Smart Pads On the Wireless Web

Marc Lauritsen | Take intuitive interfaces.

Add wireless connectivity. Factor in expert systems. Sometimes the future sneaks up on you. Are we nearing the crest of another big change in law practice technology?

t's an old dream: You wield a magic yellow pad, its pages rippling with intellectual current. Case information and legal research display on command. You save scribbled notes for easy search and retrieval. All your files can be called up from anywhere, at any time. Checklists and questionnaires reshape themselves as you work. Participating in phone and video conferences requires just a couple of taps.

Okay. Let's be a little more realistic. How about a lightweight, pad-shaped device that's intuitive to use, reasonably unobtrusive, wirelessly networked and equipped with some pretty smart software? Three developments have gotten us a lot closer to that dream:

- A new generation of tablet PCs
- Wireless fidelity, or Wi-Fi, technology

Web-enabled knowledge tools

Put them together and some compelling applications become feasible. Will they change how you work? Are you ready for a magic carpet ride?

A Dynamic Trio on the Rise

Each basic dimension of information technology has undergone several mini-revolutions in recent years. Here are the three main fronts.

The interface. Computer use has become more intuitive as graphical interfaces, hypertext, Web browsers and voice recognition systems have arrived. We're comfortable with touch screens at ATMs and airport check-in stations. Tablet PCs build on these advances and add pen-, or stylus-, based modes of interaction. Now we talk about handwriting recognition, gestural communi-

cation and "digital ink."

If you haven't yet tried a tablet PC, think of something that combines the portability of a PDA with the functionality of a late-model laptop, costing around \$2,000. It's a type of notebook computer with special software and physical features to accept and digitize handwritten input. (Its operating system is a subset of Windows XP, and there are already tablet-aware versions of Microsoft Word, Excel, Outlook and PowerPoint.)

Connectivity. Our ability to exchange information electronically with others has, likewise, steadily improved. Local area networks gave way to wide area networks and eventually the Internet. We now have the "pipes" and protocols to move data error-free and at awesome speeds. Cheap, fast wireless Internet connections are part of the latest wave. Most tablet PCs include an integrated 802.11b (Wi-Fi) wireless card, and Wi-Fi "hot spots" proliferate. Throughput and geographical coverage will continue to improve. Bandwidths of tens of megabytes per second are within reach. We can be superbly connected without all those clumsy hardwire connections.

Intelligence. Software that enables us to perform tasks acknowledged as "smart" also has been on the rise. Artificial intelligence and expert systems go way back, even though practical applications have been slow in coming. In the legal world we now have online inferencing systems (such as Inana) and Web-based document assembly tools (like GhostFill and HotDocs) that can embody a great deal of know-how and perform complex analytical and text-generation tasks. Knowledge-based applications enable dynamic, interactive user experiences and increasingly do valuable intellectual labor. Online advisors step people through important decisions and activities, while intelligent templates assemble both simple documents and elaborate sets.

Combinatorial Explosions for E-Lawyering

Independently, each of the discussed technologies lets us do once-miraculous things. Tablet PCs are liberating even without Internet connections or programmed legal intelligence. You don't need pen-based interfaces or smart software to enjoy the benefits of wirelessness. And you can perform highly sophisticated document assembly from a fixed computer using a conventional keyboard and mouse.

But interesting stuff starts to happen when you combine the developments. Tablet PCs plus wireless network access Pen computing plus document assembly Put all three together—intuitiveness and wirelessness and intelligence—and the fireworks really start. Longmooted modes of e-lawyering at last become practical.

Here are just a few examples of how you might put these combined innovations to use in your practice. Client interviews. You can unobtrusively run an interactive questionnaire on a tablet during a client interview, perhaps prepopulated with information that the client entered the day before via your firm's Web site. Or how about taking notes in a dynamic outline? You can also rapidly check and update case management information using software such as Time Matters World Edition.

Depositions. Likewise, you can access a deponent-specific question outline, based, for instance, on a plaintiff's peculiar work or medical history, or on an expert witness's supposed expertise. If an answer surprises you, detailed follow-up questions will be right at hand. In multiparty litigation, both questionnaires and answers can be quickly shared with fellow counsel—regardless of their locations—consolidating the best thinking on key lines of investigation.

Due diligence work. Associates or paralegals off-site on due diligence errands can be equipped with intelligent checklists that both minimize missed issues and provide instant data uploads back to the firm, when time may be of the essence for pending transactions. Checkboxes, menus, buttons and similar controls on such applications lend themselves well to tablet pens.

Trials. A small, light, easy-to-read device that resembles a legal pad—that is, the tablet PC—will likely turn out to be very handy in witness examinations and closing arguments. You can check off points as you make them, jot quick notes and be alerted to dangerous omissions. You can e-mail or instant message notes with colleagues at counsel table or back at the office, without making those

annoying clicking sounds or looking like a geek. You can generate motions, proposed offers and settlement agreements on the spot.

Negotiations and closings. With a smart tablet in hand, you and your colleagues (or opponents) can do just-intime collaborative drafting, highlighting and annotating of documents. Need to regenerate those 300 pages of paper for the loan closing because a guarantor has been substituted or other terms have changed at the last minute? No problem. Fire up your document assembly program, access the latest file on your server, make the changes, assemble and send to a convenient printer. (Well, maybe that's stretching it a bit.)

Burgeoning potentials. You can imagine many other possibilities without much trouble. Take any application you have, or wish you had, and picture using it with a pen on a portable tablet, aided by software that seems to think and actually does "intellectual" work. If this very article had been designed for interactivity, you could tap here to see a quick video of legal tablets in action and here to be taken through an interactive analysis of how they might cost-effectively be introduced into your practice—all while grabbing a bite between flights at O'Hare.

What's Stopping Us?

Much, of course, remains to be done. Tablet PCs aren't as lightweight or as intuitive as real yellow pads and pens. And they aren't as pleasant to read as printed books and magazines (although "smart paper" is emerging from research labs). Plus, legal technology vendors have yet to adjust their software for optimal performance in tablet modes.

Handwriting recognition, like voice recognition, still makes too many mistakes. While 80-plus percent accuracy may be amazing, it's also woefully inadequate. Network bandwidth and security features are not yet ideal. We need more Wi-Fi hot spots—and unquestioned data integrity.

Finally, interactive checklists and intelligent templates can be expensive to build and maintain. We'll want some ready knowledge tools to outfit our new devices. An open market-place of prefabricated applications, starter kits and componentry is my personal dream.

Tapping and Tipping

Not all legal computing is best done on tablets. Other visions of mobile and distributed computing will contend for adoption. And no technical or market advances will neutralize deep-seated resistance to transformation. Some lawyers won't change even when full-size portable devices weigh less than an ounce, regularly exchange 100MB per second and cost so little as to be disposable. But most lawyers, thankfully, have a lower threshold of adoption.

We've barely begun to see information technology's impact on law practice. The confluence of factors discussed here has produced a rare opportunity for Big Change—one of those famous tipping points at which things suddenly shift seismically. Enough legal professionals doing enough work with smart software on wireless tablets may unleash cascades of innovation. Consider tapping into some of it.

MARC LAURITSEN (marc@capstonepractice.com) is President of Capstone Practice Systems, which specializes in document assembly and other legal knowledge systems. He is a member of the LPM Section's eLawyering Task Force. he few good ideas I have always seem to come when I'm on the move and can't stop to jot them down for near-term posterity. Enter my Voice-It, a digital recorder that is always ready to receive those lil' gems of thinking, all in a device just about the size of a credit card. While there are a couple of different versions, my Voice-It VT-90 model—which can be had for \$36—can handle 90 seconds of musing (which is plenty for my mind's meager output). The only problem: Sometimes I need a second Voice-It just to remind me to listen to the first one!

I've also grown quite fond of my **thumb drive.** Named for its digit-like size, this baby can hold up to 128MB of files and it couldn't be more "Daveproof" to use. I just plug it into any USB port and I'm off—no fussy drivers or software to deal with. Gone are the days of burning a CD or e-mailing a file to myself so that I can transfer something to another machine. And before I hit the road for that critical presentation, backing up to this puny wonder sets my mind at ease. There are scores of thumb drive manufacturers and sizes available, but I use the Sony Micro Vault USB Drive, which sells for less than \$50.

In my line of work, I do a fair amount of presenting and I find myself moving around a bit (probably to keep from falling asleep). Happily, my discreet **remote control mouse** allows me to roam freely. A small receiver plugs into a USB port, and with its better half I can advance, or reverse, my PowerPoint program with a simple flick of my thumb. My model of choice is the Atek Tote-Remote, which costs around \$75. As a special bonus, it also has a built-in laser pointer that I can use to prod my audiences to pay attention.

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hate to be slowed down when I'm on the road, so when I have an option in hotels, I choose them based on whether or not they offer high-speed Internet access, especially free high-speed access. For example, the best-kept secret in San Francisco is the Hilton Garden Inns at the airport. It has not only free high-speed access, but also microwaves and fridges in the room, a pool, a jacuzzi and, best of all, a laundry (at rates always at least half the price of downtown hotels)!

Also, Bose Corporation's new **QuietComfort2 noise-reducing headsets** are like a gift from heaven. The upgrade offers "fold-able" headsets that take up much less room than version 1, and they've eliminated the clunky battery box. These are super because they really knock out the noise from screaming babies, and you can hear the full range of sound from your CDs. These headsets are worth every penny of the \$299 price tag.

A final favorite, though somewhat larger than a gizmo or a gadget, is **car service** in Manhattan. There's nothing like a reliable car service after a long and stressful trip, allowing you to relax and refocus for the next big meeting while you're being whisked in comfort to your destination.

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