Go Mobile, Young Lawyer!
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There has never been a better time to use technology to aid the practice of law and the young lawyer may be said to have an advantage that no other lawyer has. Adapting technology to the processes and methods of practicing can be one of the hardest challenges. Lawyers who have recently joined the profession are still developing the business practices that will lie at the heart of their practice. Young lawyers have the opportunity to find technology that becomes part of the way they practice, rather than the other way around.

Law firm technology can take advantage of new infrastructure changes, like new wireless networks and copiers that fax. Software integration has reached a new level, providing the opportunity to turn your computer into a multi-purpose tool where e-mail, documents, client information, and other information are all accessible. The choices have never been so great.

The Future is Mobile

The real opportunities for the young lawyer to distinguish herself lie in the technologies that allow you to be mobile. This often conjures up the picture of the always-available, phone-and-pager-bedecked attorney but there is much more to the mobile picture than phones. There are also ways to take advantage of mobility that will improve, not detract, from your quality of life.

Networking

The first place to look is at your office technology infrastructure, which should be based on a local area network (LAN). This network allows you to share information, printers, and other resources throughout your office. Until recently, your network choices were limited to "how fast?" because the typical law office network relied on wire. The wire was in your walls or run through your floors or ceiling and connected all the devices in your office. When a computer or resource was added or moved, a new wire was added or an old wire was moved.

Enter the wireless local area network. At least one vendor of these products uses the term "wire-free" because it both underscores what the network is and is not. There are no wires between the antennas n a wireless LAN – data is transmitted through the air using radio waves that can penetrate walls, windows, doors, and most other physical objects. It is also a technology that should be distinguished from wireless phones, and wireless phone networks, that are highly touted to the mobile professional. The wireless LAN is at least 10 times faster than any wireless phone network and is comparable in speeds to a typical wired network.

Wireless Networking: What Do I Need to Know

Wireless LANs have at least two antennas and at least one computer. The computer has one antenna, which sticks out of the computer and is about the size of a tab on a manila folder. The other antenna may be attached to a computer or may be a self-sufficient "super" antenna called an access point. The computer with the antenna

transmits data to the second antenna and the response is transmitted, again through the air, to the original computer.

It is important to say a word about the two types of networks. If the above network had two computers, each with an antenna, you would have an *ad hoc* wireless LAN. This is comparable to having two computers and running a single wire between them. It is a simple, no frills way to have a network: no dedicated servers, no dedicated printers. Each person on a computer can transmit and share data with the other. The wired version of this network is typically called a *peer-to-peer* network.

The other type of network, where there is a dedicated antenna called an access point, is called an *infrastructure* network. The access point is wired to your Internet connection or other network hardware and manages all of the connections on your network. It is not attached to a computer. Anything with an antenna can talk to the access point and reach any other resource on the network. These could be laptops, printers, fax machines, even handheld computers like a Palm Pilot. The benefits of an *infrastructure* network are encompassed in the fact that the access point is always there and computers can be configured to look for it. Computers in an *ad hoc* network may go on the road, be turned off or otherwise become inaccessible. If you are considering a wireless network, you will find that an *infrastructure* network will provide you with the best solution and cost little more than you would spend to build an *ad hoc* collection of computers.

You can see an immediate cost savings in wiring costs. The only wire in a wireless LAN is from the network hardware (a router or gateway, typically connected to a firewall and the Internet) to the access point, which also requires electrical power.

From there, everything travels through the air. If you add staff, or reconfigure an office, or merely want additional connections in a conference room or other location, the access point will handle the traffic from the new resource. Do you want to work in the library with your laptop and have network access? Wireless access can be possible in every corner of a library, no matter how secluded. The wireless transmissions can travel through floors, so a single antenna can typically handle traffic from two floors of a building. There is no escape from wiring, but wireless removes the most costly part of wiring, which are the changes and additions that happen once your network is in place.

There are downsides to wireless networks that should be contemplated and balanced with the benefits. The primary concern with wireless networks is security. In the same way that your wired network can be compromised once it is connected to the Internet or a modem, your wireless network is subject to probing, attacks, and improper use. Typically, an intruder will be within 1500 feet of your antenna, which diminishes some of the risk. The security that keeps the intruder out, however, is not very strong in wireless networks. Any decision to incorporate a wireless network into your law office should also consider the security and encryption methods you will use to keep intruders out. The same technology can be applied both to a wired network or a wireless network.

The other feature of wireless networks is that, unlike wired networks, there are multiple, competing, equivalent standards that make selecting technology difficult. Fortunately, there is probably no wrong choice and typical factors, like price and speed, can bring you to a decision point. The slower, and cheaper, standard is called 802.11b or WiFi (for **Wi**reless **Fi**delity). It transmits data at speeds comparable to older wired

networks, about 11 Megabytes per second (MBps). This is fast enough for typical office uses – printing, file transfer, Internet access, legal research, etc. It is susceptible to some conflicts with other radiowave-related products, like microwave ovens and 2.4 GHz cordless telephones.

The newer standard is called 802.11a, or WiFi2. Although it might seem illogical to have the newer standard called “a” while the older is called “b”, the faster standard's adoption has encountered more hurdles. This has meant that 802.11b has been an accepted standard longer and is the most common wireless network technology available. Owning 802.11b equipment is more likely to allow you to use networks in courts, your client’s offices, and retailers like Starbucks or hotels. On the other hand, 802.11a is currently 5 times faster and only slightly more expensive. You trade the 54 MBps speeds, however, for shorter distances to an access point and, in the near future, possible compatibility issues with older hardware.

The choice for one standard or the other – 802.11a or 802.11b – is dependent on many factors, including your need to work with other wireless-enabled attorneys or locations (is working in Starbucks important?), your budget, and what you are transferring on your network. If you want to do high quality video-conferencing, you are better served by buying the 802.11a technology for the higher speeds. If you are primarily preparing documents, doing legal research, and printing, then 802.11b will be more than enough.

Another benefit to using wireless in your office is that you can easily use the same technology at home and thus use the same computer in two places, unless your office is already in your home! The wireless hardware is cheap enough and easy

enough to configure that your staff and attorneys can create their own, home-based wireless LANs. If they have DSL or cable connections, they can share that connection among additional, wireless computers.

Your Pocket Office

Wireless networking is revolutionizing how computers are networked but it may seem a bit utilitarian to discuss cutting edge networking. Another revolution that is just beginning for lawyers is the ability to put your office in your pocket. The developments in both the hardware and software on handheld computers – also known as personal digital assistants (PDAs) – have been astounding. Although most lawyers appear primarily to use these devices for calendaring, admittedly an important function, the improvements in technology may make a laptop unnecessary.

First, the handheld computer is no longer restricted to input by stylus. Not only does it enforce a relatively rigid writing style, stylus writing is slower than writing with a pen and paper, if only because you have to use a stylized alphabet. If you rely on a stylus to input information into your PDA, you will have a hard time breaking out of the typical applications on your device – calendar, notes, expenses, contacts. And what a world you are missing! The document creation products and office suites that are available are astounding, with most interacting and synchronizing with Microsoft Word and other typical law office products. Need to do an expense report in Microsoft Excel? Have a Powerpoint presentation you want to carry with you and display from your PDA? Both of these are now easy to manage.

The most critical addition to the PDA world has been the keyboard. It is incredible how much more you can do with a PDA when you can input information faster. You can now work on a document, with many of the formatting functions you would have on your desktop word processor, as if you were working on a laptop. Your main limitation is the speed at which you can type. The idea of a keyboard may seem at odds with the portability of a PDA but the typical PDA keyboard either starts at, or can be folded to be, the same size as your PDA. One type clips on the bottom of the PDA and you type using your thumbs. Big thumbs or long nails? This may not be the best choice. Your thumb-tips will need to be exceptionally accurate. The other type folds out, from four pieces hinged like a "W", into a full size keyboard. It's not as portable – you will appreciate a firm surface underneath it to type – but far easier to perform typical typing than the smaller option.

Once you have the keyboard, it is time to think about other hardware you can assemble to create your laptop-replacement. 56 KBps modems, equipped with Web browsers and e-mail, and wireless LAN antennas will put your PDA on whatever network you use. You can turn your PDA into a cell phone by purchasing one of the wireless phone components and a service package. Are you going to brief a client on a particular new legal issue or presenting information at trial using Microsoft Powerpoint? You can now add a presentation module to most PDAs that connects to a projector and displays the slides – no laptop necessary.

PDA hardware is not the only enhancement you can make to your PDA. Many of the legal-specific software programs available offer data synchronization. When purchasing a case management software system – or any software for that matter –

consider its ability to synchronize contacts, calendar, documents, and other information to your PDA. Some will synchronize to PocketPCs and some will synchronize only with PDAs running the Palm operating system. Building your office technology with these types of requirements in mind will give you a head start on integrating your technology for the future.

Communication on the Run

There is no longer an excuse for missing a call. Phone systems can page you automatically, voice-mail can be forwarded in a variety of ways, and you can always give out your cell phone number. Around the clock availability is a tricky area. It is important, at the start, to consider how much you want to be in contact with your clients. Some lawyers feel that 24-hour access is a minimum; others feel that all communication can occur during daylight hours. Let your preference decide which types of technology you use.

The cell phone, now commonly called a wireless phone, is no longer a novelty. It is rare to find the attorney who does not have at least one. Pagers too can be handy for your communications needs. Increasingly, lawyers with high communication needs are looking at wireless e-mail services like RIM's Blackberry, where you can receive and send e-mail wherever you are in a covered area.

The Integrated Device

The future really resides with the integrated devices that are coming to market. They are not for everyone. You may find that your selection of PDA, or laptop, or other tool takes care of all the needs you have. As your needs grow – you want to be in

greater contact with your clients and firm via e-mail, you want more computing power – you will quickly find that you have to rely on too many devices. The software industry has blazed the trail in integration. Few lawyers use a word processor that does not integrate with an office suite of applications – spreadsheet, presentations software, database program. Legal-specific software combines time and billing, documents, case and conflict management, e-mail, and calendaring all in one package. The communications device is the next logical place for integration to occur. Wireless phones are increasingly packaged with the Palm operating system on board. These combine the benefits of the wireless PDA with the convenience of the typical phone. You may lose some functions typical to one or the other – keyboards can be hard or impossible to attach, other components may not be available – but for the communication heavy lawyer, this will take a few pounds of your belt and put you on the cutting edge of technology.

Where are YOU Going?

The young lawyer has the opportunity to take advantage of the newness of the profession. As you build your practice and develop your business methods, consider how technology can assist you in solving your problems. The earlier you consider how technology can help, the easier you may find it to fit technology into how you practice. Once you have identified the problem you are trying to solve, feel confident about getting just the technology that you need to solve that problem. The cutting edge is alluring and can lead you to over-engineer your practice, making more difficult exactly what you intended to simplify. Take advantage of being in the earlier years of your

professional career and be aggressive about bringing in the right technology to help you better deliver services and to enjoy life.