

THE USE OF TECHNOLOGY IN EVIDENCE

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OUTLINE

1. Technology
2. Using Technology
 - What is available
 - Think outside of the box
3. Technology as evidence
 - Electronic devices
 - Data extraction
 - Social media
 - Data collection
4. Electronic Evidence
5. Law and Commentary
6. Tips



TECHNOLOGY

- the application of scientific knowledge for practical purposes, especially in industry,
 - machinery and equipment developed from the application of scientific knowledge.
 - the branch of knowledge dealing with engineering or applied sciences.
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USING TECHNOLOGY

- Available technology
 - Collection of evidence
 - Interpreting evidence
 - Presenting of evidence
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AVAILABLE TECHNOLOGY

- Video/TV
- Multi-screen display
- Computer applications
- 3 dimensional projectors
- Video link for testimony
- Electronic devices



COLLECTION OF EVIDENCE

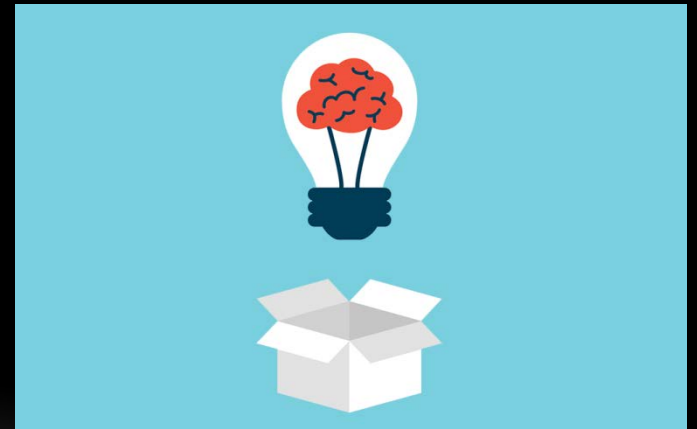
- How do we find the evidence
 - Need to understand what evidence may exist – educate yourself
 - Statements/discovery
 - Documents reflecting the use of technology to create the evidence
 - The technology itself
 - Business records
 - There is a wealth of information far beyond what the eye can see
 - Ethical questions of how to collect such data
 - Social media – “friending”
 - Open source
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INTERPRETING THE EVIDENCE

- Often the evidence will speak for itself (text message, email, chats etc)
- Business records (phone/cell records)
- May require the use of experts to extract data
 - Wealth of information
 - Searches – word search, website search
 - Internet history
 - Chat history
 - Geolocation
 - Programs used/social media posts
 - timelines
 - Retrieval of deleted data

PRESENTING EVIDENCE

- Decisions - what evidence to present and what to hold for cross examination
- Determine the method that best presents the evidence
 - Tell the story
 - Visual impact
 - Simplicity
 - Demonstration



TECHNOLOGY AS EVIDENCE

- When technology is the evidence there is likely a need for an expert
 - Determine the purpose of the evidence
 - How the evidence was extracted
 - What do you need to prove
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ELECTRONIC DEVICES

- What is considered an electronic device?
 - Anything that can store data electronically
 - Endless possibilities



ELECTRONIC DEVICES

- How many devices do you have?
- How many devices does your client have?
- How many devices is the evidence on?
- How many devices will you use in the Courtroom?
 - If your device went missing what could we learn about you from your device?



DATA EXTRACTION

- Who does this?
 - Owner of the device
 - Forensic analyst (expert)
 - How is it done?
 - What value is it?
 - How to present what is found?
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SOCIAL MEDIA

- Social media are computer-mediated technologies that allow individuals, companies, NGOs, governments, and other organizations to view, create and share information, ideas, career interests, and other forms of expression via virtual communities and networks.
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SOCIAL MEDIA STATISTICS

- For context, as of July 2015, total worldwide population is 7.3 billion
 - The internet has 3.17 billion users
 - There are 2.3 billion active social media users
 - 91% of retail brands use 2 or more social media channels
 - Internet users have an average of 5.54 social media accounts
 - Social media users have risen by 176 million in the last year
 - 1 million new active mobile social users are added every day. That's 12 each second
 - Facebook Messenger and Whatsapp handle 60 billion messages a day
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THOUGHTS

- Think about the number of social media accounts you have
 - Think about how many apps you have
 - Think about what is on those accounts
 - What can we learn about you right now from those accounts
 - What could we learn about you if we had your devices and access to your accounts
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"APPS"

- As of that June 2016, the number of apps available for download in leading app stores was,
 - Android users were able to choose between **2.2 million apps**
 - Apple's App Store remained the second-largest app store with **2 million** available apps.

USER NUMBERS

- Airbnb: 50 million users
 - Facebook: 1.71 billion users
 - Flickr: 112 million users
 - Google+: 300 million users
 - Instagram: 400 million users
 - LinkedIn: 450 million users
 - MySpace: 50.6 million users
 - Reddit: 36 million accounts
 - Snapchat: 100 million users
 - Twitter: 320 million users
 - WhatsApp: 900 million users
 - Youtube: Over 1 billion users
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DATA COLLECTION

- Who collects?
 - How do you collect?
 - Where is the data?
 - Does the data still exist?
 - If it has been deleted, is it gone?
 - Deleted from device
 - Deleted from storage
 - Never recorded
 - What information is available?
 - Overlap of apps, social media, device data
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ELECTRONIC EVIDENCE

- Electronic Evidence in Canada by Graham Underwood and Jonathan Penner (Toronto: Carswell, 2013):
 - They provide a broad definition of electronic evidence, including all electronically stored data
 - classify the electronically stored information as either real or documentary evidence.
 - Guide to the admissibility analysis
 - Real - Where the electronically stored data is recorded electronically by an automated process
 - Documentary - the electronically stored information is created by humans, and is not admissible for its truth absent some other rule of admissibility.

ELECTRONIC EVIDENCE

- Determine the use and purpose of the evidence to determine the rules of evidence
 - The way evidence is created, or the purpose for which it is tendered (and sometimes both) will determine how the evidence should be characterized for the purpose of determining admissibility.
 - Possession of the evidence versus the truth of its contents
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R. V. AVANES ET AL., 2015 ONCJ 606 (CANLII)

- It is a recent case on the admissibility of electronic evidence
 - Issue – data extracted from two blackberry devices seized from possession of accused and search of home without calling an expert
- Provides a detailed outline of the law and standards of proof
 - Relevance
 - Possession
 - Origin of the data
 - Authentication and best evidence
 - Probative v prejudicial effect
- Commentary: <http://www.slaw.ca/2016/01/15/smartphone-evidence-r-v-avanes-et-al/>

APPLICABLE LAW

- Canada Evidence Act
 - sections 31.1 -31.8
 - <http://laws-lois.justice.gc.ca/eng/acts/C-5/FullText.html>
- Uniform Electronic Evidence Act (UEEA)
 - <http://www.ulcc.ca/en/older-uniform-acts/electronic-evidence/1924-electronic-evidence-act>
- The Evidence Act (Saskatchewan)
 - sections 54 -59
 - <http://www.qp.gov.sk.ca/documents/english/Statutes/Statutes/e11-2.pdf>
- The Common law
- The Sedona Canada Principles
 - <https://lexum.com/e-discovery/documents/SedonaCanadaPrinciples01-08.pdf>

CASES

- R. v. Avanes et al., 2015 ONCJ 606 (CanLII)
 - <http://www.canlii.org/en/on/oncj/doc/2015/2015oncj606/2015oncj606.html>
- R v. K.M., 2016 NWTSC 36 (CanLII)
 - <http://www.canlii.org/en/nt/ntsc/doc/2016/2016nwtsc36/2016nwtsc36.html>
- R. v. Mackay, 2002 SKQB 316 (CanLII)
 - <http://www.canlii.org/en/sk/skqb/doc/2002/2002skqb316/2002skqb316.html>
- R v Flett, 2013 SKQB 155 (CanLII)
 - <http://www.canlii.org/en/sk/skqb/doc/2013/2013skqb155/2013skqb155.html>

CASES

- R. v. Mondor, 2014 ONCJ 135 (CanLII)
 - <http://www.canlii.org/en/on/oncj/doc/2014/2014oncj135/2014oncj135.html>
- R v Nde Soh, 2014 NBQB 20 (CanLII)
 - <http://www.canlii.org/en/nb/nbqb/doc/2014/2014nbqb20/2014nbqb20.html>
- R. v. Moon, 2016 ABPC 103 (CanLII)
 - <http://www.canlii.org/en/ab/abpc/doc/2016/2016abpc103/2016abpc103.html>

COMMENTARY AND ARTICLES

- There is an abundance of material written on this area, here are some links to just a few
 - <http://www.slaw.ca/2016/01/15/smartphone-evidence-r-v-avanes-et-al/>
 - <http://www.slaw.ca/2014/03/20/electronic-evidence-case-criminal-law-and-social-media/>
 - <http://www.slaw.ca/2015/03/11/the-uniform-electronic-evidence-act-revisited-by-archivists/>
 - <https://ojs.library.dal.ca/CJLT/article/viewFile/6001/5335>
 - <http://archivaria.ca/index.php/archivaria/article/view/13296/14607>

PRACTICE DIRECTIVES

- Saskatchewan Courts Practice Directives in relation to the use of technology
 - <http://www.qp.gov.sk.ca/documents/english/QBPracticeDirectives/PD06.pdf>
 - http://www.sasklawcourts.ca/images/documents/Provincial_Court/PC_PD_4_Witness_Phone.pdf
 - http://www.sasklawcourts.ca/images/documents/Provincial_Court/PC_PD_10_Exhibits.pdf

TIPS

- Using Technology
 - Understand the technology you are using
 - Do not be afraid to use technology
 - Be aware of limitations
 - Do not assume everyone understands how the technology works
 - The Evidence
 - Understand what the evidence is telling you and what you want it to tell the Judge
 - Know how to present the evidence
 - Technological jargon can confuse everyone – KISS principle
 - Do not let the Judge suggest the evidence represents something it does not
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QUESTIONS?

