

**Saving Expense Through the Use of Technology:
Smarter, Faster, Better**

**James K. Horstman
Cray Huber Horstman Heil & VanAusdal LLC
303 W. Madison, Suite 2200
Chicago, Illinois 60606
Tel. 312.332.8450
Fax. 312.332.8451
Email. jkh@crayhuber.com**

JAMES K. HORSTMAN

James K. Horstman is the managing partner of Cray Huber Horstman Heil & VanAusdal LLC, a Chicago-based law firm with a national civil trial practice. He is licensed to practice before the Illinois Supreme Court, several United States Circuit and District Courts, and is admitted in numerous state courts *pro hac vice*. He is a member of the Illinois State Bar Association, the Defense Research Institute, the Appellate Lawyers Association and the Federation of Insurance and Corporate Counsel. He is a graduate of DePauw University (B.A. 1975), Yale University (M.A.R. 1977) and Washington University (J.D. 1980). Mr. Horstman is a frequent author and lecturer on coverage and technology-related topics.

I. Introduction

“Change is not merely necessary to life, it is life.”

“Between now and the 21st Century, millions of ordinary, psychologically normal people will face an abrupt collision with the future. Many of them will find it increasingly painful to keep up with the incessant demand for change that characterizes our time. For them, the future will come too soon.”

Alvin Toffler, *Future Shock*, 1970

Welcome to the future.

Technology presentations claim to make your life easier and save money but can they really deliver what they promise? The answer is “yes!” if law firms commit to full utilization of available technology and do not allow individuals to continue doing things the traditional “old-fashioned” way. The demand for technological change need not be disruptive or unsettling for law firms if certain prerequisites are met. Changing to a technology-based practice will reap benefits to the firm and clients in cost savings, greater flexibility in the manner cases are prepared and tried, and in quality of life.

Technology can facilitate attorney-client communication, enhance the exchange of information, provide access to information previously only available at great expense, streamline case management and improve courtroom access. History provides many examples of the benefits reaped from using technology in a business setting. The telephone, the photocopier, the fax machine and the memory typewriter each transformed the practice of law in its time. The only difference between these items and computer-based technology is our familiarity with the former devices. Investment in your future demands a commitment to technology.

II. Potential Obstacles to Saving Expense with Technology

The primary prerequisite to saving expense through the use of computer based technology is acceptance of the fact that the office of the future is technology driven. Clients will demand efficient case handling that comes with technology, access through email for client communication, and extranets for exchange of case materials. Law firms that fail to embrace this change will find it increasingly difficult to compete. Firms that embrace technological change in the way they do business will enter the 21st Century with the right attitude to succeed in the increasingly competitive business environment.

Unwillingness to Eliminate Duplicate Expenses

A law firm can embrace technology yet lose money in the process. Why? Because it has failed to eliminate the aspects of the business that overlap that which technology can provide. The firm library is one such example. The books in the library come at a price, including the books themselves, the librarian and staff to maintain the library, and the costly space to store the materials. Case materials can be accessed at minimal cost through the internet or researched through an online service such as Lexis or Westlaw. The need to maintain the books has long since disappeared.

Similarly, firms should use technology to move to a paperless office. Commonly available copiers now come with scanners to input case materials. Large case files can be scanned by outside service providers and stored on CD-ROM or similar storage media. Documents created internally are created on a computer system and stored on the network server for future access. Email communications can be stored electronically. Depositions are routinely produced on computer disks instead of bulky hard copy. The need to keep every document in hard copy in a readily accessible file drawer no longer exists. Firms must resist the temptation to continue with the “old way” of storing documents as they move to a computer-based system.

Unwillingness to Acquire the Required Technology

The cost-effective transition to technology requires that the entire firm embrace the change. Towards this end, the firm must be willing to acquire the necessary hardware, software and utility access so everyone in the firm can use the technology. Too often, firms slowly add computers to select groups in the firm thereby denying access to others. When the hardware is obtained, it is not portable thereby defeating one of the major benefits of technology: its flexibility to go anywhere and work anywhere.

Failure to Attain Minimum Competency

Those persons expected to use technology must acquire certain basic skills. It behooves firms to provide training to those attorneys and staff who have not acquired a minimum level of competency in typing, using email with attachments and conducting legal and factual research on the internet.

The basic typing skills required include: (1) typing, (2) cut and pasting text, and dragging and dropping it into a document, and (3) editing a document in a word processing program. The basic email skills include: (1) locating an email address, (2) adding an attachment to a message, (3) opening an attachment received with a

message, and (4) using the email program remotely, i.e. when away from the office. The basic internet skills include: (1) using a search engine, and (2) downloading a document or file from the internet.

A. Attitudinal Challenges

“It is our attitude at the beginning of a difficult undertaking which, more than anything else, will determine its successful outcome.” William James. The attitude of the firm regarding technology, more than anything else, will determine whether technology is used cost-effectively, and therefore successfully, by a firm.

A firm should develop a zero tolerance approach to individuals within the firm who seek to continue with case and client management according to the old-fashioned ways. Full benefits can be gained only when everyone utilizes the available technology. Your firm’s technological image and advantage will be judged by your weakest link (i.e., the lawyer who resists the transition to the new technologies.)

The firm should promote the “single keystroke rule” in all aspects of the business. According to this rule, information is entered only once, then transmitted to the next person to work with the information. Under current practices, a lawyer typically will dictate a letter, a secretary transcribes the dictation, the lawyer writes revisions on a hardcopy of the document, which the secretary then types into the original document and delivers the document back to the attorney for review. The work has been repeated four times in this example. In contrast, following the single keystroke rule, the attorney could type the text of the document either into an email or in a word processing program, the secretary then formats and “cleans up” the document, the lawyer reviews the document electronically and makes changes directly into the document, followed by the secretary finalizing and printing the document. The technology-based method of document creation and review eliminates transcription equipment expenses, delays in transcription, duplication of efforts, and time delays incurred when materials are exchanged between secretary and lawyer.

B. Inflexibility Regarding When and Where Work is Done

Firms need to be open-minded about when and where work is done to realize the benefits of technology. Laptop computers can be taken anywhere to do the same work that otherwise would be done by staying in the office. To encourage the use of technology, firms must allow work to be done out of the office. The freedom to work outside the office enables lawyers to work at home, on the road or at odd hours, to free up time for personal matters during the day. In turn, the quality of life of the lawyer is enhanced, and costs to the lawyer and firm are minimized. For example, if a lawyer must travel to the office to work on a weekend, the lawyer is likely to incur travel expenses, parking fees, possibly lunch expenses, and wasted time traveling to and from the office. If that same lawyer can work at home on the weekend because of the availability of a laptop computer and access

to the firm computer network, the expenses are avoided. The time saved by avoiding the commute can be put to better use, whether it is on behalf of the firm or the attorney.

C. Potential Legal and Ethical Issues Concerning Privileged Electronic Communication

A necessary prerequisite to the use of technology is the assurance that the electronic transmission of information will not violate the attorney-client privilege or any ethical provisions. The rules defining the ethical and evidentiary status of electronic communications are developing, but they naturally develop more slowly than the technology itself. Most modern rules governing professional responsibility take an enlightened view of technology and extend the attorney-client privilege to electronic communications. However, the development of the technology related law is slower in some jurisdictions than others.

A pivotal legal question that is raised in connection with modern electronic attorney-client communications is whether confidences transmitted via such media retain their essential confidential quality. The factual root of this inquiry is an instinctive doubt by some that electronic communications are as private and secure as paper-based communications. These factual and legal questions arise in a variety of evidentiary settings, but have received most attention in examinations of attorneys' ethical obligations to maintain client confidences.

In evidentiary contexts, the focus is on whether a privileged communication may lose its protected status by virtue of being communicated through electronic media. A waiver analysis has been applied by the courts on this question, with some courts taking a strict view that any disclosure, even inadvertent, waives the privilege. *See, e.g., In re Sealed Case*, 877 F. 2d 976, 980 (D.C. Cir. 1989). Other courts look more conservatively to whether there was an intentional relinquishment of a known right. *See, e.g., Underwater Storage Inc.*, 314 F. Supp. 546, 549 (D.D.C. 1970). Yet others employ a balancing test which evaluates the reasonableness of precautions taken to prevent disclosure. *Alldread v. City of Grenada*, 988 F. 2d 1425, 1433 (5th Cir. 1993).

Some state evidence codes have expressly addressed the issue of the confidentiality of electronic communications:

“A communication between a client and his or her lawyer is not deemed lacking in confidentiality solely because the communication is transmitted by facsimile, cellular telephone, or other electronic means between the client and his or her lawyer.” CAL. EVID. CODE § 952 (West 1994).

In the professional responsibility context, the focus is on whether an attorney can have a reasonable expectation of privacy in communications transmitted by email or similar electronic medium. While earlier directives of state ethics boards were in conflict on the issue, ABA Formal Opinion 99-413 provides clear guidance on the propriety of transmitting confidential information via unencrypted e-mail:

“A lawyer may transmit information relating to the representation of a client by unencrypted e-mail sent over the Internet without violating the Model Rules of Professional Conduct (1988) because the mode of transmission affords a reasonable expectation of privacy from a technological and legal standpoint. The same privacy accorded U.S. and commercial mail, land-line telephonic transmissions, and facsimiles applies to Internet e-mail. A lawyer should consult with the client and follow her instructions, however, as to the mode of transmitting highly sensitive information relating to the client’s representation.”

The ABA Committee recognized that while Internet e-mail is not invulnerable, it is no more vulnerable than traditional mail, land-line phones or facsimile. The Electronic Communications Privacy Act of 1986 amended the Federal Wiretap Statute of 1968 by extending its scope to include electronic communications and provides criminal and civil penalties for the unauthorized interception or disclosure of a wire, oral, or electronic communication. (18 U.S.C. § 2510 B 2522, 2703 B 2711 (1996)). Similarly, the Communications Assistance for Law Enforcement Act amended the Federal Wiretap Act to include cordless and cellular phone communications. (18 U.S.C. § 2510(1), 2510(12)(A)). The ABA Committee predicated its conclusion that an attorney can have a reasonable expectation of privacy in communications transmitted by email or similar electronic medium largely on the fact that these federal statutes prohibit and punish interceptions of such communications in the same way that opening traditional mail is prohibited.

Although the trend is to the contrary, some state ethics boards apparently still remain uncertain of the relative security of electronic communications. Some states require that sensitive material sent across the Internet by attorneys must be encrypted. In those jurisdictions, absent encryption, the attorney must obtain the client’s written acknowledgment of the risks such communication poses to the expectation of privacy. Iowa Supreme Court Board of Professional Ethics and Conduct, Op. No. 96-01 (Aug. 29, 1996). Also see, South Carolina State Bar Assn. Ethics Advisory Comm., Advisory Op. No. 94-27 (Jan. 1995).

As a matter of simple prudence, firms must take the same care and caution in the filing and transmission of electronic communications as is taken with paper communications. Additionally, firms should examine the ethics rules and opinions in the states in which they practice to ensure that there are no unusual ethics requirements associated with the use of electronic communications with clients in the particular jurisdiction.

II. Methods and Means to Save Expense Through the Use of Technology

A. Communication with Clients and Counsel

The following communications can be conducted via a computer to save time and expense:

1. Fax documents from a computer.

Sending a fax directly from a computer avoids the time and expense required to print and prepare the fax for the office fax machine, and avoids involving other officer personnel to transmit the fax. This enables the staff to turn their attention to other labor intensive matters that require their efforts. Faxing from a laptop computer while out of the office can save significant charges associated with hotel fax charges (if faxing from a hotel), messenger service charges, secretarial overtime, or overnight mail charges.

2. Revise documents via email with clients or your office.

Revising a document via the internet gives you the freedom to work whenever and wherever you choose or you happen to be at the moment. Imagine not being tied down to the hotel lobby, the business center or the office while waiting for a colleague to finish a first draft or a secretary to finish typing the document. With the knowledge of how to revise a motion via the internet, an attorney can finish/review a project at home, on a train, at a deposition, on a weekend, on vacation, when there is no fax machine available, when there is no printer available, or no secretary available. When you master this skill, you are no longer tied to the office.

- a. Practical tips when **sending** a motion to someone to be revised via the internet.
 1. Tell the recipient what word processing program was used to create the document, what version, the font type, the font size, and whether any coding was enabled to track document changes. It aids the process if you first ask the recipient what word processing program he/she uses and the document is sent in that format.
 2. Don't forget to send the document attached to your email to the recipient.
 3. Don't forget to send the email.

4. Ask the recipient to send you a brief email message confirming receipt of the document. This simple gesture avoids miscommunication about whether a document was sent and received.
 5. Tell the recipient when you must receive the response/input.
 6. Know your state ethics and evidentiary rules regarding whether email communications are privileged. If emails are not privileged, do not send a confidential document via the internet.
 7. Enable your word processing program “change tracking” features so you can identify and incorporate any changes made to the document when it is returned from the recipient.
- a. Practical tips for revising a motion via the internet when responding to a sender.
1. Upon receipt of the document, send a brief email acknowledging receipt.
 2. Opening and editing the document:
 - (a) Open your email containing the document.
 - (b) Click once (not twice) on the attachment at the bottom of the email.
 - (c) Click on your right mouse button once.
 - (d) Click on the word “open.” The document should open. “Should” is an interesting word in the world of technology. If the document does not open, there are a variety of reasons why this could be happening to you. The most likely reason is that the computer cannot determine what word processing program was used to create the document and needs you to tell it. Odds are the document was created either in WordPerfect or Microsoft Word. The computer will request that you fill in an “application to run.” In that box, the goal is to point to the path on your system that opens your word processing program. Usually, a command ending in the extension “.exe” will do the trick. This is the only challenging part of editing a document and it is recommended that this stage of the process be practiced at work once or twice before taking the show on the road, or travel with the pager numbers of your IS department employees.

TIP: Most documents created in a Windows environment will put an extension on the end of the file name like .wpd or .doc. This tells the computer what program to use to open the file. When you send documents to others, make sure the proper extension is on the document (the extension used by the program you created the file with).

Once the document is open, it is recommended that you do a "Save As" and save the document with a different name. When you are done editing you can compare your changes with the original and generate a redline document.

With the document open, edit to your heart's content just as you would type an original document. Save the document periodically so you do not lose your work product.

- (e) When the editing process is done, you must remember to send the revised document back. To do this, click "File" on the main toolbar, select "Send" or any similarly described term, select the email option to send the document back. After clicking on send, the computer should (there is that should word again) allow you to address and email, automatically attach your document and complete the process. If this is problematic from the word processing program, go to your email program and send the document as an attachment to an email from the email program.

Send your email via the internet and wait for the recipient to advise you the email was (or was not) received.

- (f) Use all the time and money you saved to do something fun and interesting.

3. Video conference

Video conferencing has become accessible and cost-effective for anyone with a computer. Access via the internet is possible with minimal set-up required. The benefits are obvious: avoid the expense and inconvenience of travel.

B. Case Management Through the Use of Technology

Technology offers a variety of options to save expense during the management of a case. Investigation, research, billing, deposition reporting, document management and creation of trial exhibits all can be done affordably and easily through the use of technology.

1. Fact research

The internet is a source of an infinite amount of information. Factual research on the internet can uncover background information about witnesses, corporate information, medical information, verdicts/settlements, expert information, product issues, patents, recall information, attorney and judge information and information on a host of technical issues.

2. Legal research

The internet is a gateway to case law from all state and federal courts, as well as international law. Web sites such as the Federation of Insurance and Corporate Counsel (www.thefederation.org) provides links to the courts, to insurance information and to regulatory sites.

3. Billing

Software is available commercially to record time and expenses on the computer and to establish electronic billing with clients. The faster the bill review, the faster the payment (at least in theory).

4. Depositions

Realtime reporting is readily available but not widely used due to a general lack of familiarity with the benefits. With realtime reporting, a lawyer can annotate the transcript, code issues and make notes of additional work to be done on a matter on a laptop while the live testimony is transcribed. The benefit of instant annotation is that the transcript (in electronic format) can be immediately emailed to the client at the conclusion of the deposition. The client benefits by eliminating the need for costly summarizing and abstracting several weeks after the deposition was completed.

The drawback to realtime reporting is that an attorney unfamiliar with its features can slow down a deposition by attempting to annotate and note a transcript while at the same time questioning the witness. While attorneys should be aware of this potential problem, it should not be used as an excuse not to realize the benefits of this computer program.

At trial, realtime offers the benefit of instant transcripts without having to wait for daily copy at the end of the court day. The transcripts can be used to prepare for court the next day and can be sent to clients and experts to review to stay informed of the daily case developments.

5. Document Storage and Retrieval

Technology can be used to store documents, depositions and photographs on CD-ROM or disk. This method of storage makes it easy to retrieve data, cost-effective to store the information, and easy to transport voluminous information from one location to another.

a. Document/Photo Scanning

One of the easiest ways to realize a cost savings in the management of a case is to scan documents onto CD-ROM. Photocopies can range from a few cents to over a dollar per page for color copies. Scanned documents (by an outside vendor) may cost around 15 to 30 cents per page. An example illustrates the cost advantage of technology:

The cost savings:

- | | |
|---|----------|
| (1) 5,000 pages at .05/page (average) | 250.00 |
| (2) Four copies (court, opposing counsel, yourself & extra) | 1,000.00 |
| (3) Versus scanned to CD at .15/page (average) | 750.00 |
| (4) Burn four CDs | 50.00 |
| (5) Total cost \$1000 vs \$800 | |
| (6) Savings increase if you are able to scan and burn CDs inhouse | |
| (7) Savings increase the more parties involved in the case. | |

Scanning of documents has the added advantage of being able to access all exhibits from any location. Scanning also adds flexibility in that any document can be printed if the hardcopy cannot be located.

Photo scanning offers similar cost advantages. When an ordinary roll of film is developed, it can be reproduced onto CD for approximately \$16. Any photo can thereafter be transmitted electronically at a minimal cost compared to the traditional method of exchanging photos involving expensive and time-consuming reproductions.

When enlargements of photos are needed at trial, the cost can range anywhere from \$300 to over \$100 depending on the size and mounting. Scanned photos can be projected on to a screen at trial using relatively inexpensive audio-visual equipment. Any photo can be enlarged and zoomed in on during trial; whereas, with enlargements usually only a few photos are selected for enlarging.

C. Using Technology in the Courts

1. Computer graphics assist with demonstrative evidence

Computer programs such as Microsoft Excel and Powerpoint can be used to create charts, graphics and timelines for use in court. These programs can be projected on screen using an LCD projector. They have the added benefit of being editable on a moments notice, allowing an expert to visually demonstrate flaws in an adversary's position.

2. Projection of actual evidence

The use of a video projection system such as an Elmo or Doar Communication product allows the trial lawyer to project the image of any document, real object or photograph onto a screen or television monitor before the jury without the need for expensive pretrial preparation of the exhibit. The modern video projection system replaces the traditional overhead projector.

3. Technology can be used to access case information

The majority of federal courts and many state courts now permit electronic access to their files either through the internet or through the use of a modem. Electronic filings are permitted by a handful of courts but the trend is growing. The ability to access the court file without leaving the office yields significant savings to counsel; the trip to court is avoided.

IV. Working With People and Remembering the Big Picture When Trying to Save Expense Through Technology

A. Personnel

If the entire firm does not embrace the use of technology, the "holdouts" can defeat the goal of saving expense. The weak link breaks the chain. So long as the firm permits some of the staff to continue with non-technological means to get the work done, the costs associated with the older methods remain as part of the firm overhead.

To address the problem of staff that is unwilling to update work practices, a careful examination of the basis for the attitudes must be examined. Oftentimes, a lack of adequate training and support for the new methods of doing the work cause the staff to fear errors and omissions. Similarly, a lack of technical support to address problems

with the hardware and software can cause the staff to become discouraged from relying on the technology. A highly qualified and responsive information technology staff is a must.

B. Limitations of Technology

Computer based communications with clients hold vast advantages over traditional forms of communication. However, one delayed or missed transmission can derail the greatest system. While U.S. mail, overnight mail, faxes and telephone messages also can be missed, the risk of a delayed message should not be ignored.

Computer based communications also can be derailed if the computer network should crash. A power outage, a hardware defect, a software conflict or a computer virus can shut down an entire network indefinitely. Any firm relying on technology should have a contingency plan in place to respond to these potential emergencies.

C. Court System: Virtual Courtroom or Contempt of Court?

Courts in the United States are moving at different speeds with respect to embracing the use of technology. Some courts have established model courtrooms of the future, equipped with sufficient electric and telephone lines, specially designed podiums and arranged to accommodate audio-visual needs. However, the vast majority of courts lack the electric outlets, the telephone access and work space necessary to accommodate the use of computers, audio visual projection systems and other emerging technology in the courtroom.

V. Conclusion

The use of technology enables lawyers to work smarter, not harder, with a resulting savings in expense and enhancement in the quality of life. It allows them to work faster, by employing programs to replace manual methods of collection and research. And it ultimately assists lawyers in producing a better product, by ensuring thoroughness and by saving lawyers' time to perform the tasks for which they are uniquely qualified.