

by:

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Nathan Sanders, Neal & Harwell

66

ABA Model Rule 1.1

A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.

Comment 8 to Model Rule 1.1

"[8] To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all [CLE] requirements to which the lawyer is subject.".

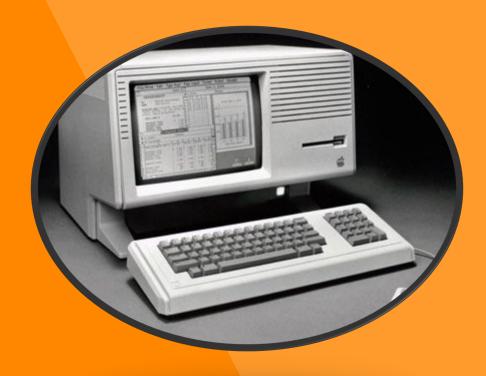


Technical Competence

40 States
have adopted
"technical
competency"
requirement

California
ethics opinion
re duty of
technical
competence

In 2017
Florida first
state to
require
technology
related CLE



Legal Tech History

Legal Technology Through the Years

1980's: WordPerfect era 1990: Microsoft Office 1990: LexisNexis 100,000 searches

1992: AOL for Windows



1995: O.J. Simpson Trial



1996: Trial Director & Sanction

1996: TimeSlips

Legal Technology Through the Years

2000: Y2K Scare



2003: Zubulake v. UBS Warburg 2005: E-Discovery FRCP Changes

2007: Apple iPhone



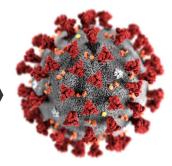
2010: iPad



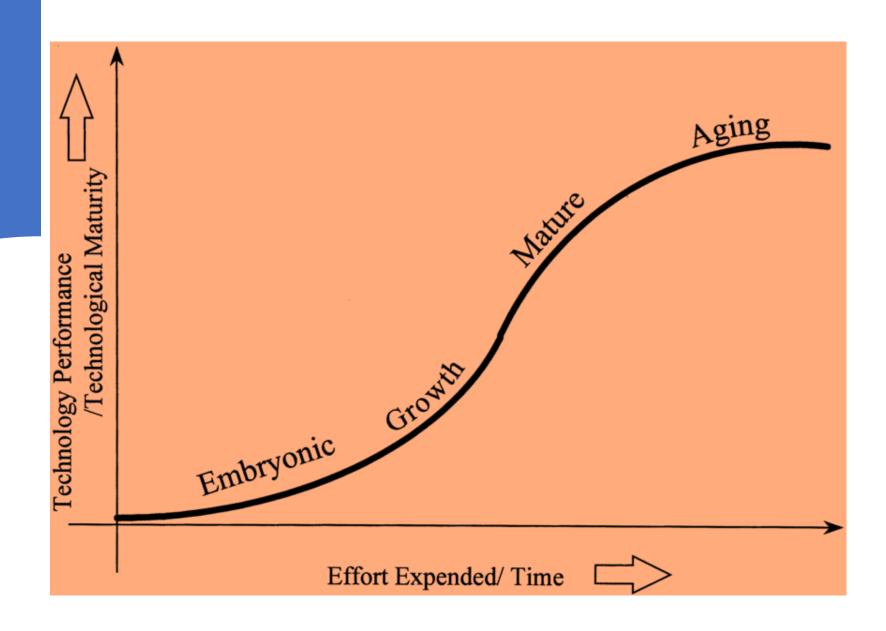
2012:
ABA
Technical
Competence

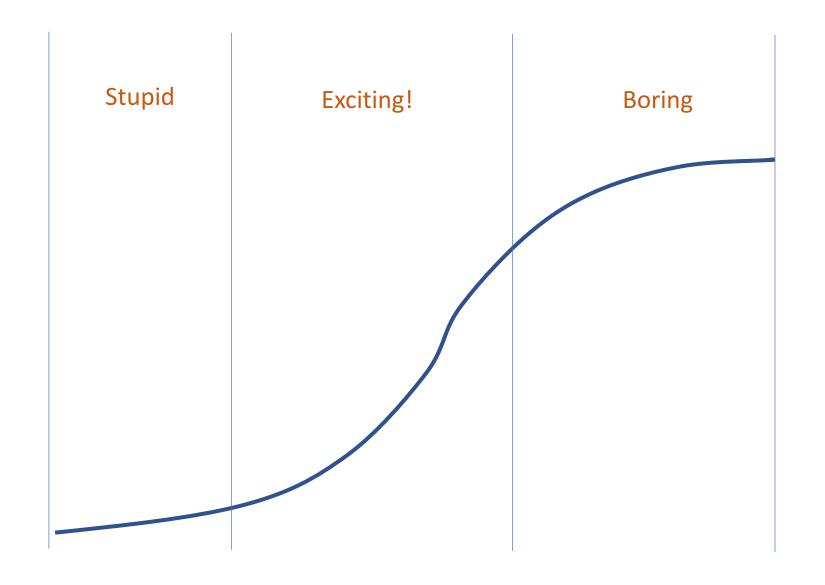
2016: Panama Papers Scandal

2020: Covid-19 Pandemic



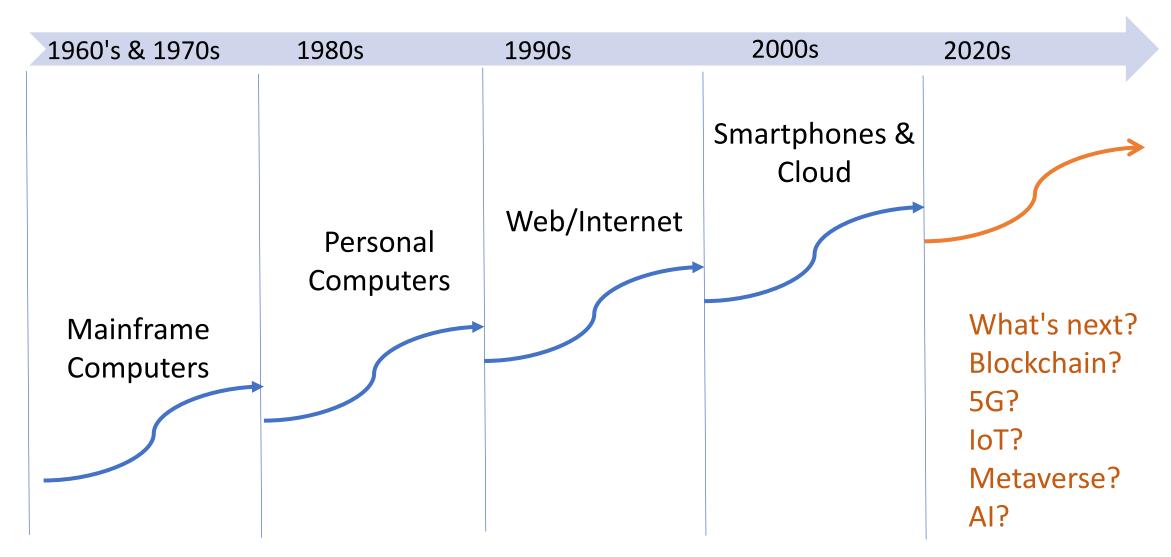
Technology S-Curve





Technology S-Curve (In Layman's Terms)

Tech Life Cycles 1970-Current



Where are we on the mobile device S-curve?

8 Billion

Current world population in 2023 (Worldometers)

6.92 Billion (87%)

People who own a mobile phone in 2023 (Statista)

4.3 Billion (53%)

People who own a smartphone in 2023 (GSMA)

Legal Technology Innovation S-Curves

- Trial PresentationTechnology
- Electronic Discovery and Digital Forensics
- Cloud Technologies and Cybersecurity
- Artificial Intelligence



Trial Presentation Technology

TOP 5 TRIAL PRESENTATION TECHNOLOGY CHALLENGES

--Source: 2013 LexisNexis nationwide litigation survey

Keeping evidence organized

Keeping the jury and judge engaged

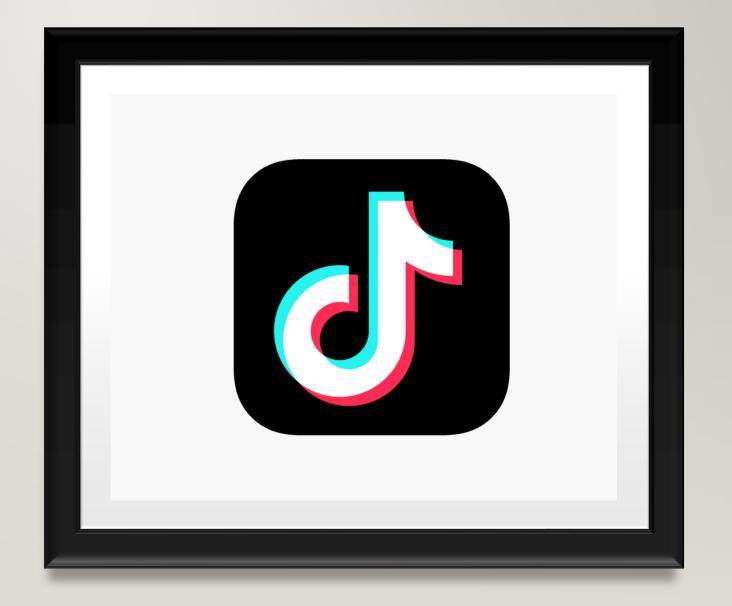
Lack of time and/or resources

Issues with software not working correctly

Connecting to presentation devices

ELECTRONIC PRESENTATION ADVANTAGES

- Jurors part of TikTok generation
 - Competition with television and internet
- Pre-planning and coordination required
 - Counsel must agree beforehand on exhibits and witness order



ELECTRONIC PRESENTATION ADVANTAGES



- Expedites trial proceedings
- Appeals to different learning styles
- Flow of information controlled

Electronic Court Kit (Hardware)



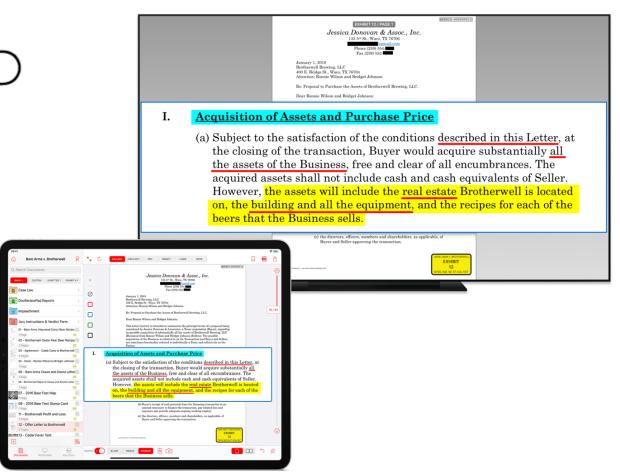
Elmo MO-2 Visual Presenter

- Ultra compact
- 16X zoom in HD
- 2.1 lbs
- Digital document camera
- HDMI input/output
- Connect to laptop
- 3-hour battery
- Use for court / mediations
- \$789
- www.elmousa.com





- www.litsoftware.com
- 7-Day Free Trial



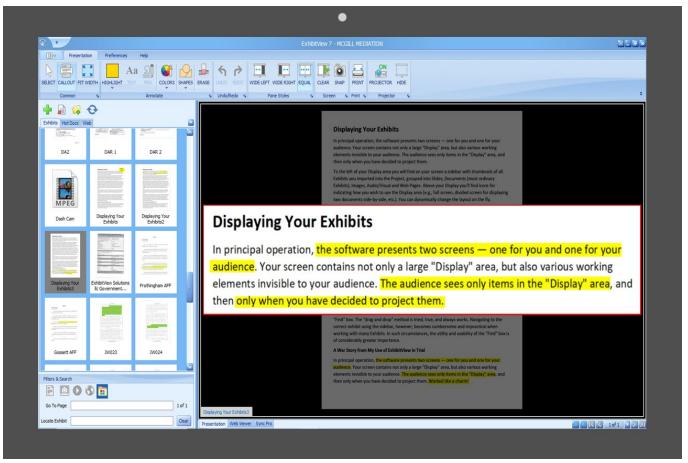


- Trialline.net
- 14-Day Free Trial



EXHIBITVIEW SOLUTIONS, LLC

- Exhibitview.net
- 5-Day Free Trial



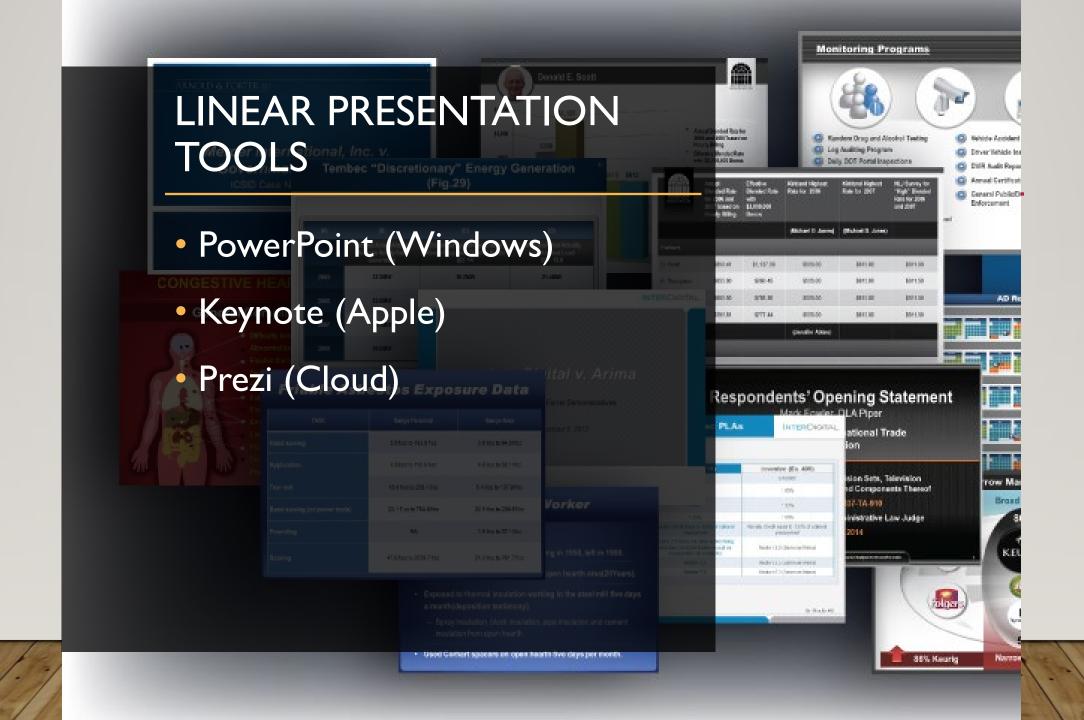
TrialDirector 360[®]

- iPro.com
- Enterprise solution



- New Kid on the Block
- Developed in 2014
- Simple to use
- Powerful
- Fast







POWERPOINT TIPS

Avoid SOL (Slide Over Load)

anti-GMO

Introduction

- What is called "biotechnology" is a vital issue that impacts all of us.
- Largely between 1997 and 1999, genetically modified (GM) food ingredients suddenly appeared in 2/3rds of all US processed foods. This food alteration was fueled by a single Supreme Court ruling. It allowed, for the first time, the patenting of life forms for commercialization. Since then thousands of applications for experimental genetically-modified (GM) organisms, including quite bizarre GMOs, have been filed with the US Patent Office alone, and many more abroad. Furthermore an economic war broke out to own equity in firms that legally claimed such patent rights or the means to control not only genetically modified organisms but vast reaches of human food supplies. This has been the behind-the-scenes and key factor for some of the largest and rapid agri-chemical firm mergers in history. The merger of Pioneer Hi-Bed and Dupont (1997), Novartis AG and AstraZeneca PLC (2000), plus Dow's merger with Rohm and Haas (2001) are three prominent examples. Few consumers are aware this has been going on and is ever continuing. Yet if you recently ate soya sauce in a Chinese restaurant, munched popcorn in a movie theatre, or indulged in an occasional candy bar - you've undoubtedly ingested this new type of food. You may have, at the time, known exactly how much salt, fat and carbohydrates were in each of these foods because regulations mandate their labeling for dietary purposes. But you would not know if the bulk of these foods, and literally every cell had been genetically altered!



POWERPOINT TIPS

- Avoid SOL (Slide Over Load)
- Use photos and illustrations

Who Our Clients Are

Plaintiffs in Class Action
Phen-fen
Litigation

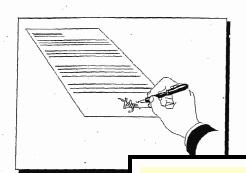
(Johnetta Moore, et. al. v. A.H. Robins, et. al., 98-CI-795)





POWERPOINT TIPS

- Avoid SOL (Slide Over Load)
- Use photos and illustrations
- Use video and audio
- Highlight critical passages



Fee Agreement

This agreement made on the date of <u>DEC</u>
between the Melbourne MillsLaw Office, refer

Marcia lewanne Hughes , re

WITNESSETH: That client emple,

known as fen-phen, Redux, and Pondimin. Attorney accepts the employment. It is anticipated that attorney will file a class action law suit on behalf of client and others similarly situated against the manufacturers of those drugs. Attorney's fees shall be set by the court, but shall not be more than 30% of client's net recovery Expenses, if any, will be

paid up front by Attorney and repaid off the top before calculation of fee. Cite. will pay for

This agreement made on the date of DEC 77

between the Melbourne MillsLaw Office, referred to as Attorney, and

MARCIA Lewanne Hughes , referred to as Client,

similarly situated against the manufacturers of those drugs. Attorney's fees shall be set by

the court, but shall not be more than 30% of client's net recovery. Expenses, if any, will be



POWERPOINT TIPS

- Avoid SOL (Slide Over Load)
- Use photos and illustrations
- Use video and audio
- Highlight critical passages
- Use pre-designed templates for professional look
- Use built-in tools (like SmartArt) to make slides more interesting



POWERPOINT TIPS

Avoid SOL (Slide Over Load)

Use photos and illustrations

Use video and audio

Highlight critical passages

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Use built-in tools (like SmartArt) to make slides more interesting

ELECTRONIC DISCOVERY & DIGITAL FORENSICS

FORENSICS VS. E-DISCOVERY

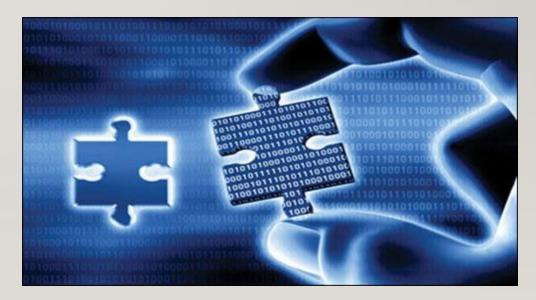
WHAT'S THE DIFFERENCE?



DO YOU NEED TRADITIONAL E-DISCOVERY PROCESSING...



or a digital (computer) forensics examination?



CHARACTERISTICS OF E-DISCOVERY CASE

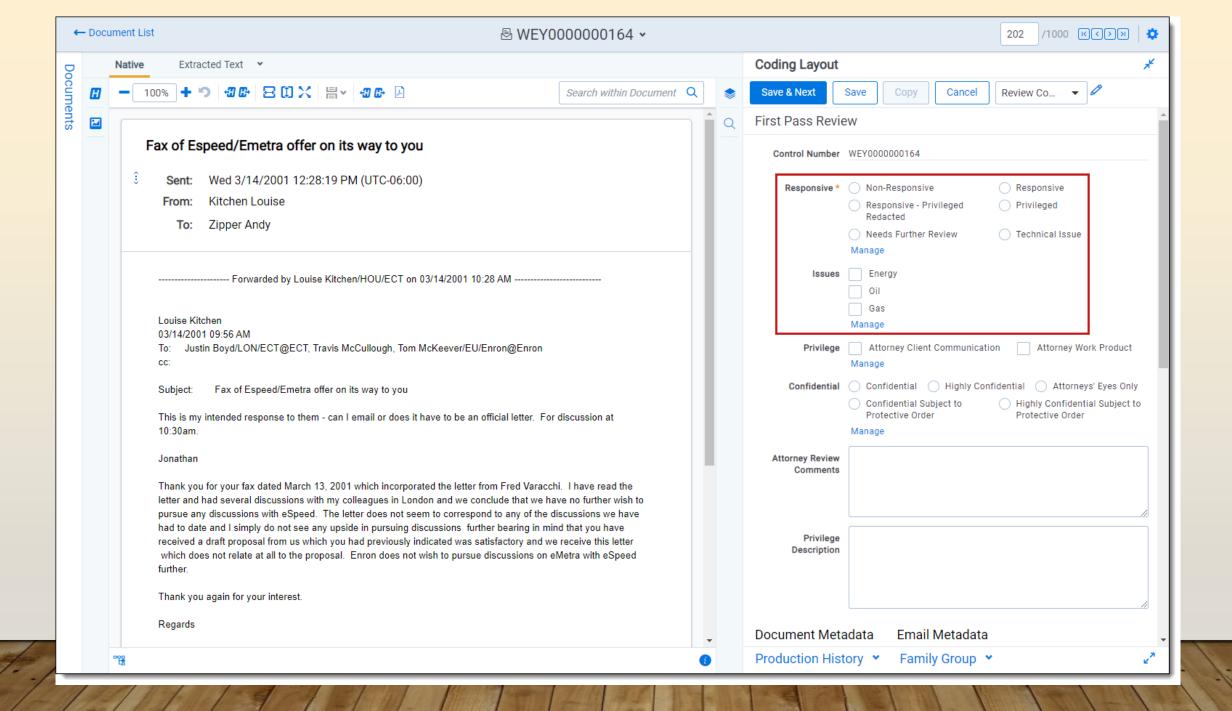
- Routine collection of documents from a targeted list of custodians
- Filter parameters are well-defined
- Custodians have no personal stake in the discovery process
- No allegations of data destruction have been made
- E-Discovery engineer not typically called to testify as expert witness
- Typical Output: Document database exported to a review tool



WEB BASED DOCUMENT REVIEW

- Web-based litigation review platform
- Intuitive
- Multi-browser compatible
- Analytics module
- www.relativity.com
- Other solutions: Everlaw, Logikcull, Epiq Discovery, DISCO, iCONECT





CHARACTERISTICS OF DIGITAL FORENSICS CASE

- Suspicion exists of malicious destruction or alteration of digital data
- Custodians have personal stake in findings
- Scope of investigation unknown initially
- Experience and skill of investigator critically important
- Typical Output: Computer Forensics Expert
 Report
- May be called to testify as expert witness



SOURCES OF DIGITAL DATA

- o Mobile Devices (Phones & Tablets)
- The Cloud (Email, Social Media & Backups)
- o Device RAM (in-private, passwords)
- o PC/Laptop Hard Drives
- o Video Systems
- o Digital Cameras
- Backup Media (CDs/DVDs /Thumb Drives)
- o 3rd Party Providers Records











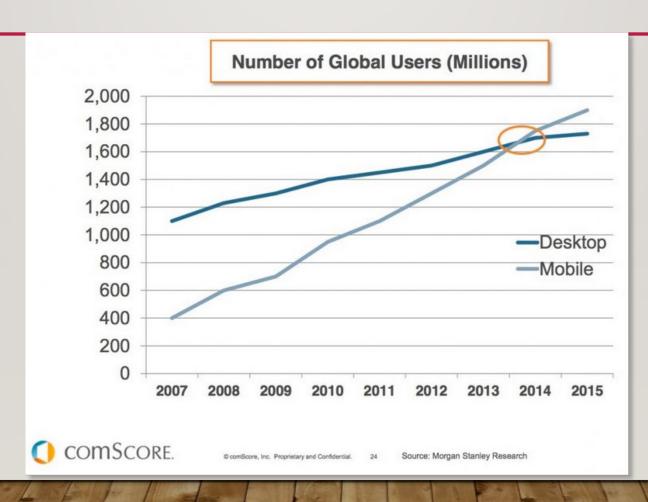


DON'T OVERLOOK SMALLTHINGS





MOBILE DEVICEV. DESKTOP COMPUTER



SMART PHONES / MOBILE DEVICES

- Text Messages
- Email
- Call Logs
- Pictures/Videos
- Usernames & Passwords***
- Geo-location
- Cell Tower Data from providers
- 3rd Party Applications

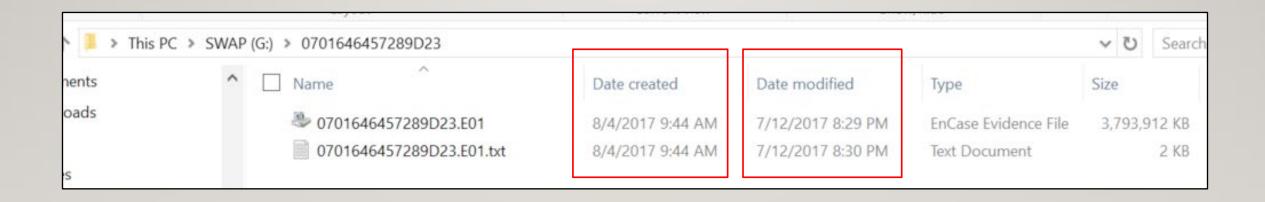


DIGITAL METADATA

- Metadata is data about data
- External & Internal metadata
- Important to keep intact
 - Easily altered during collection & examination
- Can help to identify when data was created, moved and/or modified
- Can help identify the location of an event
 - Geolocation

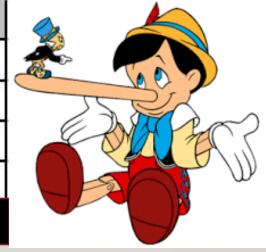


EXAMPLE OF <u>EXTERNAL</u> METADATA



DELETED SEARCH HISTORY IN GMAIL ACCOUNTS

TimeStamp	Search Query
2017-11-11 16:03:19 Sat CST	daniel marsh
2017-11-11 15:54:34 Sat CST	Danielle marsh
2017-11-11 15:54:17 Sat CST	donyell Marsh
2017-11-11 15:02:04 Sat CST	Veterans Day
2017-11-11 04:53:49 Sat CST	



The iPhone That Snitched



The iPhone That Snitched

Background:

 Civil litigation related to a bank fraud where the respondent agreed to have his laptop examined.

Tasks:

- 1. Determine if the respondent had a personal relationship with a female bank employee
- 2. Determine respondent's sources of income.

iTunes Backups

Examination of computer revealed backups for several iPhones

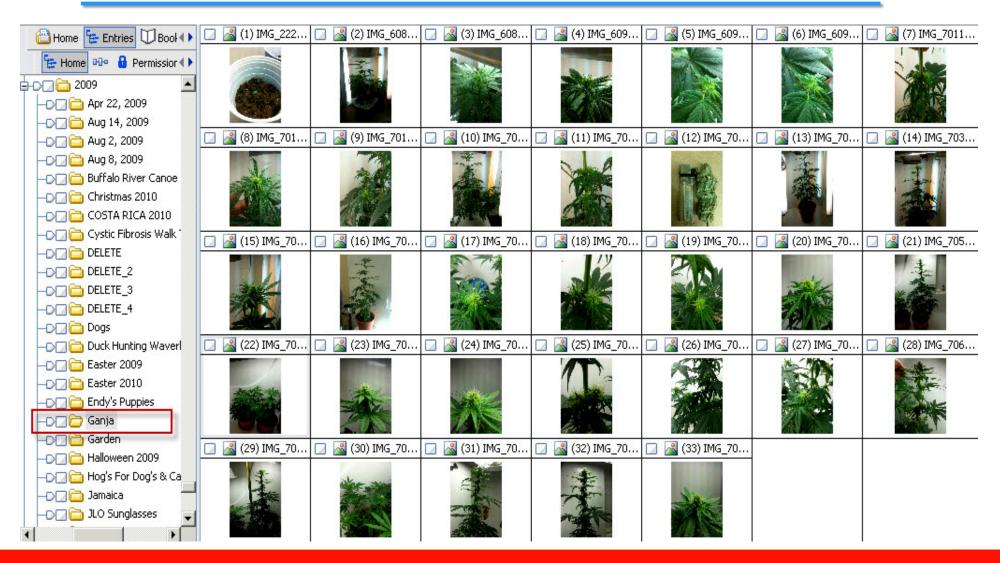
 Parsing of the iPhone backups had positive results in answering Task #1

Number	Date	Text	Flags	Desc
N.	2/19/2009 13:55 ank Employee's Cell #	We didn't get to the bank on Saturday and I have four checks in my purse I will try to get to go in Nashville later but something is trying to clear the bank I'm sorry to bother you	3	Sent
1615#####69	2/19/2009 13:56	no problem, I will call and let her know. Do you know what is trying to clear so I can tell her?	2	Received
1615####69	8/26/2009 14:44	In the future whatever method funds come in needs to be the way they go out has been to the 6th bank and the will not do caskets check; they think it is some kind of fraud. He is headed to to see what they will do. Bank of corporate is some new bitch but the check number is only 1024		Sent
1615#####69	11/17/2009 13:41	although put a rush on checks they did not come yesterday but should today; I'm sorry I didn't leave a check but will get you one this afternoon or will bring you cash	3	Sent
1615####69	11/17/2009 13:48	That's fine. Whatever works for you guys. Thanks,	2	Received
1615#####69	11/17/2009 13:48	He paid extra for a rush print but they are still not here.	3	Sent
1615#####69	11/17/2009 13:52	Do you know who ordered them? They need to waive the rush fee. They can also print you some checks at the bank. I work on Sat. If you need me to check on them.		Received
1615#####69	11/17/2009 15:41	Ok, great. Just let me know if I can do anything to help when I go in on Sat. Also, do you want me to put new sheets on your bed? Just let me know. Thanks,	2	Received

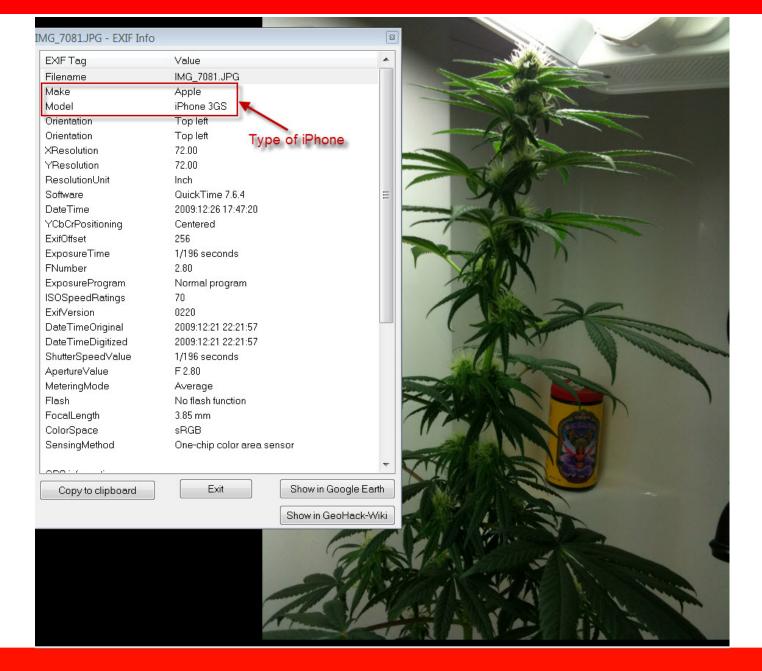
But Hold on There's More...

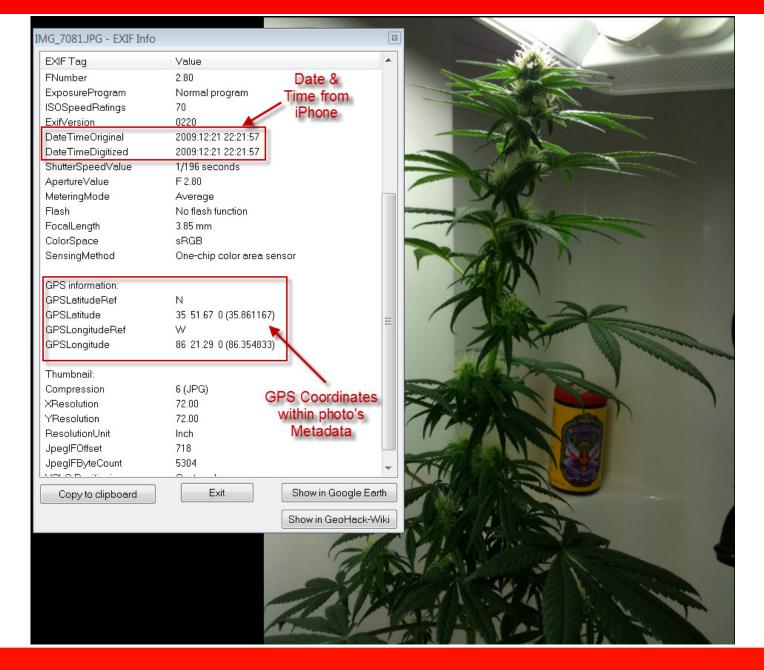
What About Task #2 Possible Sources of Income?

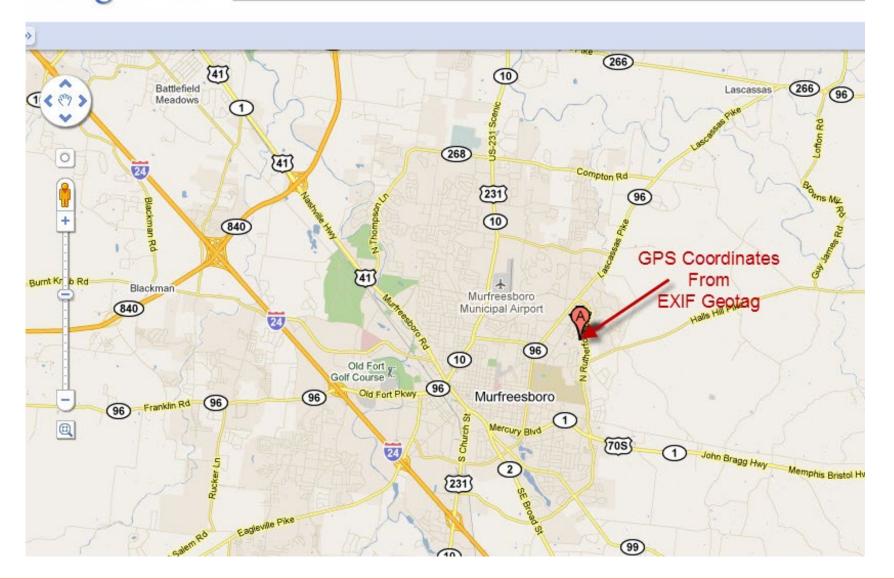
Possible Sources of Income?











GPS Coordinate Converter, Maps and Info

Enter coordinates

35 51.65-86 21.28

(like 37 23.516 -122 02.625, but it's flexible)

GPS Coordinates From

Convert and Map

EXIF Geotag

Decimal Degrees (WGS84)

<u>Latitude</u> <u>Longitude</u> 35.860833 -86.354667

Degrees, Minutes & Seconds

<u>Latitude</u> <u>Longitude</u> N35 51 39 W86 21 16

GPS

<u>Latitude</u> <u>Longitude</u> N 35 51.650 W 86 21.280

UTM

X Y

16N 558265 3968705



Mobile & Cloud Technologies



Storing Client Information on the Cloud Formal Ethics Opinion 2015-F-159



Client Information on the Cloud

A lawyer may ethically allow confidential client information to be stored in "the cloud" if the lawyer takes reasonable care to **assure** that:

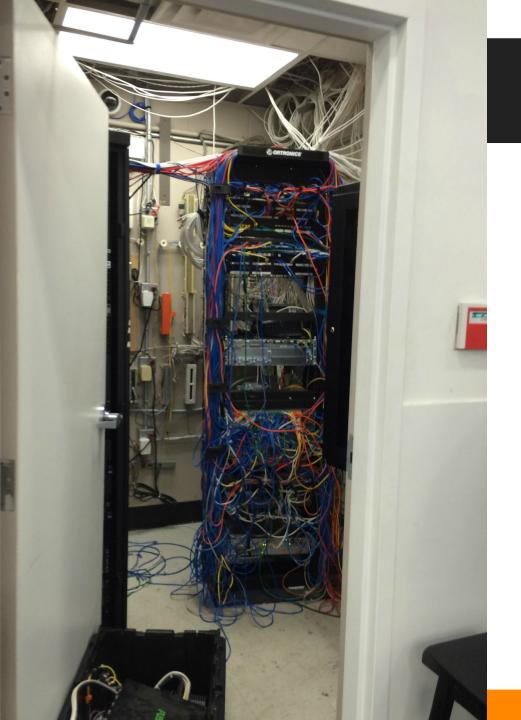
- 1) all such information or materials <u>remain</u> <u>confidential</u>; and
- 2) reasonable safeguards are employed to **ensure** that the information is protected.

<u>Disclaimer-</u> Due to rapidly changing technology, the Board doesn't attempt to establish a standard of care.

What About The Cloud?

- Modern day "cloud computing" concept introduced by Google CEO Eric Schmidt in 2006
- Law firms slow to adopt
- Ethical considerations
 - Security/privacy of client data
 - Ownership of data
 - Reliability of cloud vendor



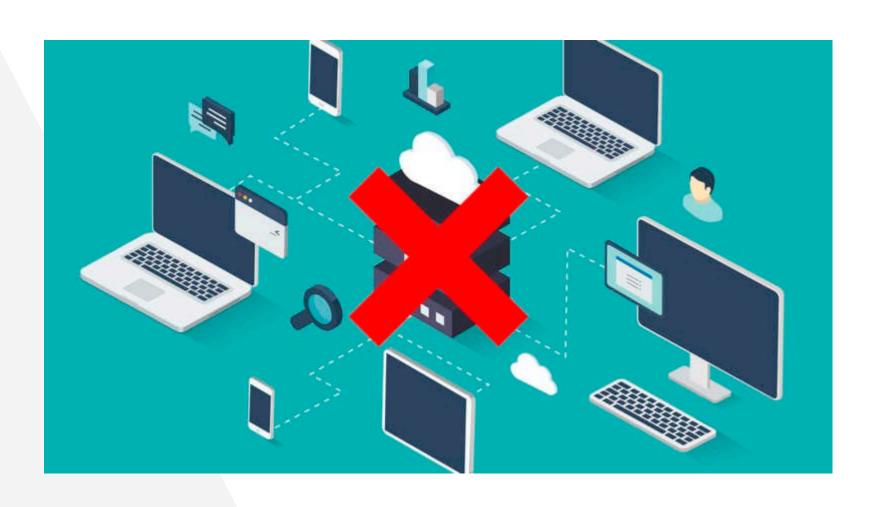


Evolution to the Cloud



Evolution to the Cloud

The Serverless Law Firm



Popular Cloud Applications











netdocuments*





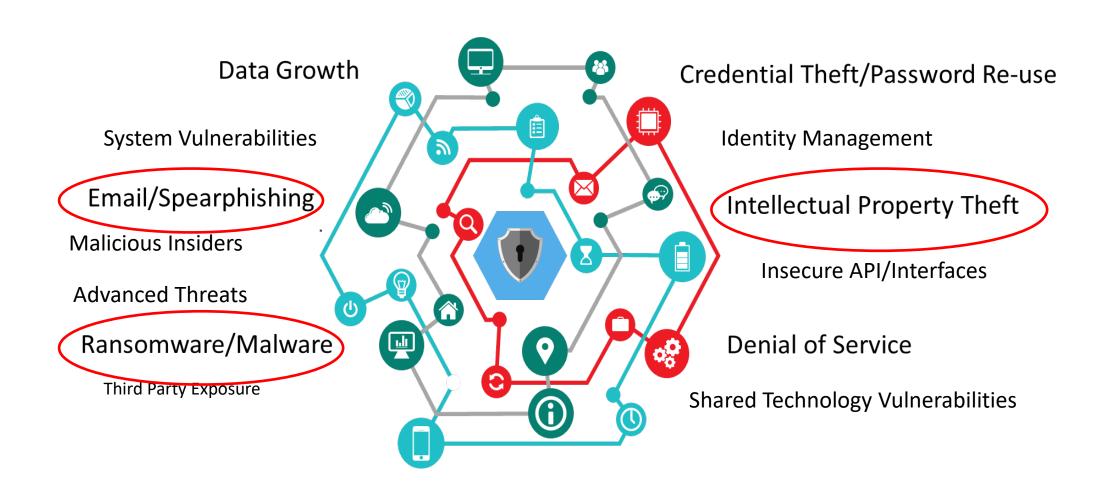




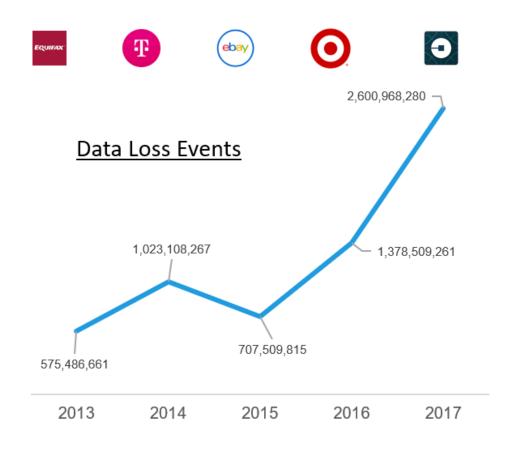




Cyber Threats



Data Loss Trends



- 14.3 Billion records compromised since 2013
- Increased targeting of third party data processing providers
- 56% of breaches involve third parties

CyberSecurity Scorecard

Scorecard			
Categories	Implementation Score	Weighted Value	Weighted Average
Cybersecurity Policies	43%	10%	4.30%
Penetration and Vulnerability Tes	sting 42%	10%	4.20%
Type of Testing	79%	1%	0.79%
Full Disk Encryption	38%	5%	1.90%
Multifactor Authentication	30%	10%	3.00%
Data Loss Prevention Services	41%	5%	2.05%
Training	32%	10%	3.20%
Insurance	41%	10%	4.10%
Investment	40%	5%	2.00%
Records Management Policy	86%	9%	7.74%
Security Executive	38%	15%	5.70%
Third Party Risk Assessments	31%	10%	3.10%
Industry Score			42.08%

Top 10 Recommendations

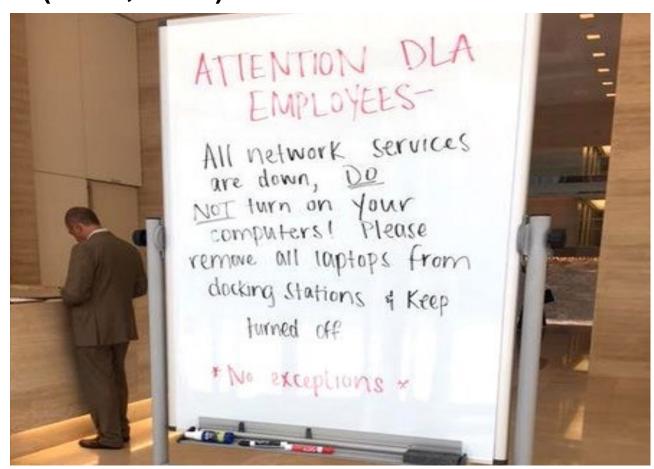
- 1. Set a tone for cybersecurity at top and appoint CISO/CIO to be in charge
- Inventory and evaluate risk of all software systems and data
- 3. Establish critical points of contact: internet service providers, law enforcement, data forensic experts
- 4. Regular training/awareness programs for all staff
- Multifactor authentication for any application accessible via internet

Top 10 Recommendations (cont)

- 6. Take out cyber insurance policy
- 7. Conduct gap analysis of firm's cybersecurity position
- 8. Continually test for vulnerabilities
 - Annual penetration testing by an independent third party
 - Monthly vulnerability testing
- Enable encryption on all devices that can store sensitive data (laptops, desktops, smartphones, tablets, etc.)
- 10. Deploy data loss protection systems

Ransomware Attacks Against Attorneys

DLA Piper (June, 2017):



Ransomware Attacks Against Attorneys

DLA Piper (June, 2017):

If you see this text, then your files are no longer accessible, because they have been encrypted. Perhaps you are busy looking for a way to recover your files, but don't waste your time. Nobody can recover your files without our decryption service. He guarantee that you can recover all your files safely and easily. need to do is submit the payment and purchase the decryption key. Please follow the instructions: 1. Send \$300 worth of Bitcoin to following address: 1Mz7153HMuxXTuR2R1t78mGSdzaAtNbBWX 2. Send your Bitcoin wallet ID and personal installation key to e-mail wowsmith123456@posteo.net. Your personal installation key: DH3THk-J4wFvR-VJmTap-25P6H5-Ligtsd-KfBUou-AT8DLv-HRmnxq-PF2kdb-c5HHmC If you already purchased your key, please enter it below. Key:

Ransomware Attacks Against Attorneys **DLA Piper (June 27, 2017)**:

- Firm infected by Petya malware.
- Entire 3,600 lawyers + support staff in 40 countries on digital lockdown.
- Lockdown wasn't fully remediated for weeks.
 - 1 day without phones
 - 6 days without email
 - 2 weeks without complete access to older email and documents
- Total direct and indirect costs to firm estimated to be millions of dollars.

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Ransomware Attacks Against Attorneys Moses Afonson Ryan, Ltd. (May, 2015)

- 10 person law firm located in Providence, RI
- Attorney at firm opened an email attachment from an unknown source which was encoded with a ransomware encrypted virus that infected firm's computer network.
- All of the information and documents on firm's computer network became disabled and its network was rendered inoperable.
- Hacker demanded \$25,000 in ransom paid in bitcoin to restore access to firm's system. Firm negotiated ransom to be paid in bitcoins.
- During the seizure, the firm's 10 lawyers were left unproductive = \$700,000 in lost billings.

NY Real Estate Attompy (Aspiro 2018) MS

- Attorney used AOL email account to communicate involving clients' purchase of a \$19,380,000 condo.
- Cybercriminals hacked into the account, impersonated the attorney, and tricked her clients into wiring a \$1.9 million dollar security deposit into a fraudulent bank account.
- Complaint alleged attorney failed to take basic cybersecurity measures and lacked awareness of same.



Malpractice Claims Malpractice Claim Filed Against NY Real Estate Attorney (April, 2016)

- 43. To represent the Millards competently and protect the Millards (and other clients) from cybercrime and other crime, Doran had a duty to take reasonable and necessary security precautions, such as the installation of appropriate protective software and the use of two-factor authentication. Doran had a duty to take measures including but not limited to the following:
 - Reasonable measures to secure Doran's client files, and communications with clients.
 - Reasonable measures to secure Doran's email account and computer, including the data contained within them, from unauthorized third parties.
 - c. Reasonable measures to prevent Doran's email account from being used by unauthorized third parties.
 - d. A strict policy of orally confirming instructions for the electronic transfer of funds belonging to clients. This policy should include advance notification to clients that funds should not be transferred unless Doran orally confirmed any emailed instructions.
 - e. Oral confirmation, following the electronic transfer of funds, to establish that the funds were actually received by the intended party.
 - f. The immediate investigation of any incident involving crime or cybercrime, to determine its cause, its perpetrator, and the possibility of remedying or mitigating any loss.
 - g. The preservation of all Electronically Stored Information (ESI).

Artificial Intelligence



- OpenAl Generative Pre-training Transformer (GPT)
- Machine learning model
- Trained on large dataset
- Generates human-like text

- Microsoft investment
- Incorporated into Bing search engine
- Try it at: chat.openai.com

New Bing

- Microsoft new search engine
- Powered by ChatGPT
- Responds to queries with answers (not URL links)
- Can ask follow-up questions
- Conversational
- Works in Microsoft Edge browser
- Bing.com/new

Create a 3-course menu.

Help plan my special anniversary trip.

What art ideas can I do with my kid?

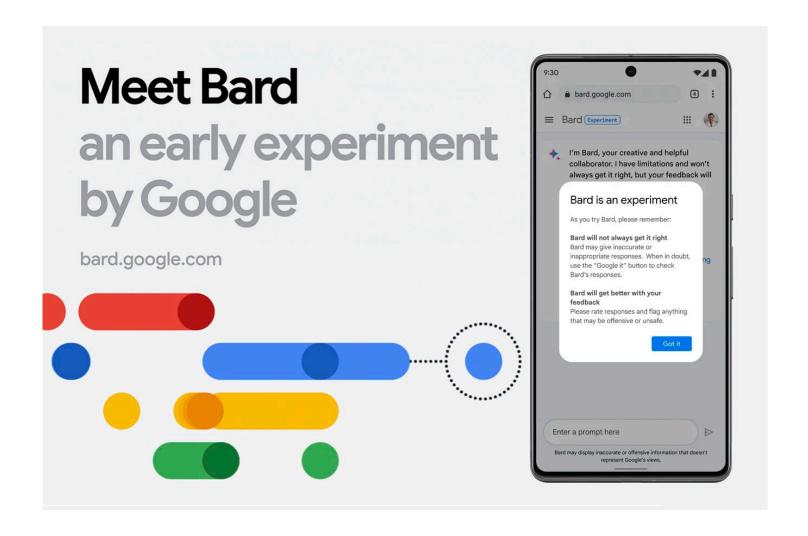
Can you help me get fit?

Write a rhyming poem.

Help me plan for my fishing trip.

Google Bard

- Google's AI chatbot
- Introduced Feb 2023
- Powered by Google's own language model
- Conversational
- Experimental
- Open to general public
- Bard.google.com



Zoom Etiquette

AI Enforcer: American offices are using AI to teach 'meeting etiquettes' in Zoom, Teams calls

More and More American businesses are now using AI chatbots and AI assistants to teach their staff meeting etiquettes and how to behave properly in a virtual or video meeting. The AI bot looks for speech patterns and if someone is constantly interrupting other speakers

- Corporate Al "Bots"
- Silent Note Takers
- Real-time feedback
- Summarizes documents

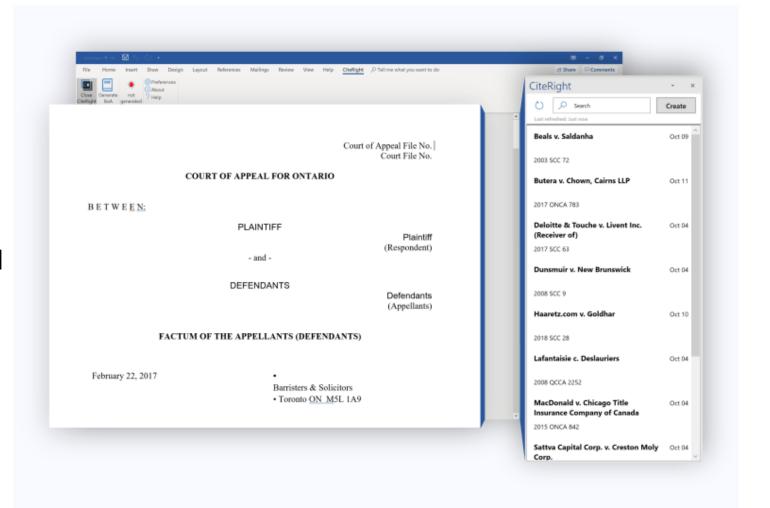
A few AI examples for lawyers

- Video Meeting etiquette Enforcers
- Cite Rite
- Law Droid
- Zoom Al Assistant
- Co-counsel
- Westlaw Edge
- Spellbook
- NetDocuments AI (and other DMS AI add-ons)

```
_________ modifier_ob.
  mirror object to mirror
mirror_mod.mirror_object
 peration == "MIRROR_X":
irror_mod.use_x = True
mirror_mod.use_y = False
__mod.use_z = False
 _operation == "MIRROR_Y"
irror_mod.use_x = False
Mrror_mod.use_y = True
 lrror_mod.use_z = False
 _operation == "MIRROR_Z"
 __mod.use_x = False
 lrror_mod.use_y = False
 rror_mod.use_z = True
 Melection at the end -add
   ob.select= 1
   er ob.select=1
   ntext.scene.objects.action
  "Selected" + str(modification
   irror ob.select = 0
  bpy.context.selected_obj
  ata.objects[one.name].se
 int("please select exactle
  --- OPERATOR CLASSES ----
     pes.Operator):
     V mirror to the selected
   ject.mirror_mirror_x"
  ext.active_object is not
```

CiteRite

- Save legal research
- Integrate inside Microsoft Word
- Automatically cite saved case law
- Applies all legal citation rules, including ibid and supra
- One button Books of Authority
- Citeright.net



LAWDROID COPILOT

Research a legal issue

5:24 PM

Please describe to me the legal issue you would like me to research. Remember to give me the jurisdiction and as much detail as possible.

524 PM

What is the leading case on privacy in the United States?

5:24 P

The leading case on privacy in the United States is the Supreme Court case of Griswold v. Connecticut (1965). This case established the right to privacy as a fundamental right under the Constitution. It held that the Constitution protects the right of individuals to make decisions about their personal lives without interference from the government.

Ask your guestion.



LawDroid



- Al legal assistant
- Research legal issues
- Help with drafting emails & letters
- Summarize documents
- Lawdroid.com

Zoom Al Companion



Zoom AI Companion

Zoom's smart Al assistant empowers you

- "Cliffnotes" of recordigs
- Creates
 - Highlights
 - Summaries
 - Conversation analytics
 - Topic Tracking
 - Next Steps
- Drafts chat responses for you
- Creates meeting whitboards

Co-Counsel

Meet CoCounsel-the world's first Al legal assistant

- Al legal assistant
- Designed to perform
 - Legal research memo drafting
 - Deposition preparation
 - Document review
 - Contract analysis
- Powered by OpenAl
- Pay per use
- Casetext.com

Westlaw Edge

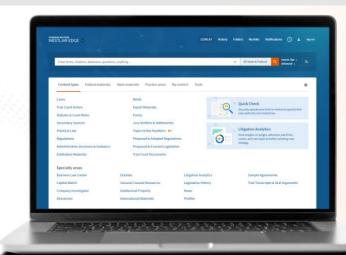
Expedite your most complex

legal research tasks

Westlaw Edge is powered by Al-enhanced capabilities that can help you research more effectively and be more strategic

View plans

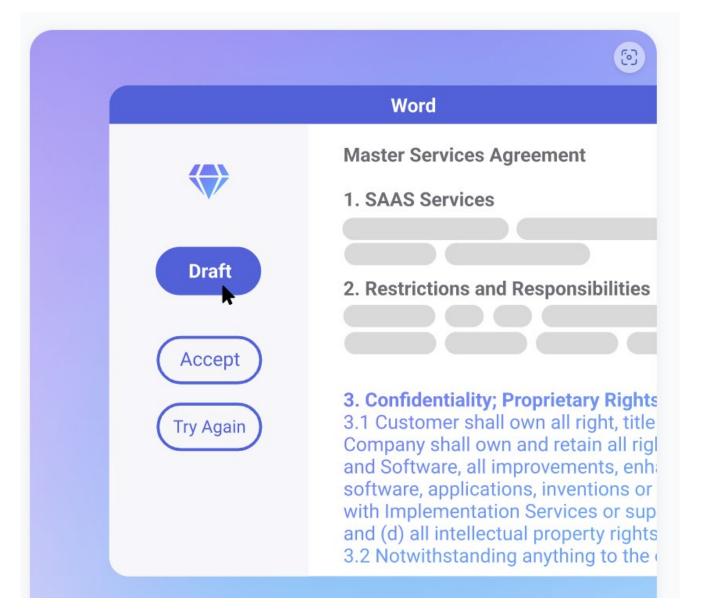
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Questions?

Thank you!

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