



International Association  
of Defense Counsel

# Trial Academy

## *Use of Technology in the Courtroom*

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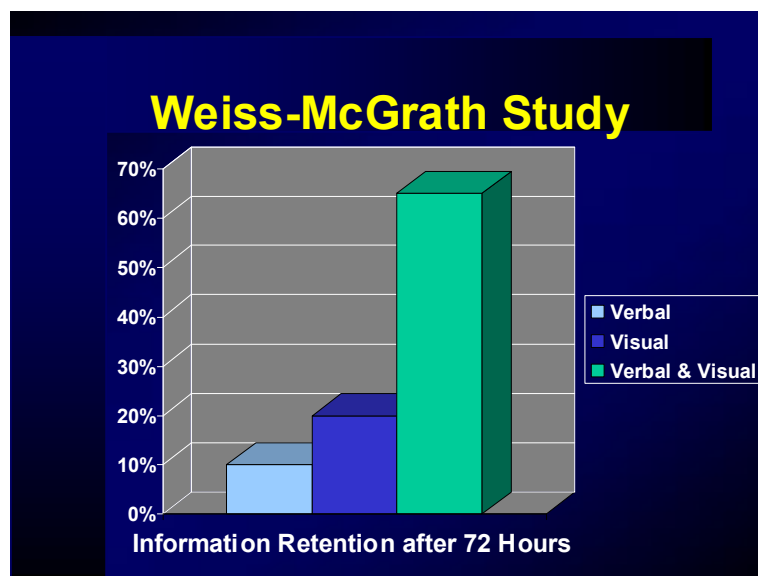
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## I. INTRODUCTION

21st Century jurors are being conditioned by advertisers and the media to receive information in high-impact sound bites that hit the core message in 18 seconds or less. Further, human memory research reveals that after a mere 72 hours typical jurors will retain only 10% of verbally presented information, while those who both heard and saw (verbal and visual) the presentation retained 65% of the information.<sup>1</sup>



As a result, trial attorneys who embrace the use of multi-media presentations in the courtroom have a substantial advantage over their adversaries in making their points and telling their stories.

Technology use at trial has changed dramatically over the last 15 years. Hardware and software options are more numerous, more robust, less expensive and easier to use than ever before. There are several options to consider when selecting your trial technology products.

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<sup>1</sup>Harold Weiss & J.B. McGrath, Jr., *Technically Speaking: Oral Communication for Engineers, Scientists and Technical Personnel* (1963).

Cutting to the chase, if you are limited in scope and funding, a basic trial technology kit should include a laptop (with Pentium® 4, 2.4 GHz Processor (or better), 1024 MB RAM, 120 GB Hard Drive, XP Professional or Vista and DVD player/burner), Microsoft PowerPoint; a computer light projector (w/ 2000+ lumens) & screen; a visual presenter/document camera (e.g., Elmo); a multi-plug power adapter with extension cord; and 3 1/2 key foam core board blow-ups.

For minimal additional costs, you can take your firm's trial technology kit to the next level with trial presentation software (i.e., Sanction or Trial Director). For greatly enhanced courtroom/main office communications, you should also seriously consider having a Blackberry or other text messaging handheld device.

Make no mistake, however; technology is not the end-all. The keys to unlocking the power of technology in the courtroom are: (1) pre-planning, (2) flexibility, and (3) redundancy. Blind reliance on technology without keeping your attention on the three keys above may leave you and, more importantly, your jurors without anything to see!

## **II. PRACTICAL CONSIDERATIONS**

Several weeks before trial, you need to lay out your trial technology master plan. You should ask yourself the following questions:

1. How will I present my evidence at trial?
2. What are the case-specific cost issues with using levels of technology?
3. Will the Court allow me to use projectors, computers and any other equipment for demonstrative purposes? Will the Court provide any of the equipment I can use? Can the cost of any presentation equipment be shared with my adversaries? Are there monitors already built into the courtroom?
4. How is the courtroom set up?

5. Where is the optimum location to place the screen, the projector, the computer, the power cords and any other necessary equipment that will best convey my message to the jury?
6. Are there any electrical limitations in the Courthouse? Due to the age of some buildings, powering up any one courtroom with multiple projectors, computers, and display equipment can blow fuses.
7. Will there be a need to dim the lights and, if so, where are the controls located and how do I create the desired lighting during a computer-projected presentation?
8. Do the acoustics of the courtroom require use of a microphone and amplification?
9. Will I be able to move around or must I stand at the counsel's table during presentation
10. How will the judge or jury view my evidence?
11. Will the Court allow me to set up my equipment before trial and store equipment at the courthouse or will I need to consider transporting my equipment each day?
12. Will I need to hire an outside graphics professional or technology consultant and, if so, will I need him/her with me at trial?
13. Who will run the equipment at trial?
14. How much space will we be given in the courtroom? Will there be a convenient location to place binders of bar-coded exhibits close-by and within reach of counsel's table?
15. Will there be a work area for the person running the equipment at trial? How far will the presentation equipment be from the projector, nearest power outlet, or the binders of exhibits? Will extension cords and cables be necessary for the projector, A/C surge protector, and speakers?

16. Do I have enough time to be trained and become proficient with the technology and software I want to use?

17. What will be my back-up plan if technology goes awry at trial?

### **III. PROPER PREPARATION FOR TRIAL**

Get pre-approval from the Court to use any equipment or services you need.

Prepare all evidence ahead of time. If using trial presentation software, load all of your documents into the respective program(s) and practice accessing documents with the same computer that will be used at trial. Your presentation will go more smoothly if you practice using your trial system beforehand even if you plan to search for evidence on the fly. Find out if there are any glitches with the equipment that you plan to use. And, remember, the bulbs in light projectors will burn out! Make sure you have extra bulbs on hand.

If feasible, hire a professional to run the equipment for you and, if you are not running the trial system yourself, practice with the person who will be doing so at trial.

Always have an emergency back-up plan! If costs allow, we suggest that you bring back-up equipment such as hard drives and extra projector or have a vendor in the courtroom with you or on standby in case of equipment failure. Have a trial binder containing a hard copy set of back-up documents, including your color graphics, in case there is power or equipment failure. Finally, irrespective of your technology emergency back-up plan, we strongly suggest that you have your top three exhibits blown-up onto foam core board and/or story boards. They can be used even if all power to the courtroom fails!

### **IV. COURTROOM SET UP**

Check the courtroom out beforehand. Find out if the courtroom technician (if one is available) will be assisting with set-up or provide support during trial. What equipment will the Court allow or not allow? Will all the power cords reach? If there are windows, will you be

allowed to dim lights or pull down blinds? Depending on the size and equipment you are using, you may also have to arrange for carts or tables to be set up. Also, find out where you can set up and store your equipment for the duration of trial.

In addition to visual effects, make sure that you have adequate sound quality in the courtroom. Test the microphones! If you plan to play video or sound, make sure there are ample speakers compatible with your equipment. If necessary, you may need to bring in additional speakers to amplify sound properly.

Be as wireless as possible. Invest in a wireless mouse and light pointer so that you can walk around if necessary during your presentation and still advance your screen and maintain control of the laptop. Be aware of any reception restrictions in the courtroom (cell phones may not work) and practice with any wireless equipment to ensure proper connections. Also, tape down all power cords to the floor to prevent tripping over them or distractions to the presentation. Discuss tape restrictions with the Bailiff. Some courtrooms require the use of gaffing tape over masking or electrical tape as gaffing tape does not leave adhesive residue.

Jurors' ability to view your presentation is key to the success of your argument. Studies and professional presenters will tell you that jurors, in general, pay more attention to a single large screen than to individual screens. There is a reason why movie theaters are not built with individual monitors per seat! The brighter the projector and bigger the screen, the better. There are alternative presentation display devices available – see Hardware section below.

For unavailable key out-of-state witnesses, videoconferencing technology (or worst case teleconference technology) may be an emergency back-up that is worth considering. Acceptance and approval by Judges around the country is not uniform so seek approval early and also retain an outside videoconferencing vendor to verify feasibility of witness location and courtroom

location (or other location) set-up and cost. Within the next few years, net-meeting technologies will improve to the point where "live video feed" can be run over the internet very easily and inexpensively.

## **V. DECIDE ON WHAT TECHNOLOGY TO USE AND BE COMFORTABLE WITH IT**

Today's improved trial presentation programs are much easier to use than earlier versions. With training and practice, the trial attorney can operate these software programs with confidence thereby allowing more control and flexibility over the use of technology during trial.

Hardware is now faster and more robust than ever before which allows for ease in using the software at trial. There is far less need to fear that your computer system will crash or lock-up during your presentation, making the need to retain a trial consultant to troubleshoot or attend trial in case of equipment failure no longer a requirement.

Further, costs of trial presentation software have also fallen significantly over the past 15 years thereby making use of such software much more affordable for even smaller law firms. Previously, trial presentation software was sold as proprietary trial systems for as much as \$20,000; today, the cost for a single license of trial presentation software is under \$600<sup>2</sup>. Prohibitive before, feasible now.

## **VI. TRIAL PRESENTATION SOFTWARE,**

These applications allow a trial attorney to access and present any trial exhibit (document, photograph, etc.) that has been previously loaded as a digital file onto the trial computer. In general, you can zoom in or out, highlight sections, draw arrows and pull out portions of graphic or text on the fly. These programs are also designed to integrate with the most common litigation support programs to manage and organize evidentiary documents. With

this integration, you can quickly locate documents from your database and select them for dynamic presentation at trial.

Most of these programs also are designed to manage and present videotaped testimony at trial. Trial presentation software has been integrated with video management tools for courtroom playback. These tools are designed to link the video testimony with transcript text which can be displayed for presentation. With quick key word searches or page-and-line designations, you are able to create clips of testimony for playback at trial. The transcript text also can be set with rolling yellow highlighting to further enhance the visual presentation and thus improve juror memory retention. Not only is this a powerful impeachment tool, it can be done on the fly with basic training on the software.

When requesting video from a court reporter, be aware of the video format to be delivered. Most trial presentation software packages use MPEG1 video which can be stored on DVD media. DVD-video, on the other hand, can also be stored on DVD media, but this format is incompatible with trial presentation software packages. DVD-video works in home DVD players and is the common format for full feature movies. DVD-video must be converted to MPEG1 in order to be used with trial presentation software, and it is just as easy to have the court reporter deliver this format in the first place to avoid delays and unnecessary expenses.

Examples of trial presentation software are Trial Director Suite (5.1) (by inData), Sanction 2.8 (by Verdict Systems), and Visionary 7.2 (by Visionary Legal Technologies).

## **VII. GRAPHIC AND DEMONSTRATIVE SOFTWARE**

In the past, blow-up foam core boards were the primary way to display demonstrative exhibits in the courtroom. Although still effective for a multi-media presentation and as

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<sup>2</sup> inData's Trial Director Suite 5.1 retails at \$595, Verdict System's Sanction 2.8 also retails for \$595. Microsoft's



emergency back-up, use of this method for all demonstrative exhibits can be time-consuming, expensive, limited in scope as to edit ability, and difficult to transport. Today, it is becoming more common to use software packages to create and display graphics. Popular programs used to create graphics include Adobe Photoshop, Corel Draw and PhotoPaint, Paint Shop Pro and Microsoft's Visio. Please note, however, it is necessary to have the software program used to design the graphic installed on the trial computer or to have the graphic saved in an accessible format such as a Word document or PowerPoint slide in order to display the graphic.

The most common graphic presentation software on the market today is Microsoft's PowerPoint<sup>3</sup> which can create graphics as well as present multi-graphic formats on various slides. These features make it very popular for use at trial. In addition, most trial presentation software programs have the ability to integrate PowerPoint within the presentation thereby giving you the dual benefit of displaying your graphics and organizing them within your presentation along with your other digital exhibits and on-the-fly search capabilities.

We recommend that you package PowerPoint with other media such as trial presentation, timeline software and enlarged graphics left on white boards or easels. Additionally, it is not recommended that you use PowerPoint to display your detailed text-based outlines or as the only media for your presentation. Be selective and use it correctly to make strong and effective arguments.

*“Speak with passion, not PowerPoint...”*

*Have something meaningful to say...*

*Avoid over-use of distracting animation, sound effects and cheesy backgrounds...*

*Use easy-to-read fonts...*

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PowerPoint retails for \$229. Visionary retails for \$0.

<sup>3</sup> Microsoft PowerPoint

*Avoid information overload.”<sup>4</sup>*

## **VIII. DEMONSTRATIVE EXHIBIT PREPARATION AND TIMELINE SOFTWARE**

Trial preparation software such as CaseMap will help you organize and analyze the key issues and details of your case by entering key people, dates, events, etc. By organizing your information in this manner, you are able to sort your issues and organize strategy by which you will answer or solve each of the issues identified in your case. Timeline software allows you to organize and explain events of your case in chronological order and display facts or events as graphic timelines. Other than CaseMap<sup>5</sup> & TimeMap 3 (both by CaseSoft) and Timeline Xpress 4.5 (by inData), trial preparation software which promotes brainstorming in an organized way includes:

MindManager X5 Pro (by Mindjet) ó Organizes complex relationships in graphical format. *“One of the nice things about MindManager is that you can portray your information with different colors and different ‘levels’ so you can start off with the basics and work your way down to the details. Done properly, you can make very complex information easy to understand.”<sup>5</sup>*

Keyhole 2 LT (by Keyhole) ó Geographical óEarthStream technologyö mapping software, displays maps of any area on Earth via aerial photography, virtual tour or by 3D graphics.

Google Earth and Google Earth Pro (by Google) ó Google Earth enables you to place a wealth of earth and space imagery and other geographic information right on your desktop, while Google Earth Pro is a research, presentation and collaboration tool for

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<sup>4</sup> Paul Unger *Law Technology News* March 2005 Vol.12 No. 3 pp. 18-19

<sup>5</sup> [http://www.legalunderground.com/2005/02/swanner\\_post.html](http://www.legalunderground.com/2005/02/swanner_post.html) óTwelve Ways Technology Can Make You a Better Trial Lawyerö by David Swanner

geo-specific information used by professionals to deliver complex data sets simply and clearly.<sup>6</sup>

Microsoft Virtual Earth (by Microsoft) provides views of real-world locations, and provides users with a glimpse of the location or house using aerial or 3-D imagery.<sup>7</sup>

## **IX. HARDWARE AND OTHER PRESENTATION TOOLS**

Mix up your media – the best presentations involve multi-media to vary the presentation and to keep the jury’s attention! Sometimes use the physical exhibit, but at other times combine tools. Leave a key foam core board with relevant information in front of the jury on an easel while presenting live testimony of a witness with an electronic presentation. Beware that this sophisticated approach must be used sparingly so as not to create sensory overload.<sup>8</sup>

### **A. Laptops and Desktops**

Due to the mobility advantage, laptops are more popular than desktops for trial use. If you plan to use a laptop, invest in a high-end, state-of-the-art quality laptop. When deciding on new a laptop, speed and reliability are the name of the game and they do not have to be mutually exclusive. Today’s laptop can perform memory intensive functions like video play back, video editing and exporting extremely fast and without crashing. Equally important to the hardware you purchase is the number of applications you run. Only load the software you plan to use. Even though hardware and software crashes are less common, it’s still a good idea to anticipate the “worst case scenario.”

We recommend that you consider the following specifications for laptop trial presentations:

• Pentium® 4 2.4 GHz Processor (or better)  
• Windows® XP Professional or Vista

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<sup>6</sup> <http://earth.google.com/intl/en/products.html>

<sup>7</sup> <http://www.microsoft.com/virtualearth/>

<sup>8</sup> <http://www.law.com/jsp/ltn/pubArticleLTN.jsp?id=1109597691860>

É1024 MB RAM (More is better)  
É64 MB+ AGP Video Adapter  
ÉDual Monitor Output  
ÉSVGA Separate Monitor (1280 x 1024) at 24-bit Color (True Color)  
ÉSound card and speakers (required for Audio/Video functions)  
É120 GB (or more) available hard disk space (to store video and document files)  
ÉDVD-Read/Write Drive  
É100 MB (or better) Network Adapter

**Configure your computer to be “trial ready”.** To configure your laptop, be sure to:

- a. Turn off all extra computer sounds like windows startup and shutdown sounds, error sounds, etc.
- b. Turn off any screen saver settings and optimize your laptop power options so that your hard drive and monitor will not hibernate during operation.

c. Configure your laptop setting to the “do-nothing” mode when you close your lid. If not set properly in your power settings, closing the lid of your computer will shut the system down automatically.

d. The number one technology headache that both novice and tech-savvy users encounter is with the laptop display and projector settings. Most laptops have the same display settings but some of the newer “high-end” systems with advanced graphics cards have new menus and settings that, without the proper training, can be foreign to the everyday user. Make sure you can toggle on and off once you are connected to the equipment setup.

- e. Spend time learning all of the ins and outs of the software including hotkeys.
- f. Consider a dual monitor display. This approach allows the user to work behind the scenes on their laptop while still being able to publish the presentation to the projector.

**Carry two laptops [for major presentations].** Even if you never pull it out of your bag, always carry a second laptop.

**Use a second laptop for different presentations.** Consider using your primary laptop to run exhibits and video designations while using the second one to call up PowerPoint presentations or search for those “needle-in-the-haystack” documents in your database software.

**Turn off “behind the scenes” programs.** Today’s computers come preloaded with extra software that will never be used in the courtroom. Take the time to decide which applications are vital to the operation of your system and which are unnecessary.

**Extended warranties are a REALLY good idea.** Make sure your firm purchases the extended warranty. At some point, you will need it.

**Recovery disks.** Carry all backup and recovery disks for your operating system and applications. If you can’t find them, Windows XP and Vista allow you to create recover disks without the original install disks.

## **B. Projectors and Screens**

Even if the courtroom has a projector and screen for trial use, test it to make sure it is the quality you need. It is suggested that a projector for trial use is at least 3000 ANSI lumens. Existing models have options with a document camera attached to the projector so that you will not need separate equipment. If your office doesn’t have a practical use for a projector of this quality, you can rent projectors (and other equipment) on a daily, weekly or monthly basis. Bring a backup projector bulb. Most projectors bulbs will last at least 2,000 ó 2,500 hours. If you are uncertain of the hours used or how much you will use during your case, consider carrying an extra bulb. Bulbs typically run \$300-400. Buy them at the time you buy your projector and you will never have to worry about it. Confirm how the menu system on a projector works, including brightness and contrast as well as “key stoning” for awkward setups that require repositioning the unit. Test how to focus and zoom documents and slides on a

document camera. Error messages are common place especially for bulb and filter hours. These are simple adjustments to make but can be very unnerving to the untrained user.

### **C. Portable Video Presenters and Document Cameras (ELMO)**

Document cameras have come a long way in terms of improved resolution, mobility, durability and price. Using a document camera allows you great flexibility to show demonstratives without having to pull them up on your computer or to create them on a blow-up foam core board. This technology is also good for the "computer-phobic" jury.

Alternatively, document cameras can be a good back-up to display "surprise" documents that were not scanned for trial, documents that cannot be located in your trial presentation software for some reason or 3D objects. It's important to make sure your camera is also bright enough to display properly in conjunction with the projector so that anything displayed can be seen clearly by jury and judge.

Spend ample time practicing with the exact make and model that will be in the courtroom. The buttons and features vary and it takes time to get accustomed to orienting the page correctly, zooming in/out, and panning. Although seemingly simple to use, the document camera's display tends to look "shaky" and can be hard for jurors to follow if the operator is not proficient with the device.

### **D. The SmartBoard**

The SmartBoard is a device that can be used in a courtroom in addition to or in lieu of a projection screen. The advantage of a SmartBoard is that it captures (digitally) any drawing made on it and can also convert handwriting to searchable text. Think of it as a "smart" interactive blackboard or flip chart. Not only can you display whatever you want from your computer screen via projector, but you can digitally record anything you draw on the

SmartBoard. This is great for witnesses who need to annotate a demonstrative exhibit or draw diagrams for illustration purposes.

#### **E. Foam Core Boards**

Traditionally, the foam core board was the most common way to display key demonstrative exhibits. Although potentially expensive, foam core boards with key documents can be strategically placed in the courtroom for permanent visual effect. Whereas a presentation screen will change with each displayed image or slide, a foam core board can be left up for jurors to view and analyze when they get bored listening to your adversary's presentation. Be careful when you're presenting to make sure the jury is not distracted by too many graphics that you have left around the courtroom. Be sure to locate a local Kinko's or copy vendor before trial begins.

#### **F. Redundancy = Piece of Mind (Backup Storage)**

How do you ensure that your presentation system is going to be there for you? The simple answer is to reverse Murphy's Law. The more redundancy you have in place, the better the chances are that your technology will work from beginning to end. Make sure you have plenty of hardware space to save and transfer digital files. Designated trial systems with plenty of space on the hard drive are ideal for trial and allay fear of accidentally pulling up the wrong files during your presentation. This may also be a good solution if you are planning to show lots of video testimony; you can save time by pulling up video on your PC, rather than waiting to load a CD/DVD into your external drive. Remember, if it's slow, it does not work! Jurors are not going to be impressed by a trial attorney fumbling around with the technology trying to find the document to display.

For smaller, more mobile "space" solutions, Thumb or Flash drives can hold several files and are good to use as back-up. In a pinch, an Apple iPod<sup>9</sup> or Microsoft X-Box<sup>10</sup> or any other electronics that can hold files can be used for external storage file space. Be resourceful if necessary! A good rule of thumb for redundancy is three copies of the data. One on your computer, one on a hard drive or disk and the last one should be the hard-copy exhibits or the video on disk.

## **X. COURTROOM TECHNOLOGY**

More and more courtrooms are becoming automated. Check out the courtroom technology and wiring features well before your day at trial begins. In some situations you will find that the wired courtrooms with permanent equipment setups are not conducive to your presentation style or the room layout. If you do plan to provide your own audio/visual equipment, take special care approaching the judge since most have gone to great lengths to lobby for technology for their courtrooms. Additionally, inform the judge that you will allow opposing counsel to use your equipment even if they do not wish to split the rental cost.

Communication with your outside trial team and clients can be critical during your trial. Service bureaus such as CourtroomConnect<sup>11</sup> offer high-speed Internet access in the courtroom for the duration of your trial. Technology enables your trial team at the office or in the war room to communicate with you during your trial in such ways as receiving live feed of the trial video via video conferencing with transcripts shared in real time to exchanging emails and sharing documents over secured Wi-Fi wireless data network.

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<sup>9</sup> [www.apple.com/ipod](http://www.apple.com/ipod)

<sup>10</sup> [www.microsoft.com/xbox/](http://www.microsoft.com/xbox/)

<sup>11</sup> [www.courtroomconnect.com/](http://www.courtroomconnect.com/)



If you do not need a state-of-the-art wireless live video feed during trial, you can keep in touch with your office through wireless web modems and email technology such as Blackberry<sup>12</sup> or Sierra AirCard for your laptop.<sup>13</sup>

**Help is a phone call away.** Notify your IT staff or consultant that you will be in trial and might need their assistance over the phone. Add them to your speed dial.

## **XI. CONCLUSION**

We have presented you with an overview of numerous technologies that can take your trial presentation to another level. Because we have presented this in a text-only presentation, you will likely forget most of what you have read in just 72 hours – so keep this memo nearby. In all seriousness, if you remember nothing else, remember this: jurors retain six times more information if your presentation combines visual evidence with oral presentation. Proper use of technology in the courtroom can take you from good to great! The keys to unlocking the power from the technology are: (1) pre-planning, (2) flexibility, and (3) redundancy.

Those trial attorneys who embrace the use of multi-media presentations in the courtroom will have a substantial advantage over their adversaries in making their points and telling their clients' stories. In the event you are limited in scope and funding, a basic trial technology kit should include laptop (with Pentium® 4, 2.4 GHz Processor (or better), 1024 MB RAM, 120 GB Hard Drive, XP Professional or Vista and DVD player/burner), Microsoft PowerPoint; a computer light projector (w/ 2000+ lumens) & screen; a visual presenter/document camera (e.g., Elmo); a multi-plug power adapter with extension cord; and 3 key foam core board blow-ups.

For minimal additional costs, you can take your firm's trial technology kit to the next level with trial presentation software (i.e., Sanction or Trial Director). For greatly enhanced

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<sup>12</sup> [www.blackberry.com](http://www.blackberry.com)

<sup>13</sup> [www.sierrawireless.com](http://www.sierrawireless.com)

courtroom/main office communications, you should also seriously consider having a Blackberry or other text messaging handheld device.

The best presentations in court are the ones that appear simple and well rehearsed. The experienced litigator never loses sight of the content of the story and how the jury is reacting to the presentation regardless of technology demands and opportunities.

If you have questions regarding the use of technology in your case, please feel free to contact me at [bmanlowe@williamskastner.com](mailto:bmanlowe@williamskastner.com), my co-author, Adam Bloomberg at [abloomberg@litigationinsights.com](mailto:abloomberg@litigationinsights.com) or my technology assistant, Jenny Guidi, at [jguidi@williamskastner.com](mailto:jguidi@williamskastner.com),

Now, go out and take good to great!