

## Part I: Mobile Devices

### Trial Presentation Tools and Tricks

Lawyers and law firms have embraced mobile devices, particularly smartphones and iPads. An article by Sharon D. Nelson and John W. Simek, who have been leaders in legal technology, electronic discovery and computer forensics for many years, discusses the increasing use of iPads by lawyers to manage their demonstrative evidence and present their cases in court. (Nelson, S.D. and Simek, John W. *Demonstrative Evidence in the Courtroom: Evolution or Revolution?* Sensei Enterprises, 2013) However, note the statement that “[m]ost lawyers still hire experts, not only to prepare exhibits but to present them” and that most lawyers are presenting demonstrative evidence electronically rather than through paper flip charts and foam boards. As they state on page 2, “[d]emonstrative evidence has become a true specialty” and they discuss whether lawyers should hire experts or try to handle the technology themselves. An article from *Indiana Lawyer* explains how to share the iPad’s display on a big screen during trial using a wireless connection. (Bour, S. *Display your iPad on the big screen at trial.* *Indiana Lawyer*, May 8-21, 2013, p. 6)

### Apps for Lawyers: Who Has the Most?

With the speed of technology development and given the popularity of apps, it is difficult to provide accurate figures on the number of law-related apps available for specific devices. However, Narkiewicz notes that “iPad is the tablet of choice by the overwhelming number of lawyers who use tablet computers.” (Narkiewicz, D. *One of the most valuable technology tools that you can own.* 34 *Pennsylvania Lawyer* 42, September-October 2012) He goes on to state that while tablet computers that currently use the Android and Windows operating systems are

certainly viable alternatives to the iPad, the iPad “has by far the most applications (apps) available specifically for lawyers or valuable to lawyers.” (Id.) He goes on to comment that all apps for the iPad can be easily purchased from the Apple Store directly from the iPad with a connection to the Internet and an Apple account. (Id.) He then provides a useful comparison between the iPad 2 and the new iPad based on specifications such as size and weight, Wi-Fi or cellular connections, storage, display, voice, operating system, camera and battery life. The author states that there are more than 225,000 apps available from the Apple App Store specifically for the iPad and another 250,000 made for the iPhone that will work on the iPad, although the display of these apps may not be ideal on an iPad (Id. at 43). In terms of the various law-related functions that can be performed using an iPad and its apps with satisfactory results are note taking, organizing case files, document creation, review and revision, spreadsheets and presentations and time and billing. (Id. at 43-45)

Additional insight into the use of smartphones and tablets by lawyers and law firms will be available later in 2013 through a six-volume survey being published by the American Bar Association’s Legal Technology Research Center. These volumes are based on a 208-question survey divided into six questionnaires and emailed to 12,500 ABA lawyer members in private practice. Volumes III and IV, *Litigation and Courtroom Technology* and *Web and Communication Technology*, will be available in June and Volumes V and VI, *Online Research* and *Mobile Lawyers*, will be available in July. An executive summary of all of the volumes will be published in August.

## Security Risks

A number of recent articles should heighten an attorney's awareness of the significant risks to information security and confidentiality posed by the use of mobile devices as well as cloud computing vendors. Often, the issue is not the technology itself, but human behavior that causes mobile devices to be lost or stolen at alarming rates. Law firms are only beginning to grapple with some of these issues. (See Finnemore, M. The data dilemma: law firms strive to strengthen e-security as potential threats continue to arise. *77 Or. St. B. Bull.* 27, October 2012)

Nelson and Simek, experts in information security, provide the following recommendations for security when using smartphones, with a reminder that attorneys have an ethical obligation to protect confidential client information. (Nelson, S.D. and Simek, J.W. Our Top 16 Security Tips for Smartphones. Sensei Enterprises, 2012)

1. Encryption
2. Encrypt Expansion Memory
3. Lock Code
4. Inactivity Timer
5. Location Services
6. Remote Wipe
7. Security Software
8. URLs and QR Codes
9. Wireless Networks
10. Update Your Device
11. Don't Jailbreak or Root

12. Application Installations
13. Terms of Service
14. Turn Off Unneeded Interfaces
15. Mobile Device Manager
16. Backup

In their conclusion, the authors note that data can be written to a smartphone without the user's knowledge and that just opening and reviewing a document can result in the document being written to the phone, especially an iPhone. (Id. at 4) They also advise attorneys to be aware of the changes to the ABA Model Rules of Professional Conduct because under the revisions to the Rules (as part of the Ethics 20/20 project), attorneys are now required to use technology competently and to assess the risks of any particular technology and the sensitivity of the data being handled as it relates to the measures being taken to secure the data. (Id.)

Another article by Nelson and Simek covers how to securely delete data from mobile devices. (Nelson, S.D. and Simek, J.W. Securely Deleting Data from Mobile Devices. Sensei Enterprises, 2012) Sensei Enterprises offers a variety of services related to mobile device/phone forensics, noting that these devices can hold a wealth of information that can be extracted, such as text messages, pictures, videos, call logs, emails and contacts. (See Sensei Enterprises, <http://www.senseient.com/mobile-devicephone-forensics>, accessed 5/8/13). Their website outlines three levels of recovery from these devices, noting that it is possible to recover deleted information even if the device has been deactivated from service.

Murphy also discusses the impact of increasing use of mobile devices by lawyers and law firm employees, especially the trend towards employees purchasing their own devices and then

using these personal devices to perform their duties, what is now referred to as the “bring your own device” (BYOD) revolution. (Murphy, C. Contain yourself: top five ways to protect mobile data. *Peer to Peer*, March 2013, pp. 16-19) He describes how this blurring of personal and business computing is creating special challenges for law firms and their IT departments, including security as an afterthought, data contamination, mobile malware, phishing attacks that can bypass network defenses, lost devices and risky file sharing. (Id. at 17-19) He lists top five ways to protect the law firm’s data on mobile devices:

1. “Chose a solution that protects all confidential files on all devices.
2. Centralize control and monitoring.
3. Connect to SharePoint and other systems for matter centricity.
4. Use private, not public, clouds.
5. Nudge users to safety.” (Id. at 18-19)

He advocates using a security file-sharing solution which can shield confidential data from unauthorized access and from malware that may have infected other files on the device. (Id. at 19)

Beck notes that the data being stored on mobile devices continues to grow because of email messages and attachments, text messages and other instant messaging services, app data, multimedia files and metadata. (Beck, D. Mobile device management: the missing piece of the puzzle. *Peer to Peer*, September 2012, pp. 80-88) He notes that proper mobile device management (MDM) begins with information governance, including policies and standards. (Id. at 81) Essential MDM technical controls covered in his article include asset management, configuration management, encryption and remote secure wipe. (Id. at 81-82) Advanced MDM

solutions can include data leakage protection, remote auditing, advanced support options and backups and restores. (Id. at 82) The final section of his article discusses the challenges of deploying an MDM solution on a global basis. (Id. at 82-83) (See also Skokowski, P. Stop, thief: protecting legal documents in a mobile world. *Peer to Peer*, September 2012, pp. 84-88.)

Magliato also provides helpful advice for lawyers and law firms for mobile device management (MDM) in the age of BYOD. (Magliato, C. Making BYOD work for legal. *Peer to Peer*, September 2012, pp. 20-24) He notes that a fully managed mobility solution should address the following characteristics:

- “Software Distribution
- Policy Management
- Inventory Management
- Security Management
- Encryption
- MDM Access to Business Applications
- Data Loss Prevention” (Id. at 21).

He also covers three categories of application-specific mobile apps for database management systems, law practice management systems and secure file transfer and file-sharing.

Not only are mobile devices prone to being lost or stolen, but people also continue to fall victim to the tactics of social engineering, which Carlson and Wolf define as manipulating people into disclosing information or performing tasks. (Carlson, A. and Wolf, M. Train to strengthen security’s “weakest link”. *Peer to Peer*, September 2012, pp. 52-56) Their article

discusses the importance of training lawyers and their staff members about information security threats. Among the key areas to consider are:

- “Law firms are being targeted by hackers
- Specific data are considered confidential by the law firm
- The law firm has policies and procedures
- Email messages might be phishing attempts
- There is a safe way to surf the web
- Social networks can be inaccurate
- Social engineering comes in many forms
- Passwords need to stay secure
- Personal devices require security measures
- There are people available for support
- Security needs to be a shared responsibility” (Id. at 54)

Among the recommendations the authors provide for designing a training program for lawyers and law firm staff members are:

- “Don’t try to cover everything at once
- Use different approaches
- Provide a range of times and opportunities
- Use threat-based scenarios or real-world examples
- Do not exaggerate
- Look for opportunities to “train the trainers”
- Ask for feedback” (Id. at 55-56)

In terms of keeping mobile employees and their data safe, Nabavi provides a number of best practices for keeping IT secure, whether it is mobile or stationary (Nabavi, R. Keep mobile workers and their data safe. *Peer to Peer*, September 2012, pp. 26-27) and DeSot recommends building a “culture of security”. (DeSot, T. Build a “culture of security”. *Peer to Peer*, September 2012, p. 28)

Kimbro devotes a number of sections of her book to such important topics as protecting client confidences, storage and retention of client data and securing mobile devices. (Kimbro, S.L. *Virtual Law Practice: How to Deliver Legal Services Online*. Chicago, IL: American Bar Association, 2010). She provides an excellent checklist of daily best practices for the use of technology that will help to ensure that the attorney is in compliance with respect to the confidentiality of client information.

- “Use full disk encryption on all computers.
- Create strong passwords. Change them occasionally. Make sure username and passwords are not written down or are not easily viewable or accessible.
- Use a daily backup system.
- Keep antivirus software up-to-date and a firewall in place.
- Use antimalware protection.
- Use a pop-up blocker, depending on the browser you use. (Firefox is recommended with the use of security add-ons.)
- Have a secondary, backup Internet method, such as a wireless AirCard.
- Secure your wireless.
- Remove metadata before transmitting documents.

- Educate and remind your online clients about protecting themselves using their own hardware.” (Kimbrow, p. 97)

Other suggestions from Kimbro are to know your state’s ethical rules, especially related to your law firm’s website (pp. 133-134), obtain adequate malpractice insurance (pp. 134-136) and purchase insurance for your hardware (pp. 136-140).

### Comparison

There are many comparisons of smartphones and tablets – and the continued advances in this technology and competition in the marketplace means that this is a moving target.

Fortunately, current information on the specifications of various devices and detailed information comparing these devices is readily available through a simple search of the web. Attorneys will also want to be sure that they are consulting the most up-to-date information and reviews. For example, on April 4, 2013, Jack Wallen provided the following comparison of four smartphones (Wallen, J. Leading smartphone feature-to-feature comparison chart. TechRepublic <http://www.techrepublic.com/blog/smartphones/leading-smartphone-feature-to-feature-comparison-chart/6676>, accessed 5/10/13).

# Smartphone Feature Comparison

MAJOR U.S. CARRIERS			
Samsung Galaxy S III	iPhone 5	Samsung Galaxy Note II	Motorola Razr Maxx HD
AT&T Cricket Mobility Sprint T-Mobile U.S. Cellular Verizon	AT&T Cricket Sprint Verizon	AT&T Mobility Sprint T-Mobile U.S. Cellular Verizon	Verizon

DATA				
	Samsung Galaxy S III	iPhone 5	Samsung Galaxy Note II	Motorola Razr Maxx HD
GPRS	Yes	Yes	Yes	Yes
Networks	2G 3G CDMA/UMTS/DC HSPA+/CDMA/4G LTE	UMTS/HSPA+/DC HSDPA/GSM/Edge/4G LTE	2G 3G CDMA/Edge/DC HSPA+/4G LTE	2G 3G CDMA/GSM/Edge/UMTS/4G LTE
Wi-Fi	802.11a/b/g/n	802.11 a/b/g/n	802.11a/b/g/n	802.11a/b/g/n
Bluetooth	Yes	Yes	Yes	Yes
NFC	Yes	No	Yes	Yes
USB	microUSB	No	microUSB	microUSB

DISPLAY				
	Samsung Galaxy SIII	iPhone 5	Samsung Galaxy Note II	Motorola Razr Maxx HD
Type	HD Super AMOLED	Retina Display	HD Super AMOLED	HD Super AMOLED
Size	4.8 in 16:9 aspect ratio	4 in. 16:9 aspect ratio	5.55 in 16:9 aspect ratio	4.7 in 16:9 aspect ratio
Resolution	1280x720 p	1136x640 p	1280x720 p	1280x720 p
Multi-touch	Yes	Yes	Yes	Yes
Protection	Gorilla Glass 2	Fingerprint-resistant oleophobic coating on front	Gorilla Glass 2	Gorilla Glass 2 and water-repellent nanocoating

PLATFORM				
	Samsung Galaxy S III	iPhone 5	Samsung Galaxy Note II	Motorola Razr Maxx HD
OS	Android 4.0.4	iOS 6	Android 4.1.2	Android 4.1.1
CPU	1.4 GHz quad-core Cortex-A9	1.3 GHz dual-core Apple A6	1.4 GHz dual-core ARM Cortex-A9/1.5 GHz dual-core Qualcomm Scorpion	1.5 GHz dual-core Krait
GPU	Mali-400 MP	Power VR SGX	ARM Mali-420 MP	PowerVR SGX540
RAM	1 GB or 2 GB	1 GB 1066	2 GB	1 GB
Storage	16 or 32 GB	16, 32, or 64 GB	16, 32, or 64 GB	16 or 32 GB
Removable Storage	microSD up to 64 GB	No	microSD up to 64 GB	microSD up to 64 GB

CAMERA				
	Samsung Galaxy S III	iPhone 5	Samsung Galaxy Note II	Motorola Razr Maxx HD
Front	1.9 MP HD	1.2 MP HD	1.9 MP HD	1.3 MP HD
Rear	8.0 MP HD LED flash	8 MP HD	8 MP LED flash	8 MP 6 MP (widescreen mode)

BATTERY				
	Samsung Galaxy S III	iPhone 5	Samsung Galaxy Note II	Motorola RAZR MAX HD
Type	Replaceable 2,100 mAh Li-ion	Non-replaceable 1440 mAh Li-ion	Replaceable 3,100 mAh Li-ion	Replaceable 3,300 mAh Li-ion
Advertised Life	Talk: 16 hours Standby: 580 hours	Talk: 8 hours Standby: 220 hours	Talk: 35 hours Standby: 980 hours	Talk: 32 hours Standby: 372 hours

FEATURES			
Samsung Galaxy S III	iPhone 5	Samsung Galaxy Note II	Motorola Razr Maxx HDz
<ul style="list-style-type: none"> <li>• TouchWiz "Nature UX" graphical user interface</li> <li>• S Voice for easy voice interaction</li> <li>• Direct Call</li> <li>• Smart Stay</li> <li>• Pop Up Play</li> <li>• Voice over LTE</li> <li>• Smart alert</li> <li>• Smart Beam</li> <li>• AllShare Cast/Play</li> <li>• Call from text message</li> <li>• Power saving mode</li> <li>• Google Now</li> <li>• Data monitor</li> <li>• Predictive text input (Swype)</li> <li>• Wake by voice</li> <li>• Gesture actions (Palm Sweep and Turnover)</li> </ul>	<ul style="list-style-type: none"> <li>• Active noise cancellation with dedicated mic</li> <li>• Siri natural language commands and dictation</li> <li>• iCloud cloud service</li> <li>• TV-out</li> <li>• Maps</li> <li>• iBooks PDF reader</li> <li>• Audio/video player/editor</li> <li>• Organizer</li> <li>• Document viewer</li> <li>• Image viewer/editor</li> <li>• Voice memo/dial/command</li> <li>• Predictive text input</li> </ul>	<ul style="list-style-type: none"> <li>• S-Voice natural language commands and dictation</li> <li>• Smart Stay and Smart Rotate eye tracking</li> <li>• SNS integration</li> <li>• Active noise cancellation with dedicated mic</li> <li>• Dropbox (50 GB storage)</li> <li>• TV-out (via MHL A/V link)</li> <li>• MP4/DivX/XviD/WMV/H.264/H.263 player</li> <li>• Organizer</li> <li>• Image/video editor</li> <li>• Document editor (Word, Excel, PowerPoint, PDF)</li> <li>• Voice memo/dial/commands</li> <li>• Predictive text input (Swype)</li> <li>• Multitasking</li> </ul>	<ul style="list-style-type: none"> <li>• SNS integration</li> <li>• Active noise cancellation with dedicated mic</li> <li>• HDMI port</li> <li>• Organizer</li> <li>• Document viewer/editor</li> <li>• Voice memo/dial/commands</li> <li>• Predictive text input (Swype)</li> <li>• Kelvar Backplate</li> <li>• Quick Settings button</li> <li>• Smart Actions</li> </ul>

Comparisons can also be found on the websites for The Kim Komando Show (Smartphone Comparison Chart, <http://www.komando.com/charts/smartphones.asp>, accessed 5/10/13), ComparedandReviewed.com (Smartphones, <http://www.comparedandreviewed.com/smartphones>, accessed 5/10/13), and Wikipedia (Comparison of Smartphones, [http://en.wikipedia.org/wiki/Comparison\\_of\\_smartphones](http://en.wikipedia.org/wiki/Comparison_of_smartphones), accessed 5/10/13). One of the nice features of the Wikipedia comparison is that it covers devices over nearly a decade and also includes a chart for networks and connectivity.

An article intended for attorneys provides a comparison of the iPhone 5, the iPhone 4S and the iPhone 4 as to size and weight, display, RAM, storage options, wireless speeds, battery life, camera and Siri (which commentators warn has security risks). (Narkiewicz, D. Legal tech: the iPhone 5 vs. the iPhone 4S and iPhone 4: should you upgrade? *35 Pennsylvania Lawyer* 56, January-February 2013). An article from FoxNews.com by Kim Komando lists the top seven best smartphones available with commentary on why these are especially good choices (Komando, K. 7 best smartphones today. FoxNews.com, March 23, 2013, <http://www.foxnews.com/tech/2013/03/23/7-best-smartphones-today/>, accessed 5/10/13). The following smartphones are recommended:

- HTC One
- iPhone 5
- HTC 8X
- Nexus 4
- Samsung Galaxy Note II
- Samsung Galaxy S4
- LG Optimus G

Another important decision for attorneys is whether to choose a smartphone or a tablet. An article Smartphone versus Tablet – The Everlasting Battle

(<http://usetablet.com/2013/03/28/smartphone-versus-tablet-the-everlasting-battle/>, March 28, 2013, accessed 5/10/13) provides the advantages and disadvantages of tablets:

#### **“The pros and cons of Tablets**

1. The tablets are easy to personalize, carry around and flexible to use
2. The interface of the tablets is ideal for a good gaming experience and watching HD movies
3. With the increasing megapixel count and better optics, tablets can be used as cameras as well
4. Tablets offer a good battery backup that last between six to ten hours on continuous usage
5. The tablets barely have any storage with a maximum of 64GB storage both for onboard and expandable
6. Typing long documents can prove to be difficult”

And the advantages and disadvantages of smartphones:

#### **“The pros and cons of Smartphones**

1. They are now being introduced in larger screens that has increased the competition between tablets and smartphones
2. Almost all of the high end smartphones feature a camera that is 8 megapixel or above which helps capturing quality images
3. Its touchscreen QWERTY keypad is easier to use
4. In some leading brands the screen of the smartphone can split for watching videos while working
5. HD display is ideal for gaming and watching videos
6. Options like; Push mail support, chat messages are just a touch away
7. Not many applications are available to optimise the functioning of its multi-core processor
8. The smartphones have to constantly catch up with their operating systems”

There are a number of websites that provide up-to-date comparisons of tablet computers and this is likewise a moving target as the technology improves and competition drives vendors to add more features and functionality that will be useful and appealing. Among the sources of

information available are the 2012 Tablet Comparison Guide, which offers a comparison of the seven most popular tablets of the holiday season (Shanklin, W.: 2012 Tablet Comparison Guide, November 5, 2012, <http://www.gizmag.com/tablet-comparison-2012/24877/>, accessed 5/13/13), the 2013 Best Tablet Side by Side Comparisons and Reviews (Top Ten Reviews, <http://tablets-review.toptenreviews.com/>, accessed 5/13/13) and Wikipedia – Comparison of Tablet Computers ([http://en.wikipedia.org/wiki/Comparison\\_of\\_tablet\\_computers](http://en.wikipedia.org/wiki/Comparison_of_tablet_computers), accessed 5/13/13).

## Part II: Top Legal Research Apps

- “Fastcase HD: Fastcase is not as feature-rich as Westlaw Next or Lexis Advance, but it is free and provides accurate search results for cases and statutes, both state and federal. As part of the Tennessee Bar Association Complete Membership, all members receive an upgrade to the expanded Premium-Level Access, which easily syncs between mobile device and computer. Tutorials are available online at [www.tba.org/fastcase](http://www.tba.org/fastcase).
- Lexis Advance: Free to download, but requires a subscription to Lexis. If you are more familiar with LexisNexis than Westlaw, then this is the app for you.
- WestlawNext: This app is free to download, but requires a subscription to Westlaw. The app is easy to use and has all of the features you would expect from Westlaw.
- Wolfram Lawyer’s Professional Assistant: I consider this to be the "Swiss Army Knife" of legal reference apps. This app includes a legal dictionary, the statute of limitations for each U.S. state, various financial calculators including a fees calculator, a settlement calculator, and a calculator to compute the historical value of money, a blood alcohol calculator, and many more. The app displays crime rates including state and national comparisons, investigative information including weather, company information, computations for cost of living, life expectancy, present or future values, mortgage calculators, and much, much more.
- Lawstack -- Free. Lawstack gives you access to the U.S. Constitution, Federal Rules of Civil, Criminal, Appellate and Bankruptcy Procedure, Federal Rules of Evidence, CFR, and several state codes.

- ABA Journal -- Free. You can read breaking legal news and monthly magazine articles.”

Suggestions and descriptions above from Futeral, S.: Essential tablets apps for lawyers. 49 *Tenn. B.J.* 14-17 (March 2013).

In addition to the items listed in Futeral’s article, Niemeier covers the following free and low-cost legal research apps for iPads in her article. (Niemeier, C. Apps, apps and more apps: an annotated list of free and low-cost iPad apps for attorneys and paralegals. 56 *Res Gestae* 282, September 2012):

- Black’s Law Dictionary (\$54.99)
- CCH IntelliConnect Mobile (free)
- Congressional Record (free)
- U.S. Constitution (free)
- Declaration of Independence (free)
- e-Delaware (free)
- HeinOnline (free)
- iLawLibrary (\$1.99)
- Legal Edge (free)
- Manual of Patent Examining Procedure (free)

- OpenRegs (free)
- FedCtRecords (\$9.99)
- Patent Portal (free)
- PUSH Legal (free)
- Real Time Congress (free)
- RuleBook (free)
- State Statutes (prices vary)
- U.S. Code (free)
- House & Senate Guide (free)
- Manual for the United States of America (\$2.99)
- WordWeb (free/\$1.99)

Among the ten helpful apps featured by Alanna Byrne are four for legal research: e-Delaware (free for both iPad and iPhone) and U.S. District Courts Guide (iPhone, free), Fastcase (iPad and iPhone, free) and Black's Law Dictionary (iPad, iPhone and Android, \$54.99). (Byrne, A. 10 helpful legal apps: these classic apps and new technologies can help you make your professional life easier. *Inside Counsel*, May 4, 2012, <http://www.insidecounsel.com/2012/05/04/10-helpful-legal-apps?t=technology&page=2>, accessed 5/13/13) Dysart also discusses WestlawNext in his article about the "killer apps" that

help attorneys practice better. (Dysart, J. The complete mobile lawyer: attorneys find these killer apps help them practice better. *ABA Journal*, April 2013, pp. 34-43)

According to Apple, Casemaker also provides an app for its legal research services. As stated on the website, the app is “compatible with iPhone 3GS, iPhone 4, iPhone 4S, iPhone 5, iPod touch (3rd generation), iPod touch (4th generation), iPod touch (5th generation) and iPad and requires iOS 4.3 or later. This app is optimized for iPhone 5.”

<https://itunes.apple.com/us/app/casemaker/id578124221?mt=8>, accessed 5/13/13)