

Lawyers and technology: A limited partnership

We lawyers today live in a wonderful time, when our practices are dramatically enhanced by a wealth of technological innovation. Revolutionary developments in computer hardware and software, office equipment, and means of communication allow us to accomplish far more than even the most pathologically compulsive of our workaholic predecessors could dream of (assuming, that is, that they ever slept). Yet, like an improperly designed and/or maintained road that proximately causes accidents unrelated either to vehicular defects, the acts or omissions of plaintiff drivers, or any "Act of God," resulting in extensive physical injuries, emotional distress, and loss of consortium, meriting the imposition of sizable compensatory and punitive damages, a cursory review of these marvels demonstrates there may also be a few bumps in the legal information superhighway.

The Internet

Probably the most publicized high-tech subject over the last year has been the Internet, the global network of computers, trash compactors and cappuccino machines, offering a cyberspace smorgasbord of information, ranging from the gleefully enlightening to the grossly repulsive. Particularly appealing to lawyers are the central locations on the World Wide Web appropriately referred to as "home pages" — since they remind them of the real life addresses they rarely get the time to actually visit.

Many enterprising law firms view the Internet as a marketing opportunity, obviously believing that most Fortune 500 general counsels spend their work days "surfing" the "Net." In an effort to compete with glitzy rock band and motion picture studio Web sites, law firm home pages increasingly

incorporate full-motion video, cutting-edge graphics and stereo-quality sound, although the business-developing effect of observing a bunch of bald men humming the Yale Law School fight song while a chorus line of animated gavels float by is open to question.

Both through the Internet and internally at law firms, electronic mail has skyrocketed in popularity. There have, unfortunately, been some abuses, including reports of the first e-mail chain letter ("if you break the chain, your scores on 'Tetris' will abruptly decline"). Many firms in their internal networks, like the major online services, are starting to exercise censorship to purge indecent and offensive material, such as anything reflecting the intention of associates to leave the office during daylight hours.

Software

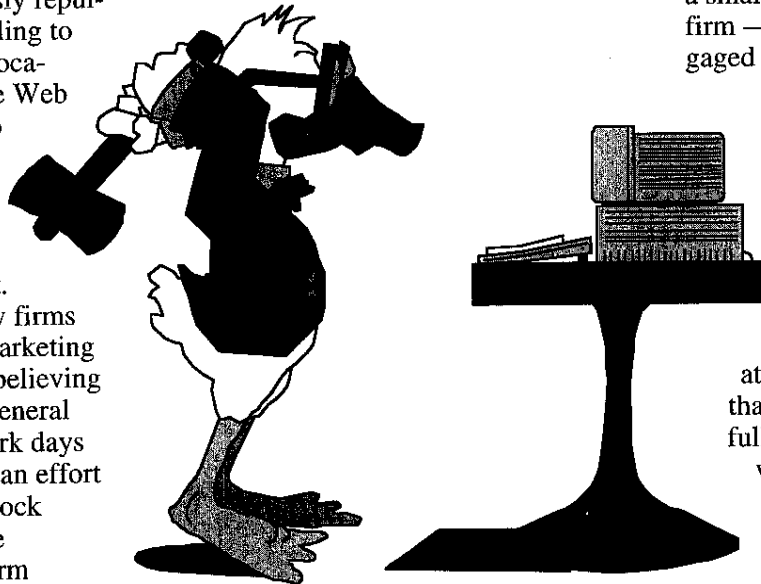
In an attempt to capitalize on the lucrative legal market, many leading software manufacturers have offered revised versions of popular programs specifically adapted for use by attorneys. Unfortunately, these offerings have not always been commercially successful. The most striking (and tasteless) example of this was the

much-ballyhooed unveiling of Microsoft's new operating system for trusts and estates practitioners, "Widows 95." Despite spending millions on advertising (including obtaining the rights to the Rolling Stones' performance of "Miss You"), sales were dismal. Microsoft is hoping for better things from its latest release, designed by the same programmers that came up with the jovial, albeit superficial, humanlike computer assistant, "Bob." Expectations are high for the new program, a legal time-tracking application, tentatively to be known affectionately as "Bill."

Some legal offerings have fared better. Among the more successful is the new title from the makers of the popular "Where in the world is Carmen Sandiego?" educational series. In "Where in the office is Murray Feinblatt?," players try to locate a marginal first-year associate who spends his day hiding from assigning partners and his firm's performance review committee. Another big seller is "Unnecessary Rudeness," created by the same team that designed a popular football simulation program. Here, players are treated to a wide variety of views of the "arena" — a conference room at a small downtown Manhattan law firm — where combatants are engaged in a no-holds-barred deposition, which defines the term "uncivil procedure."

Virtual reality software is as popular in legal circles as it is in the general population.

A top-seller among solo practitioners is the "Virtual Law Firm," whereby a solitary attorney can momentarily pretend that he or she actually works in a fully staffed law office, replete with totally committed support staff, downpour-inducing rainmakers, eager-beaver junior associates, quick-paying clients, and always



understanding family members. (Truth-in-advertising laws have forced the manufacturer to drop any reference to "reality" from all packaging and marketing efforts.)

One of the hottest areas of the software market has been translation programs, where tremendous progress has been made in conversion of text to and from foreign languages. Unfortunately, no computer — not even the most powerful supercomputer — can as yet be programmed to handle the far more inscrutable process of Legalese-to-English translation. (Of course, English-to-Legalese translation has not even been attempted, due to the effective lobbying of law schools, which complain that such a facility would render their existence largely unnecessary.)

Another category of software that clearly has a way to go is speech recognition software, which would allow a lawyer to speak into a microphone and have his or her words converted immediately (i.e., without emptying four red markup pens and a bottle of Tylenol) into typed text. The problem is that, because of the processing needed, such programs require lawyers to speak slowly, which is basically impossible. On the other hand, the monotone that such programs also require has proven to be no obstacle for most attorneys, particularly those with many years of somnambulism-inducing presentations under their belts. High-end speech recognition applications offer a variety of special add-on modules, such as the popular "Brooklyn accent" converter.

Computer viruses are a critical problem for all users, and lawyers are no exception. Fortunately, several leading anti-virus packages are available, including some that have been customized specifically to address the strains that single out lawyers' electronic efforts. One of the most feared is the so-called "Waffle Virus," which perniciously

infects previously straightforward legal texts like statutes and codes and randomly adds wishy-washy qualifying language such as "maybe," "for the most part," "by and large," and "the decisions are not uniform." The prevalence of this scourge is increasing at an alarming rate, as a quick scan of any recent law firm opinion letter will readily reveal.

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Hardware

For many lawyers who spend a significant amount of their time traveling, the most critical piece of hardware is their trusty laptop computer. The problem is that such heavy-duty hardware is really heavy, causing road warrior attorneys to resemble the scales of justice tilted with a fistful of lead in one of the weighing pans. And the battle of the bulge will never end: every time technological breakthroughs allow these machines to start getting lighter, manufacturers increase the weight back up by adding on a host of new (and, increasingly, questionably necessary) features, such as a hot plate, foot massager, and/or shredder. Chief among such "innovations" are the new crop of huge desktop-monitor-like, high-resolution laptop screens, apparently designed to ensure that the tabloid journalists in the back row of the airplane can clearly read every word of your confidential strategy memo.

For those lawyers unwilling to emulate Ben-Hur by dragging around

a Herniac 5000 strapped to their back., an increasingly popular alternative is the "personal digital assistant" or PDA, a computer the size of a small animal's spleen which you can simply put in your pocket. Far more portable than enormous loose-leaf organizers, which require your tailor to install kangaroo-like pouches in all your suits, PDAs allow you to lose an

entire lifetime of data to a single pickpocket. The diminutive size of these units comes at the additional price of typing accuracy for those whose fingers exceed pipe cleaner diameter. These less-gracefully-digitally-endowed will end up hitting between four and nine keys simultaneously; thoughtful PDA designers frequently provide macros whereby "gyhujnb" becomes simply "h," the key the owner presumably intended to strike.

Office equipment

Beyond just computers, virtually all office equipment has undergone technological improvement. Battery-powered cellular phones allow attorneys to continue telephone negotiations regardless of where they are. Unfortunately, such easily intercepted transmissions are far from secure; thus, attorneys are advised from prefacing any message on these modern-day "party lines" with words like, "Now don't tell anybody, but...."

Customized billing systems have also been designed, helping lawyers to get time records done promptly (as opposed to delaying until after the work done is depicted on "The History Channel"). One offering comes complete with a sensor that the user affixes to his or her eyeglasses (if wears them), hair (if has any), or, alternatively, forehead. The device triggers the running of a clock if the sensor detects the presence of paper or another mammal; it helpfully pauses if it perceives window glass or ceiling tiles to be in the user's direct line of

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focus, particularly for extended periods.

Pagers have become more common, guaranteeing that there is virtually no place on earth where a lawyer cannot be reached. On the plus side, pagers may actually serve to help keep attorneys conscious through marathon trade association meetings, assuming that one has activated the unit's silent but vigorous vibrating notification feature, and instructed his or her secretary to call him or her at regular intervals, synchronized with the lawyer's REM cycles.

CD-ROM and online databases

CD-ROM and online databases offer opportunities far beyond those of their paperbound predecessors. CD-ROMs in particular allow you the luxury of poking around for hours without incurring (and having to explain) annoying online charges. For example, armed with the Martindale-Hubbell Law Directory CD-ROM, you can find out where at least some of the people you went to college or law school with ended up. In some serendipitous circumstances, their geographic location may allow you to retain them as local counsel and effectively make their lives miserable for extended periods of time. Martindale-Hubbell also provides helpful quality assessments (e.g., "av" is top notch), and is reportedly considering expanding the scope of evaluations to cover specific attributes such as wardrobe (ranging from "gd" for good dresser, to "sc" for schlumpy) and personality (ranging from "dp" for decent person, to "n/a").

CD-ROM case reporters, an increasingly common option, similarly allow you to spend as many unbillable hours as you like researching esoteric legal subjects. (It is only a matter of time before someone publishes a treatise on *The Law of Meatloaf*, covering the spectrum of cases where "hits" for that word were registered, including personal injury cases where a plaintiff consumed (or slipped on) meatloaf,

divorce cases where a spouse inadequately (or too often) prepared meatloaf, and the like. But the reality is that no electronic reporter can truly replace the paper versions, particularly the old volumes with handwritten notations instructing pre-photo-copier secretaries what section to type, leaving subsequent readers to wonder who were these anonymous lawyers that left their pencil marks for posterity.

Operators of online databases, in an effort to fight off their CD-ROM competitors, offer greater coverage given their greater capacity. Unfortunately, this usually results in databases larded with obscure and tangentially relevant publications, such as the *Journal of Halitosis*, *Wheel Alignment News*, and the full-text scripts of all episodes of *Perry Mason*, *Matlock*, *The Defenders*, *Judd for the Defense*, and *Night Court*. In addition, entirely new and increasingly esoteric legal databases are constantly being introduced. One of the most popular narrowly focuses on the current massive class-action litigation involving plaintiffs who have suffered indigestion from unsuspectingly consuming unreasonably spicy Southwestern ethnic fare —TEXIS/MEXIS.

Litigation support

Computer technology has also paid major dividends in the area of litigation support. Document coding software can ultimately allow an attorney with a couple of keystrokes to find, for example, every memo by Mr. Smith written on the third Tuesday of a month where he used more than three semicolons but did not "cc" Mr. Rosenzweig. Unfortunately, frequent resort to such programs has been observed to result in attorneys mentally "coding" every "document" they thereafter encounter, including restaurant menus (all anticipated occurrences of palm oil) and family correspondence ("uncle" within 10 words of "sciatica").

Video conferences

Another hot legal technology is video conference systems. While these can save on travel expenses, for many the

"cost" in terms of its potential for supplanting lower-tech audio conference calls is simply too great to bear. Think about it. No more making unseen gestures. No more reading the newspaper, exercising or working on your resume during conference calls. Fortunately, some relief may be on the way in the form of a video "mute" button, which substitutes for the live camera view a previously recorded endless-loop video sequence of the user looking concerned into the camera, rubbing his or her chin thoughtfully, and jotting down what seem to be critical points of interest, like television news anchor persons do as the final credits roll (and which tend, upon inspection, to be as analytical as locating all occurrences of the letter "r" in the script). ♦

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