

Laptop Litigation: The impact of technology on litigation

Unless litigators insist upon and courts develop a systematic and effective set of rules to deal with the realities of litigation in the information age, developments in electronic litigation may warp our justice system.

[By Michael K. McChrystal, William C. Gleisner III & Michael J. Kuborn](#)

Like any powerful tool electronic litigation can be used wisely or harmfully. We lawyers should be careful to assure that litigating with electronic tools does not compromise our justice system. Electronic litigation techniques can cloud and even distort the litigation process. For example, electronic evidence may be published to a jury while opposing counsel overlooks obvious objections or the court fails to consider the unfair impact of that evidence upon a jury. The authors believe crucial evidentiary and procedural issues currently go unaddressed both before and at trial.

This is the first in a series of articles dealing with the impact of technology on litigation. Future articles will discuss more discrete issues related to the broad topic of litigation technology. Meanwhile, this article surveys the various ways in which technology is being used to prepare for and litigate a case, and includes an overview of various hardware and software systems.

Technological changes are affecting the legal profession far more than the changes that brought about notice pleading and the amendments to the codes of state and federal civil procedure in the 1960s and 1970s. However, to date, no effort has been made to address in any comprehensive manner the dramatic technological changes that are occurring in the world of litigation, and this is cause for real concern. Rules have been developed to respond to the videotaped deposition, and there are a patchwork of new rules that address fax transmissions, electronic filings, and the like. Nevertheless, there is no comprehensive effort underway to assess the overall impact of electronic litigation techniques on civil procedure and the rules of evidence. The time has come for bar associations and court systems to begin a serious and comprehensive assessment of electronic litigation leading to the adoption of appropriate rule changes.

A Sea Change is at Hand

There are many reasons why electronic litigation will be a force with which to reckon. For example,



the standards by which competent advocacy is measured in the information age already are evolving to reflect the impact of information technology. Ethics opinions and court decisions suggest the broad outlines of the new standards. As noted in a leading publication on legal ethics:

"[A]dvances in technology are relevant to what constitutes [lawyer] negligence and [a] defendant's failure to use available technology to reduce a known risk could be considered negligence."¹

There is a proliferation of superior online legal resources.² It will not be long before the failure to research the law online or check the Internet for relevant information could be deemed professionally substandard conduct.³ A number of court systems already are experimenting with the electronic filing of pleadings, documents, and briefs.⁴ Computers and the Internet will have an impact on issues as diverse as jurisdiction,⁵ lawyer confidentiality,⁶ Fourth Amendment searches and seizures,⁷ and the ethical responsibilities of practicing law.⁸ Undoubtedly email will become as accepted as faxes or "snail mail" for routine confirming letters or service of pleadings, briefs, and so on between opposing counsel.

Features of Electronic Litigation

Some aspects of electronic litigation already have received substantial attention. For instance, it is becoming easy to find guidance as to the framing of interrogatories so as to ensure that proper requests have been made for electronically stored data.⁹ Moreover, courts themselves are rapidly discovering the advantages of electronic document database and transcript management, electronic filings, and electronic evidence. Litigators who choose not to use technology in their practice may find that both they and their clients pay an increasingly unacceptable price. As one commentator recently remarked:

"That an adversary is unable to produce its own briefs in counterpart electronic format [that is, on a CD-ROM] is no different a condition of litigation than any other disparity in access to legal resources. After all, not every law firm uses online legal research services, or has state-of-the-art desktop publishing capabilities, or employs a stable of bright and eager young associates. Litigation in an adversary system is not a matter of maintaining the lowest common denominator between adversaries, but rather it is a competitive striving to marshal winning combinations of resources of all types and to package them in attractive ways for the relevant tribunal."¹⁰

While some judges still resist electronic solutions, the trend is unmistakable.¹¹ Increasingly, counsel can check a court's Web page for court filings and scheduling information, much as the courts have been doing for some time in multi-district litigation (MDL), such as the MDL 926 breast implant litigation.¹² In fact, Web sites covering MDL actions have become very sophisticated, complete with search engines, high-tech graphics, and downloadable executables such as the Adobe Acrobat® Reader.¹³ Other courts are beginning to follow suit. Electronic court Web pages and filings may become routine in the next few years due to their benefits.¹⁴

As usual, Wisconsin courts are beginning to show the way. The Wisconsin Supreme Court maintains a robust Web site,



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which is in fact a Web site for the entire Wisconsin court system.¹⁵ It appears clear from the Report on the Circuit Court Automation Program, accessible from that site, that it is just a matter of time before Wisconsin courts begin experimenting with electronic filings. This Web site makes it possible for users to download several free software enhancements, such as Adobe's Acrobat Reader.TM

One of the courts in Wisconsin is already a leading pioneer in electronic litigation. The U.S. District Court for the Western District's Web page is very instructive in this regard.¹⁶ At that court's site you can learn all about "PACER," which permits public access to a variety of court documents. According to that site, "If you have a personal computer, a modem and a telephone line you can access Bankruptcy and District Court docket sheets, party indexes, and judgment indexes. Just call the P.A.C.E.R. service center at (800) 676-6856 for details."¹⁷ Moreover, in that court's courtrooms 250 and 260, counsel can:

- place a piece of evidence in a single location in the courtroom. An image of that piece of evidence is displayed on monitors for counsel, court, witness, and the jury to see. All people in the courtroom are looking at the exhibit from the same perspective.
- selectively display the exhibit to any or all of the people listed above.
- scan documents, store them on a personal computer (including Macintosh), and call them up with a few keystrokes.
- ask witnesses to annotate an exhibit, retain the original without annotations, keep a copy with the annotations, and do all this without managing multiple photocopies or leaving the courtroom.
- play videotapes without renting VCRs and TVs. The participants can watch the videotape over the same monitors on which they view exhibits.
- freeze a videotape frame and annotate the video.
- run computer animated accident reenactments right from your computer;
- enhance the jury's understanding of a recorded conversation by using a computer to link a transcript of the conversation with the audio recording; and
- use presentation software to enhance your arguments.¹⁸

The advantages of briefs filed on CD-ROM (or, in the near future, on DVD disks) also will make them very popular with many judges. Electronic briefs can include full-text hyperlinked copies of cited authority or links to copies of authorities on the World Wide Web, together with hyperlinks to copies of evidence and even excerpts from videotape depositions.¹⁹ Such filings hold the potential of significantly reducing a judge's workload by freeing the judge from doing legal research or combing through the record. Such briefs also enable the judge to write opinions with many citations to and quotes from authorities that can be accessed directly from the CD.

This is powerful evidence indeed of what litigation at the turn of the millennium will entail in Wisconsin and elsewhere. However, do we have the rules in place to accommodate both the new technology and the demands of justice?

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The Need for New Regulations

Legal standards have not yet come to terms with electronic litigation. For example, pretrial scheduling and management orders often fail to address the serious disruption that can follow from the misuse of technology in the courtroom. These failures often are surprising considering how often lawyers now come to trial equipped with a laptop computer and a color projector.

High-tech litigation used to mean that a lawyer might come to court equipped with monitors, overhead projectors, or Doar projectors.²⁰ Now litigators are relying upon far different and often more sophisticated solutions for presenting their cases to a jury. A favorite hardware combination includes Dell laptops, Infocus color projectors, and barcode guns. Software such as [Dataflight's Concordance](#),[®] and its image viewer Opticon,[®] represent one of the more advanced systems now available.²¹ Other equally fine litigation software solutions include [Bowne JFS Software](#) (formerly J. Feuerstein Litigator's Notebook),^{®22} [Gravity](#),^{®23} [Isys](#),^{®24} [Inmagic's DB/Text Works](#),^{®25} and [Discovery Pro for Windows](#).^{®26} Another popular and effective software solution for many litigators is [Summation](#)^{®27} and one of its more popular image viewers [TrialDirector](#).^{®28}

Just as one example, using Summation,[®] a litigator can import literally millions of pages of evidence and hundreds of transcripts into an online database. The litigator can then search through the evidence and the transcripts and comprehensively index, cross reference, and retrieve all forms of evidence almost instantaneously. A litigator can use a laptop with a barcode gun and a color projector to call up evidence and display it virtually at will using [Indata's TrialDirector](#).[®] The relative cost of doing this is well within the reach of many practitioners.

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However, there are many evils that can result from the use of this software and the related hardware that neither courts nor the bar have begun to address in any meaningful way. Many of these evils will be the subject of a future article, but it is important to at least catalog some of the more serious dangers.

The use of this type of software and related hardware can seriously disadvantage an opponent who is not equally well equipped. Of greater concern, electronic litigation support software, and other powerful commercial software and related image manipulation software, can be used to distort or manipulate evidence in ways that have been unthinkable in the past. For example, someone could use a digital camera to capture an accident scene or some other important event. When this digital image is imported into the computer, there is no negative or other way to trace how this photograph was created. Using powerful software such as [Adobe's Photoshop 5.0](#), subtle but material changes could be made to the photograph and a witness then could testify that the photograph indeed represents what he or she saw at a particular time or place. How does one cope with such dishonesty, or determine that such a deception has even occurred?



Software such as TrialDirector® also can be used to pretreat evidence or actually manipulate evidence while it is being presented in court. For instance, an attorney calls up a piece of evidence via a color projector and then has a witness mark or manipulate the evidence in some fashion, by using a light pen, for example. In fact, a new version of an exhibit may thus have been created. However, as soon as the lawyer kills the electronic presentation, that new evidence disappears. Rules need to be crafted that will enable an adversary and a court to capture such evidence and ensure its inclusion in the record.

Several other changes to existing rules of court also should be considered. To avoid surprise, counsel should be required to produce more than just copies of evidence they plan to present at trial. They should be required to provide technical information about how the exhibits will be presented. Then an opportunity should be provided to both opposing counsel and the court to view the images and other electronic evidence in advance of trial to determine if there is anything objectionable about the technical aspects of a presentation before it is published to a jury.

Courts should consider adopting special rules that address online evidence, such as mandating the

means and methods of ensuring that the court and all counsel can verify that online evidence corresponds to original sources. Indeed, the entire matter of evidentiary authentication needs to be rethought. What about evidence that never was intended to have a hardcopy counterpart? Is it time to consider a standard that cannot be defeated, comparable to an electronic signature, so that certain forms of sensitive electronic data (for example, online contracts, confirming email, digitally created photographs) can be authoritatively authenticated when they are offered into evidence? At present, we are just beginning to see the first stirrings of interest in such matters in Wisconsin.²⁹

We can be certain that the information age will bring many new - often radically new - innovations, but we cannot possibly predict what those innovations will be. However, litigation must always involve a search for the truth. The rules of evidence, since the days of Wigmore and before, have always concerned themselves with ensuring that the trier of fact will have the benefit of the best and most authentic evidence, and the rules of civil procedure have always had as their goal the orderly providing of that evidence to the trier of fact in as fair a manner as possible. Serious thought needs to be given to the creation of rules that will be flexible enough to encompass whatever new developments are thrust upon us in the exploding information age. A comprehensive study of our rules of civil procedure and evidence needs to be done with the care that has attended such well-thought-out undertakings as the Uniform Commercial Code or the Restatements of law.

Conclusion

The rules of the game may be changing, but it's still litigation, and the search for truth remains the goal. Nevertheless, there is a real danger that the litigation process will become a victim of technical innovation. The rules that control this new world must be designed to remove the magic and ensure that litigation continues to focus on justice and not just electronic pyrotechnics.

Later articles in this series will focus on specific methods of coping with the challenges that are presented when attorneys employ electronic litigation techniques. The next article will discuss what objections and challenges can be made when opposing counsel introduces electronic evidence, and what changes in court rules should be adopted in order to respond to the challenges of electronic litigation.

Endnotes

¹ABA/BNA Lawyers' Manual of Professional Conduct, Current Reports, 11 LMPC 3, d10 at p. 5 of Westlaw online version (1996).

² See, for example, <http://www.cyberlaw.com>; <http://legalonline.com>, and our own State Bar's <http://www.wisbar.org>, to name only a few of the superior and inexpensive legal resources now on the Internet.



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³See, e.g., *Massey v. Prince George's County*, 918 F. Supp. 905 (D. Md. 1996), wherein the court observed:

"The Court turns to Respondents' further answer to its Show Cause Order, namely that the Assistant County Attorney who filed the Motion for Summary Judgment in this case did not know about the *Kopf* case. That, of course, may well be true, but the question is, ought he to have known? . [C]ounsel had an obligation to provide 'competent representation,' which includes an ability to research the law. Case reports are available in hard cover and online from computers. The Natural Language search method on Westlaw [in the appropriate database] reveals that the two most frequently referenced cases are (1) *Kopf v. Skyrn*, 9933 F.2d 374 (4th Cir. 1993), which is the appeal after remand of *Kopf v. Wing*, 942 F.2d 265 (4th Cir. 1991), and (2) *Kopf v. Wing* itself." *Id.*, at 908.

Consider also the probable use as a standard of the following excerpt from The Competitive Impact Statement of the U.S. Department of Justice, appended to the Consent Decree in *U.S. v. Thomson Corp.*, at *23, 1997 WL 226233 (D. D.C. 1997):

"Print versions of the law are not adequate substitutes for comprehensive online legal research services. Legal researchers who have the necessary computer hardware and the necessary skills to use this product value the timeliness and speed of comprehensive online legal research services. Material provided on a comprehensive online legal research service is updated often and is thus more timely than material offered in printed form. Full-text word searching of primary law on CD-ROMs is not an adequate substitute for comprehensive online legal research services. The content of most CD-ROMs is limited to a particular jurisdiction or topic. Moreover, the material contained on CD-ROMs is not as current as the material offered on an online legal research service. If the materials on CD-ROMs are not current, lawyers must still use online legal research services to supplement their research. Furthermore, the topical or limited jurisdictional focus of CD-ROMs limits their primary appeal to smaller law firms or firms specializing in a particular area of the law. These firms are not heavy users of comprehensive online legal research services. While the Internet is a useful tool for some researchers, it is not a substitute for Lexis-Nexis and Westlaw for several reasons. First, the material contained on the Internet is not nearly as comprehensive as the material offered on Lexis and Westlaw. The Internet does not provide access to historical opinions, every court's opinions, every jurisdiction's statutes, or the number of secondary law products that Lexis-Nexis and Westlaw offer. Second, the Internet's search mechanism is not as sophisticated or effective as Lexis-Nexis' or Westlaw's. Third, the case law offered on the Internet does not provide citations that are accepted by courts or are relied on by attorneys." *Id.* at *23.

⁴Wells & Winger, *Now in Development: The Courthouse on the Web*, 12 Legal Tech Newsl. 1 (March 1998) ("Under prototype programs in a handful of federal courts, Web sites are now beginning to assume some of the key functions of the courthouse. Parties can file and serve motions and other papers electronically, and judges, clerks, lawyers and their staffs can view them via the Internet."); see also Kruger, *Electronic Filing of Claims and other Pleadings in the Southern District of New York*, 767 PLI/Comm 291 (April 1998).

⁵R. Timothy Muth, *Old Doctrines on a New Frontier: Defamation and Jurisdiction in Cyberspace*, 68 Wis. Law. 10 (Sept. 1995).

⁶McChrystal, Gleisner, and Kuborn, *Document Destruction and Confidentiality*, 71 Wis. Law. 24 (Aug. 1998) ("Lawyers and clients should know that data they've entrusted to a computer system may have a much longer life and be harder to erase than merely executing a 'delete' command".)

⁷McChrystal, Gleisner, and Kuborn, *Law Enforcement in Cyberspace: Search and Seizure Law Applied to Computer Data*, 71 Wis. Law. 35 (Dec. 1998).

⁸See ABA Formal Ethics Opinion 95-398 ("A lawyer who gives a computer maintenance company access to information in client files must make reasonable efforts to ensure that the company has in place, or will establish, reasonable procedures to protect the confidentiality of client information. Should a significant breach of confidentiality occur, the lawyer may be obligated to disclose it to the client.")

⁹Berman, *Practical Issues in Framing and Responding to Discovery Requests for Electronic Information*, ABA Center for Continuing Legal Education National Institute (Oct. 22-23, 1998). See also Grenig, *Electronic Discovery: Making Your Opponent's Computer a Vital Part of Your Legal Team*, 21 Am. J. Trial Advoc. 293 (1997); Shear, *Electronic Evidence: It's Not "Cutting Edge" Anymore*, 21 Lawyer's PC 1 (1994); Lehman, *Litigating in Cyberspace: Discovery of Electronic Information*, 8 S.C. Law. (1997); Olmsted, *Electronic Media: Management and Litigation Issues When "Delete" Doesn't Mean Delete*, 63 Def. Couns. J. 523 (1996).

¹⁰Ginhart, *Paperless Federal Litigation*, 45 Fed. Law. 42, 44 (May 1998).

¹¹Hansen, *Courts Saving Time and Trees*, 85 A.B.A. J. 20 (March 1999).

¹²See the court's Web page at <http://www.fjc.gov/>.

¹³A good example is the court's Web page in the MDL 926 Breast Implant Litigation. See, <http://www.fjc.gov/BREIMLIT/mdl926.htm>

¹⁴Yoshinaga, *Is Electronic Court Filing in Your Future?*, 10 Utah B. J. 15 (1997).

¹⁵See <http://www.courts.state.wi.us/WCS>.

¹⁶See <http://www.wiw.uscourts.gov>.

¹⁷*Id.*

¹⁸*Id.*, at http://www.wiw.uscourts.gov/pub_district/electronic_courtroom/default.htm.

¹⁹Solano, *Electronic Briefs: Soon to be Commonplace*, 19 Penn. Law. 18 (1997).

²⁰Doar Litigation Services has developed some innovative and advanced technical services since the days of the simple Doar Projector. See <http://www.doar.com>.

²¹See Concordance's home page at <http://www.dataflight.com>.

²²<http://www.jfsnet.com>.

²³<http://www.gravitynet.com>.

²⁴<http://www.isysdev.com>.

²⁵<http://www.inmagic.com>.

²⁶*Id.*

²⁷<http://summation.com>.

²⁸<http://indatacorp.com>.

²⁹See, e.g., Muth & Bell, *Wisconsin's Voyage to Computerized Courts*, 71 Wis. Law. 14 (Feb. 1998); Jensen, *Laws in the Making: AB811 Regulates the Use of Digital Signatures in Wisconsin*, 71 Wis. Law. 23 (April 1998); cf., Johnson, *Computer Printouts as Evidence: Stricter Foundation or Presumption of Reliability?* 75 Marq. 439 (1992).

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