LaserJet*. And the word processor of choice? *WordPerfect 5.0*. I actually wrote my master's thesis in WP5.0/5.1 and became an "expert" using WordPerfect.

At this time, lawyers were just starting to use computers on the desktop, not too many firms were networked, and one of my favorite technology terms, "sneaker net" surfaced. Most law firms

used WordPerfect 5.0 and 5.1, many had a time & billing system, like TABS III or Alumni Computer Group. The *only* case management system, *PI/CMS*, was developed by a personal injury lawyer and marketed by Shepard's/McGraw Hill. Legal research for Westlaw or Lexis was through a proprietary direct connect system. The Internet was just a slight twinkle in Al Gore's eye, e-mail was unheard of, and lawyers were worried about using the fax machine (client confidentiality) which was just starting to make an impact on how law firms conducted business. On top of that, there was no such thing as overnight mail delivery. How on earth did the legal profession flourish with so little technology?

At the major legal technology conferences, it's fun to reminisce about these times. Those of us lucky enough to have lived (survived?) through those times love to talk about war stories and the fun we used to have juggling all those memory-resident (TSRs) programs to make sure that we don't over extend that 640KB of RAM memory. At that time, WE were in control of the computer. Times have certainly changed.

As I mentioned earlier, I've been a legal technology consultant since 1989 when I started my own business out of the spare bedroom in my house. Since then, I moved to the University of Florida Levin College of Law where I established the *Legal Technology Institute* in 1997. I have continued consulting with firms over the years; the main difference now is that I'm a full-time salaried employee with the law school; clients who retain my consulting services pay the law school, not me.

IMO - The Top 5 Quantum Leaps in Legal Technology

I guess when you've been in this profession as long as I have, you can call yourself somewhat of an industry analyst. I wrote the news column for *Law Office Computing* magazine for ten years and I've been an Editorial Board member of *Law Technology News* for eight years, so I've learned to spot trends and provide analysis (good or bad) to readers interested in such things. It's not that difficult—when you attend conferences, what are the session topics and which vendors are on the exhibit floor. When you read the legal technology magazines, what topics are written and who's advertising what. For example, if you've noticed over the last few years, *the* hottest legal technology topic is electronic data discovery. It's a featured topic in all magazines as well as having its own track at the major legal technology conferences. And if you attend these conferences, more than half of the vendors have something to do with electronic data discovery. In a nutshell, let me share with you what I think are the most important contributions to the industry over the years.

WordPerfect 5.1. Face it, WP5.1 was the best damn word processor ever created. No, I don't work for WordPerfect—never have. But when WordPerfect came out with version 5.1 and a clean screen, a few days of typing and you'd have all the function keys down pat. Before WP, you either typed the document in carbon copies on your IBM Selectric III (how many of you still have this workhorse?), or if you were in a larger firm, you'd send it to the word processing department that used either a Wang or an NBI system. WordPerfect brought word processing to a new level and to the desktop.

And what about that technical support? You'd call a toll-free number and get a real person on the phone; someone who actually knew how to solve your problem. If for some reason your "hold" time was more than a few seconds, you got to listen to soft music from a WP disc jockey, who also informed you of the wait time for your particular question. I think I remember at one time that WP employed more than 1,000 help desk technicians who answered the phone. At their peak (WP5.1), WordPerfect held about 90 - 95% of the legal marketplace.

If you are a WP fan of heart, you probably remember Alan Ashton, Bruce Bastion, and Pete Peterson—*the* WordPerfect A-Team. After WP was sold to Novell, Pete Peterson wrote a history of WP, called "Almost Perfect." It's a good read and I'd encourage you to read it; available online at http://www.wordplace.com/ap/.

Unfortunately, they sold out and have been going steadily downhill since then. That is, until recently. Many in the industry have been predicting the demise of WordPerfect for several years now. But my good friend and fellow consultant Ross Kodner continues to remind his clients "when they pry it from my cold dead hands!" At the ABA TECHSHOW in Chicago several years ago, WordPerfect announced they'd landed a huge deal with the U.S. Department of Justice to the tune of 50,000 copies. Go WordPerfect!

BTW, if you are using WP version 12 and want to save it out as a Microsoft Word 2003 document, you simply click on File/Save As and select file type: "MS Word 97/2000/2002/2003 for Windows." It's so nice of WordPerfect to play well with others. On the other hand, if you are using Microsoft Word 2003 and click on File/Save As and select a file type, there is no save to WordPerfect. Grrrr!!! (see below).

Microsoft Windows, 32-bit processing. First, as much as I abhor Microsoft (see below), face it—without Microsoft we would not be as advanced in the computer industry as we find ourselves today. I've been through various versions of DOS, various flavors of Windows, but when Microsoft brought out the 32-bit version of Microsoft Windows (Windows 2000), it was such a significant improvement over previous versions. While some may argue the integrity, I'll argue the stability. Now when one program crashes, it doesn't crash the entire system, just that program (funny how you can relate to good things by implying bad things). MS Windows/XP is getting close, even though Microsoft still releases software before it's ready (like Microsoft *Vista*). In other words, the real world, IMO, is Microsoft's *beta test* site.

The Internet. Without a doubt, the Internet and its graphical interface, the World Wide Web, has certainly changed the way we gather information, whether it be legal research, news gathering, or simply Net surfing. The Internet has transformed our society into an information gathering resource. I love the ability to go to the Net to learn something so mundane such as, "Has anyone ever thrown a baseball faster than 100mph?" or "Did Michelangelo willingly paint the ceiling of the Sistine Chapel?" It's so easy to find out the answers to these questions.

Oh yeah, it's also useful for legal stuff. For example, secondary legal research, such as finding

out if an expert witness really *is* an expert, or conducting a detailed investigation for a particular interested party. Law firms are of course expanding their marketing services with the use of creative firm Web sites. Yes, the Internet has certainly changed our society, not just the legal profession.

Electronic Mail. Email can be a useful tool, but many's the time I've heard lawyers have this love/hate relationship with email. They love the ability to communicate with clients, answer questions, and provide correspondence through attachments. They hate spam (don't we all) and they hate having to deal with attachments they can't open.

I heard a new term a few years ago from Steve Sebastian, IT Director for Bradley Arant in Birmingham, AL. He & I were on a panel discussion and talking about trends in the legal profession. He held up his Blackberry PDA and called it a "crack-berry." He further explained that lawyers who use it become so addicted and you'll never be able to take it away from them (pry from my cold, dead hands). We then got into another discussion about billable hours and the fact that it's easy to answer email, in the car, in the airport, heck, even in the bathroom. The discussion went downhill from there after someone mentioned "bathroom billables."

Industry Coopetition. I don't know who coined this term, but I started hearing it in the mid 90's. Cooperate with your competition. No one, outside of Microsoft, dominates the entire legal marketplace. Yes, there are several software companies that are leaders in various niche markets, but where there is a market leader there is also competition. I believe it was WordPerfect that started opening up its architecture first to allow 3rd party software companies to integrate their products with WordPerfect. In other words, information in one product could be passed along electronically to another. WordPerfect provided this with the ability to generate documents with information from a database developed by a completely different company.

Soon, we started seeing computerized case management systems that integrated with financial management systems (time, billing & accounting). We saw Microsoft Outlook lead the way with the user interface—many companies have developed their software using a similar type of interface.

Industry coopetition is good and while we are inching closer to seamless integration, it will be a while before we really have seamless and transparent integration between software companies, especially in the management type systems (case, financial, document, CRM, legal research, litigation support, and email).

High Speed Bandwidth. In one of my previous lives as a design electronics engineer, I used to bring home a computer & modem and play *Star Trek* on a VAX mainframe using a dial-up 300 bps modem. I had so much fun (this was before the PC generation in the mid 1980s). When I got my first PC (an IBM compatible XT with a 10 MB hard drive, two 5 1/4" floppy disks, and a whopping 640 kb RAM memory), I thought I was in hog heaven. I could do anything and everything. And that high-speed 1200 bps modem was totally awesome.

Well, we've come a long way and, thanks to the Internet that has driven more people to use communications, we're now talking affordable high speed bandwidth (DSL and cable). More people using the Internet demanding higher speeds—is this a great industry or what?! You can rest assured that Internet speeds will only increase and like most everything else in the electronics industry, prices will decrease.

What Disappointed Me

We've all got our disappointments, especially when it comes to computers. Fortunately for me, there's not too many. Technology continues to improve in both hardware and software, and prices continue to drop. What more can you ask for? But, along the way, there are a few things that have been disappointing.

Voice Recognition Software. For some reason, IMO, voice recognition just isn't where it needs to be. I figured by now, we'd be talking to our computers like Scottie does on Star Trek. "Computer - Sue the Bastards." Well, maybe not that much recognition. But, I was hoping by now that voice recognition would take commands as well as dictation and be accurate. But, I find it still disappointing. I know there are some out there that swear by it, and my problem is that I probably don't spend enough time with it. But hey, I've got to make a living and can't spend more time correcting spelling errors than by typing.

But, on the other hand, I'm not a dictator—I can't dictate a letter. I *create* on the computer. That is, when I write a report or draft an article, I think while I'm typing. I can cut & paste with the best of them, but I can't dictate. Maybe that's my problem. I need to learn to dictate.

While we're at it, let me tell you what I'd like to see. I'd love it if I could tell my computer to get a file (first, find it wherever I stored it on my hard drive) and then print. Something like "Get the article I wrote about case management for the ABA TECHSHOW and print it." Or, as my long-lost buddy, David Vandagriff who taught me a lot about word processing macros, "Dictate five letters to my clients—you know which ones—print and mail; draft two wills and three Powers of Attorney; send a bill to those clients, and email me at my vacation home when the check is deposited in my bank account." Now, is that asking too much?

Case Management Software. I wrote my first article about case management for **The Lawyer's PC** way back in August 1991 ("The Case for Case Management"). I've written a book, *Computerized Case Management Systems*, published by the ABA (1999), and I've made about 50 presentations on case management system over the years. Most of the CMS vendors and I are on a first name basis. Case Management System software is, IMO, *the* most important piece of software a law firm or law department should have, after time & billing. The disappointing fact is that only about 1/3 of the legal profession uses case management.

There are lots of excuses and reasons, but let me share with you two things that I believe are the

reasons why law firms don't jump on the CMS bandwagon. Remember, I've been in this industry for 20 years and I've heard it all.

First, case management systems, for the most part, require a law firm to standardize the way they do things. I often draw an *un*analogy between CMS and time & billing. Time & billing is pretty much standardized: you do the work, you track the time, you or your secretary enters the time in the computer, a pre-bill is presented, you mark it up, the marked up copy goes back to accounting, you get a draft bill, you mark it up again, the marked up copy goes back to accounting, you get the final bill and in many cases, you create a cover letter to go along with the client invoice. I won't get into efficiencies here, but you can see that time & billing processes are pretty cut & dry. Everyone pretty much does it the same way, no matter if you're in a transaction firm or a litigation firm. Keep in mind the only thing the lawyer typically sees electronically is the time entry module—all pre-bills, draft bills, and final bills are on paper. All the hard work is done in the back office (duh, that's why they call it "back office" software).

However, case management systems are at the forefront of lawyers' desks. Now you have access to your complete client contact information (i.e., the "Rolodex"); you also have access to your case calendar and, if you wish really hard, you can have a calendar with rules, deadlines, and tasks associated with clients. In addition, you can generate documents (standard, boilerplate documents) with the push of a button. Each case, each client, each contact can also have their own "notes" fields. And, with if you really wish hard enough, everyone associated with the case or matter will also have access to the same information—all on the computer. In other words, you will no longer have to a) find the client file and b) find a piece of information in that client file. It's all on the computer.

That's the part that causes law firms to cringe when it comes to case management: information on the computer. Gads, that means lawyers will have access to case and client information and they will need to type information in ("Memo to file," "Conference call with client," etc.). The hard part for lawyers and law firms to understand that in order to gain humongous efficiencies, lawyers need to change the way they practice law. They need to standardize on some practices and many law firms are not ready to change their culture. For example, everyone who opens a new case should first check for conflict, *then* get a new client/matter number. Maybe that's not the best example, but I've worked with many law firms that have implemented case management and the ones that are the most successful standardize on several CMS processes. That's how you gain efficiencies and more billable hours (or less non-billable hours).

The second major reason I hear, lawyers are individuals and don't like to be told how to do things. I don't have a problem with that—believe me, no problem here. But, when you have lawyers who tell you, "I can do everything a CMS can do with Microsoft Outlook," then they don't fully appreciate all the work that goes on in the office trying to accommodate that attitude. For example, lawyers who share clients—in how many *electronic* locations will you find the same basic client information? Attorney "A's" MS Outlook; attorney "B's" MS Outlook; attorney "C's" MS Word case and client file; the firm's time & billing system, etc., etc. The same

information is in multiple locations. Now what happens when that client moves or basic case information changes? This is the same problem we faced for years with the old rolodex cards we used for conflict of interest. (Don't tell me you still use a paper-based rolodex system?) You have to change the same information in multiple locations.

The key is to look at information from three levels: the attorney level, the practice group level, and the firm level. See who needs what information and how they are currently getting access to it. We consultants call this a "process review." Attorneys need access to their case and client information which is *client-centric*. Firms need access to their attorney's case and client information, but are currently mostly *business-centric*. The key point is shareable access—access to multiple levels of case and client information. This will help bring the firm closer to a practice that uses less paper.

Microsoft's General Lack of Respect for, Well, Everything
In one of my previous lives, I worked at a pulp and paper mill in a small town in southeast Oklahoma, with about 10,000 residents. The town had one supermarket—it was dirty, unorganized, and often didn't have the shelves stocked. They got by with this general sloppiness because there was no competition in town; if you wanted to shop elsewhere, you had to drive about two hours one way. Yep, this *was* a small town.

I have the utmost respect for Microsoft, up to a certain level of tolerance. Face it, without the resources, research and development, and the impact Microsoft has made, where would we be without *Windows* technology? I just can't see it. Microsoft has pushed the technology envelope many times over. In another previous life, I used to design & develop microprocessor-based systems for various government agencies. At that time, we designed the hardware first, then chose and developed the software. Times have changed dramatically: for many years now, the hardware is designed and developed *around* the software. And, guess who's software?

However, I do get tired of Microsoft's insufferable efforts to continue to push out software with so many bugs (take for example, Microsoft *Vista*). Since Microsoft dominates the world, the industry must continue to accept what is shoveled out to it. For those of us in the IT world, just ask us how much time we spend downloading security patches and applying them to our technology environment? It can be a full-time job. And, it's not just the operating system; it's almost every piece of software that is pushed out the door. That's where my patience gets thin, but like every other living creature on this earth, there is absolutely nothing I can do about it, unless I want to go back to the old IBM Selectric III. So, I do what everyone else does: I bitch and complain and find solitude and support in this comradery.

The Law Firm's General Lack of Respect for Technology
I hear it all the time from lawyers and their IT staff—most of the time they point fingers at each other. Lawyers want the computer to work the way they want it to, with all the bells and whistles, yet they don't want to take the time to learn how to make it work. IT spends much of its time putting out fires that there is very little time to properly plan for technology. Even when they do

find the time, law firm management often scoffs at the idea of spending more money on technology.

IT staffing in law firms is often dismal at best. I often wonder why law firm IT people stay with the legal profession. They know they can make more money working in other industries, yet they often stay withing the legal environment. The general business industry has a much higher respect for computer people, pays them better, and provides them with much more challenging roles and opportunities.

Keep in mind, I've been consulting a long time and many times I'm asked to conduct a technology assessment, including law firm IT staffing. Everyone wants to know how many IT people should be in the firm; a few want to know how it should be staffed. Most of the time, I, like many other consultants, recommend a range of one full-time IT person for every 20 - 35 law firm staff. The lower ratio is recommended for law firms that are embracing technology; the higher ratio is recommended for firms with basic technology. Yes, there is a difference. Most of it deals with the IT support people. It's one thing to have the latest and greatest technology and gadgets; it's quite another to get the lawyers and staff to use the technology.

I often draw an analogy between IT staff and lawyers. Most lawyers think the IT department are just seats that need to be filled. In other words, they think that anyone who knows computers can work in the IT department. That's like saying any lawyer can handle any type of law. But, I guarantee you that a law firm is not just going to hire any lawyer to fill a vacant seat; they're going to recruit a lawyer for a particular position. If you want your firm to take advantage of the technology investment, hire the right people for the right job. You don't want to hire a low paying computer technician to take care of your firm's network and server maintenance—it's a specialty that requires special training *and* experience.

Promises that Were Made but Broken

I'm sure there were lots of technology vows made and broken and we certainly saw plenty of "vapor ware," that is, software that was promised, but never delivered. But, here are a few of my picks of promises that were never delivered for one reason or another.

ASPs. Back in 2000, around the time of the dot-com crash, one of the major trends we noticed was for monthly subscription-based access to the common desktop applications, such as Microsoft Word, Excel, Outlook, as well as access to more substantive software, such as case management and document management. The idea was that a law firm or law department would pay a per-user monthly subscription rate for use of these applications. At that time, the high speed bandwidth firms used was typically T-1; DSL and cable were not developed.

The main promise of ASPs was that a law firm would only pay per user per month over a period of time (i.e., monthly maintenance expenditures); the firm would *not* have to continuously upgrade their software nor their hardware (i.e., capital expenditures). All that infrastructure was

handled outside the firm by the ASP hosting company.

Here's my take on what happened. The Y2K "bug" or whatever you wanted to call it caused many firms to upgrade their hardware and software (i.e., capital expenditures) prior to 2000. When the ASP craze hit in 2000, law firms had just spend millions of dollars on these upgrades; they weren't ready to go into maintenance mode, because the ROI wasn't there. On top of that, law firms were concerned about client confidentiality (where is the data stored), communications security (if the data goes over the Internet, who will "see" it or have access to it), and loss of control of their data (did everything in the law firm go to the ASP or only selected data). To me, the client confidentiality and communications security issues were argued simply because lawyers were not educated about encryption.

I used to argue two major points on this issue. First, when lawyers go to lunch and pay with their credit card, do they know what's being done with their credit card when it's in the back? There were published reports of waiters who had used black market credit card readers to capture credit card info during this process; who knows what they did after that.

Second, we had the same arguments 20 years ago with fax machines; client confidentiality and security. And, how many law firms now have fax machines and how many of those fax machines send faxes to the wrong person? Of course, that silly little disclaimer ("this is intended for the named recipient; if that's not you, don't read this fax") takes care of *any* possible misuse of that information.

My point is that when it comes to faxes, emails, or ASPs, it's a perception–lawyers don't worry about this happening to them if they're comfortable using the technology. ASPs are new technologies and new paradigms of handling processes. If ASPs can hold out a few more years, I think you'll see more law firms looking at these models as a potential alternative to current technology. In fact, we are now starting to see another subscription-based service called "Software as a Service" surface. (Say that three times).

Knowledge Management. KM was really big time a few years ago. Everyone was talking KM, how it would help with capturing the intelligence within a law firm. My good friends Kingsley Martin and Sally Gonzalez, whom I have the utmost respect for, are pioneers in this realm. Every now and then we get to talk realities, as opposed to market buzzwords, and the reality is that, IMO, law firms and law departments are too busy to bother with KM. KM is all about people and processes, which impacts an organization's culture. If the firm's attorneys are too busy making money, then something like KM which is non-billable, is not as important. KM is a long-term strategy and many law firms are not into long-term.

That's why the Brits are so far ahead of the game. There are non-billable professionals called Practice Managers whose job is to work the people and processes and gather *and capture* the necessary intelligence of a law firm that helps to make KM work. In other words, the mission of these managers is to understand the law firm, the practice group, and the individual attorney and

help determine the process that will optimize the practice. They analyze the firm's processes, they capture the information/knowledge about how decisions are made, and they collect the information into electronic management so the firm can reuse the information. The firm doesn't have to reinvent the wheel. And, they help modify the process, people and technology to continuously improve service to their clients, both internal and external.

A simple example of KM is a brief bank or a set of master forms or documents. The brief bank used to be a filing cabinet full of briefs created by the firm with a paper table of contents and keywords to help locate briefs. Then, with the advent of computers and word processors, we were now able to store these briefs electronically *and* search them. Many firms implemented this type of system; few kept it up. It's a process and it's unbillable. But, when done properly, it can save the law firm many man-hours.

KM is more than technology–it's people and processes. I've often said "You can't automate CHAOS" and KM is a tool that can help. Envision the major electronic management systems in the legal profession: financial (time & billing), document, case/matter, litigation, legal research, CRM (client-relationship management), email, and substantive (individual database systems). Try doing a simple search on a client, say "Adkins." In most cases, you'd have to conduct the search in each of the individual applications–search for Adkins in the time & billing system; search for Adkins in the document management system; search for Adkins in the . . . well, you get the idea.

One of KM's technology promises was that the simple search conducted above would be handled with a single search–yeah, right! We're a little way off, but we're getting closer.

Seamless Integration. Monica Bay, one of my good friends and editor of Law Technology News, refuses to print the word "solution" in any of her articles. Likewise, I have a hard time talking about "seamless integration," a marketing term coined by someone who was obviously tied to governmental politics trying to gain votes for some office they were totally unqualified to run. We are still so far away from seamless integration, IMO, it doesn't deserve any press other than a broken promise—'nuff said.

What I'd Like to See
Law firms better utilize what they have. Number one on my list of what I'd like to see is that law firms with technology do a better job of using it. I've been in so many law firms and law departments who have most of the technology they need, but for some reason, think that throwing more money at the problem will solve it. Well, I hate to be the bearer of bad news, but it doesn't work that way. There are lots of reasons why technology doesn't work in law firms and I've heard most of them. The biggest reason is that lawyers don't recognize the value or the benefits of using technology. They'd rather practice law and work with clients to solve their problems.

The number one reason for successful installations is training. The number one reason for failed

installations is lack of training. It's really that simple. Successful implementations are planned in advance, and take staffing, leadership, training, and continuous training. Why do lawyers attend CLE training (besides needing the credits to continue practicing law)? Because the law is constantly changing and good attorneys realize that they need to stay on top of the law to better serve their clients. It's the same with technology—it's always changing and there are better ways to do the same thing. I can't make it any clearer than that. One more point and I'll get off this soap box: the law is not perfect; computers are not perfect—deal with it!

Document-Centric Environment. Have you ever taken a deep look at the technology available to help generate documents? Of course, you use either Microsoft Word or Corel WordPerfect. But, do you use any document assembly tools? Do you create PDFs? Do you use macros? Do you get emails with attachments? These applications are out there and have been for some time. But, one of the things I constantly see in law firms and law departments is that these systems are often piecemeal, meaning one group may learn how to use some of the functionality of a particular application, but no one takes the time out to learn how the entire document process works. Law firms should take a few moments to understand how documents are generated, how they are delivered, how they are stored, and how they are retrieved. It's not that difficult, but taking a little time for this workflow exercise will save a great deal of time in the long run.

For example, when documents are generated, does the firm use a word processing macro application, such as Softwise, Legal MacPac, Payne Consulting Group's Form Assistant, or Icreate? Does the firm use a document management system, such as OpenText's *DM*, Interwoven's *iManage*, or World Software Corp.'s *Worldox*? Does the firm use a document assembly system such as HotDocs, GhostFill, ProDoc, ThinkDraft, or WinDraft? All of these systems are intended to help expedite the document generation, delivery, storage, and retrieval process. This *is* the document-centric environment. The key to efficiency is using these applications together. Again, training comes into play and most likely it will be training from within the firm. While each application typically has independent training, it's up to the firm's training department to understand the firm's document culture and develop a training regime to fit.

Client-Centric Environment
Now that I've laid out the document-centric computing environment, which revolves around documents, let me explain a new concept; the concept of working within a database (not a document) that revolves around your clients. This is where case management (matter management to those in the corporate & government world) comes into play.

I've been writing about case management since the early 90s. Recent studies indicate that only about one third of the legal profession use some sort of case management application. I thought by now it would be more. Case management has been around for quite some time and, in my opinion, is currently in it's fourth generation. To explain, the first generation was a simple database used to track cases and matters. The second generation incorporated additional basic functions such as document generation and calendaring. The third generation includes the ability

to integrate with other applications, not just those developed by the same company—coopetition: cooperating with your competitors. The current fourth generation incorporates workflow concepts.

Capture & reuse the knowledge. In our Knowledge Management Study a few years ago, we noted that Great Britain was more ahead of the curve on knowledge management than the United States. Diving a little more into the analysis, it was our opinion (as with many other industry analysts) that the UK employs knowledge management specialists. These specialists are attorneys who no longer work on cases or matters, but who review cases and matters within the firm. They utilize databases (document management systems and case management systems) to retrieve data and review how the firm handled the case. They make recommendations for improvement on the case, the fees, and the processes.

I don't hear that much about KM anymore. Maybe it's hiding for a future unveiling. What I do hear though, and this is a good thing, is that law firms are starting to recognize the importance of debriefing cases & matters when closed. Sure, it takes non-billable time, but it's also saving money for the firm in the long run. First, they'll review the documents in the file before closing it for archives. This exercise itself usually reduces 30-50% of the physical paper. Talk about saving dollars on archival storage–real estate for storing boxes of files is getting to be like the price of gasoline; it keeps going up. Second, the firm will review the actual case/matter to cull the intellectual information, such as a good form for reuse or expert witness information. Third, and most important, the firm will look at the billable time vs. the collected fees and determine the effective rate of the matter. Did the firm make money on the case and if so, could it or should it have charged more? If the firm lost money, should the firm take any more similar cases/matters? Should the firm market more in that practice area? There's a plethora of information that can be gathered at the end of a matter; it just takes a little time and effort *and* commitment.

My Take on the Next 15 Years
Smaller, Faster, Cheaper. No doubt, technology is getting smaller, faster *and* cheaper; at least in the equipment. I remember back in the early 1990's an AT&T 6300 desktop computer, complete with a 10MB hard drive, dual 5 1/4" floppy disk drives, a green monochrome monitor, and a whopping 640kb of RAM cost about $5,000. But, it was *the* computer to have. Now, we can get a computer with 100 times the computing capacity for under $500. Yes, technology is getting cheaper. But, as I mentioned earlier, the cost of using technology is going up. Things are more complex, and you need competent people to understand them and make them work. I could spend another couple of pages writing about PDAs and smart phones, but all I'll do is mention that they are continuing to improve—smaller, faster, cheaper.

PaperLess. As I look back over my years in this industry, I've become keenly aware that there is such an increase in computer use that there is an equal increase in the amount of paper generated. In a previous life, I worked at Weyerhaeuser as a process control engineer in a pulp & paper mill.

It stunk big time, but management always said, "Smell that money!" I imagine the paper companies are very appreciative of the computer technology industry, since people are now able to print out reams of paper 24x7.

But, over the last five or six years, the legal profession has begun to understand that while computers can help you become more efficient, finding information (in the form of paper) can be quite a nightmare. How many of you lose billable hours looking for files, then looking in the file for information?

My good friend and fellow technology consultant, Ross Kodner, introduced the concept of *PaperLess*, not paperless, but less paper. This involves using a combination of scanning and imaging technologies and document management systems. If you can create less paper by getting more information into the computer system *and* having an easier method of finding that information, then you've got a Paper*Less* office. I believe that with the advancement of copy machine and multi-function technologies, law firms will have the luxury of *easily* converting paper into electronic formats. The increased use of Storage Area Networks (SANs) will help store these document repositories and document management systems will help you easily locate the documents.

Knowledge Management. We've seen several attempts over the last couple of years for Knowledge Management. Some have been more successful than others. But, the biggest problem with knowledge management is that right now it's such an abstract concept, it may take years before a law firm will recognize the benefits. There are so many definitions out there for knowledge management it's ridiculous.

In order to capitalize on knowledge management, law firms and law departments must first recognize it's not *all* about technology. It's mostly *people* and *processes*. Kingsley Martin and Sally Gonzalez, two of the industry's KM gurus tell me that "if you spend more than 30% of your KM budget on technology, you're wasting money." They're absolutely right—it's not about technology; it's about people and processes. Law firms will eventually understand this concept and embrace it.

IT Support & Training. Yes, I'm an IT guy—actually, I have a Master's of Engineering degree in Electronics Engineering. I'll admit I'm a little biased. But, I'll also tell you one of the first things I look for during consultations is the type of technology a law firm uses. The IT staff cannot only tell me that, but they also can tell me how the firm uses technology in their day to day practice of law.

Technology, like the law, constantly changes. Like lawyers who attend CLE to keep up to date on the law, IT staff also need to attend training to keep up to date on the technology. Just because you have had the same server in the firm for eight years doesn't mean the technology is the same as it was eight years ago.

Law firms and law departments who utilize technology need to understand it takes more than your secretary's cousin's high school son to keep it running. Put the time into your IT training—they know which conferences and technical training seminars to attend. It's got to be part of your overall technology budget.

Electronic Filing. Face it; the courts are lagging behind the private industry. Why? It's funded by government and there's often not a reason to become more efficient. From the clerk's point of view, they are hurting when it comes to technology funding. But, from the government agency that funds them, the courts are doing a good job with what they have.

However, I believe that in the next five years, we are going to see a windfall in the way courts handle data input—it will become electronic and will be more automated. The slow down right now it that courts, like law firms, use different systems and software. What works in one court will not work in another court, often within the same jurisdiction. What will need to change are both the procedures as well as the technology. Electronic filing may be the key to more efficiency within the courts, not just getting data into the system. Unfortunately, the courts are significantly underfunded and understaffed with the increased filings and litigation of our society. While there are great associations, like the National Center for State Courts, that carry the torch, there's no politicians who are pushing the buttons for additional governmental funding.

Well, this dissertation is about complete. I've been in this industry for 20 some-odd years and still love it. I've had a lot of good times and only a few bad times; but, like the time I spent in the Navy, you tend to remember the good times and forget the bad. Even though I've been doing this a long time, I still feel that a good consultant must share his or her experience with others and I do that through writing and speaking. If nothing else, it keeps me off the streets at night (and weekends).

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