



Best Practices and Risk Management for the Digital Legacy Executor

Presentation to
Canadian IT Law Association

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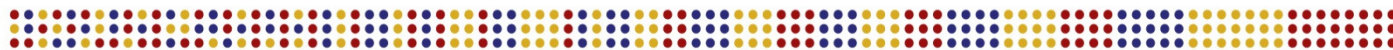
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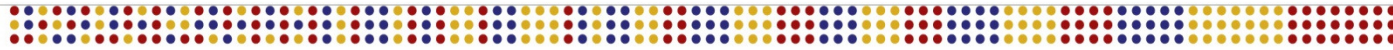
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Consult your legal, security and/or privacy practitioner(s) for more detailed information on these topics.



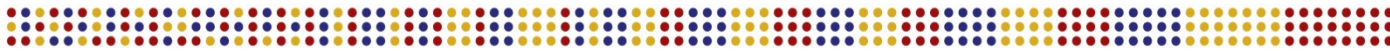
Your Presenter 😊

Jerry Gaertner



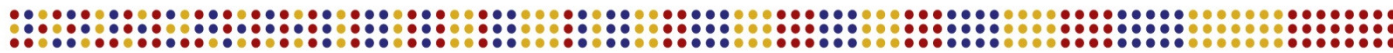
My CV

- CPA, CA, CISA, CISSP, CGEIT, CFI, CIPP/IT, CIA, I.S.P.
- Systems assurance, security and privacy practitioner
- Co-Founder and Executive Director – [Digital Legacy Institute](#)
- President, Canadian Information Processing Society
- Co-founder:
 - Managed Analytic Services
 - Society of Digital Legacy Professional
 - *data* Privacy Partners
- Adjunct Professor of Computer Science (Ryerson University)
- Special Advisor, Risk Mgmt., Finance & Analytics (U. of Toronto)
- Trustee in bankruptcy (Officer of the Court)
- Author of 3 legal texts (Thompson Carswell)
- Graduate of MIT



Canadian Information Processing Society (CIPS)

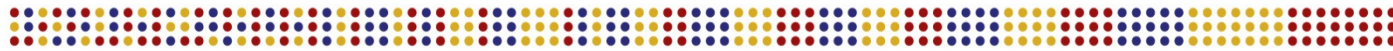
- National and provincial societies
- Established by statute
- 5,000 members in Canada
- Canada's IT voice internationally (United Nations, IFIP, FEAPO...)
- Professionalism in IT
- Protection of the public
- Advocacy on technology issues
- Certifications (national and international)
- College and university accreditation
- Public education



Digital Legacy Institute

www.digitallegacyinstitute.com

- Research and standard setting
- Works with ISDLP to help accredit DL professionals worldwide
- Open to lawyers, accountants, trustees, executors, forensic practitioners, security and privacy experts and other interested parties
- Protection of the public
- Advocacy on DL technology issues
- College and university accreditation
- Public education

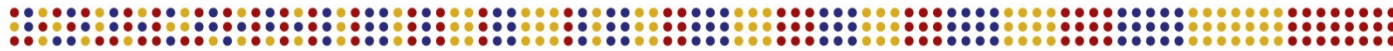


Digital Legacy Institute

www.digitallegacyinstitute.com



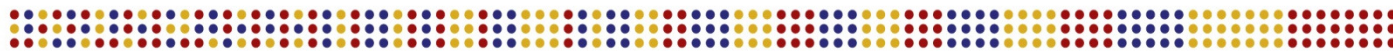
Starting up – needs volunteers!



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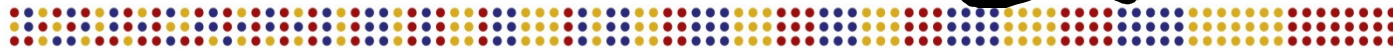
Our Roadmap for Today

- **Beginning** (p.10) - **Why we should care**
- **Foundation** (pp.11 – 25) – **Core concepts**
- **Identifying Assets and Liabilities** (pp.26 – 32) – **Digital assets and liabilities**
- **Risk Management** – **Protecting against fraud and professional practice risks**
- **Details** - **Administering the digital estate**
- **Q & A** - **Discussion**



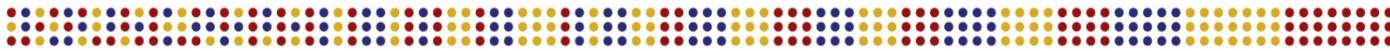
**We are presumably
all going to die**

So what about our DIGITAL legacy?



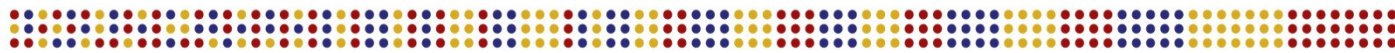
Why We Care

- 1. Digital aspects of our clients' lives are becoming increasingly important in many regards**
- 2. Important information, as well as potential assets and liabilities, may exist only in digital form, which can complicate the administration of testamentary estates and even put beneficiaries at risk**
- 3. Professional liability may arise if digital information is not properly addressed during the administration and post mortem**
- 4. Computer related fraud against estates is on the rise and professionals have an obligation to employ accepted practices to mitigate these risks**



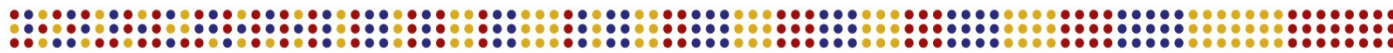
Important Digital Legacy Concepts ...

- **Identity** – Who we are in the real world and our various aliases, embodiments, avatars and pseudonyms in the digital world. **Digital identity or personae** can complicate the identification and recovery of estate assets and quantification of estate liabilities
- **Digital footprint** – The known and unknown-but-assumed digital audit trail left by the on-line activity of the testator
- **Risk management activities of a digital legacy estate** – addressing the legal, planning, technical, data custodianship, security, privacy, digital forensic and investigative components of the administration of the estate in a coherent, cost effective and appropriate fashion, making reference to good/best practices.

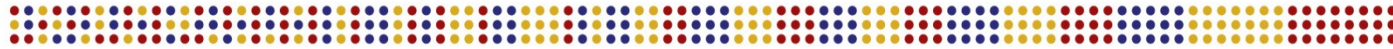


Important Digital Legacy Concepts (2) ...

- **Risk management (cont'd)** Maximizing recovery of intellectual, intangible and electronically embodied assets, as well as physical and financial ones.
- **Social media strategy** – the estate administration approach to social media issues, including but not limited to notification of third parties, preserving digital archival material, protecting the privacy and well being of beneficiaries, and protecting the reputation of the deceased.
- **Computer security** – the technical due diligence required and expected to protect estate assets, expose estate liabilities and support the general well being of beneficiaries
- **Digital privacy** – undertaking the legal, commercial and ethical responsibilities of a data and/or medical records custodian, as applicable

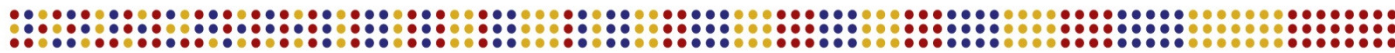


IDENTITY



Understanding Digital Identity is Important

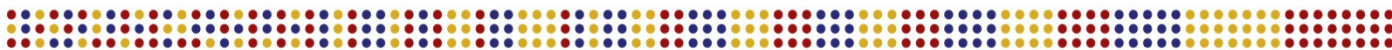
- The identification, investigation and management of digital assets may be affected by digital identity
- Issues such as ownership, residency, legal and tax liability may be affected by the type and status of a digital identity
- Digital Identity may provide important information which facilitates access to digital assets, financial and other information of relevance to the administration



Digital Identity Terminology

- Who are you? **Identification**
- How do you prove it? **Authentication**
- How do you prove you are authorized to do something? **Authorization**
- How do you prove that a transaction really was done by you – or not done by you? **Non-repudiation**

Without **ALL** of these features, establishing digital identity could be problematical!

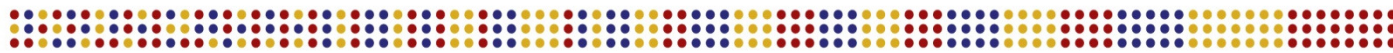


Digital Identity

Related Concepts

- The transaction or interaction can occur and be authorized **WITHOUT** the true or digital identity of at least one of the parties being known. **Anonymity**
- Ownership of the underlying personally identifiable information resides in the true or digital identity of the data subject **AND** the data custodian recognizes and has agreed to be bound by this principle. **Privacy**
- Notwithstanding any and all digital logs and records, the individual having made the transaction or performed the activity can plausibly deny having done so. **Plausible deniability**

The above features of digital identity can make digital forensic investigation and reconstruction **very** difficult.



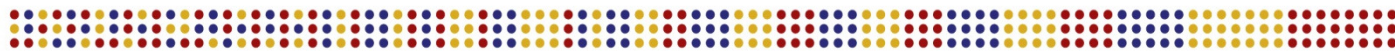
Identity in the Digital World is Different

	Real Physical World	Digital World - Mediated by TRUSTED 3rd Parties	Digital World - Self Identification
Identity	Here I am!	This is me (according to the Bank)	This is who I am - believe me
Authentication	Here's my passport with my picture on it	I have the password that Bank assigned to me. I log onto my computer using a fingerprint or a password	I have the password associated with who I say I am
Authorization	My birth certificate says I'm 19	The Bank will let me withdraw as much money as the person I am supposed to be has in the account	I can do anything that anyone permits, based on my self-generated identity
Non-reputdiation	Only I have my PIN	Audit trail exists for the person using the authorized credentials, presumably the authorized person	Audit trail exists for the person using the self-created credentials, who can be anyone at all



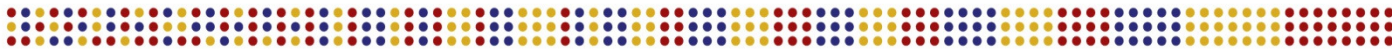
Identity in the Digital World Can Be Ephemeral

- **Who are you?** Who you say you are!
- **How do you prove it?** By what your bank, or your friends say about you - or not at all!
- **What type of identity/transaction record or audit trail do you leave?** Complete, but probably meaningless!
- **Who can you be?** Almost anyone!
- **Are transactions private/secure?** Depends!
- **Do you have plausible deniability regarding your online identity ?** Probably!



Digital Persona

- Digital Persona - who the *digital* world believes you **and each of your incarnations** are...
 - Financial and government institutions
 - Family, friends and relatives – some with infrequent or no contact
 - Clients, customers, retailers, employers
 - Press, media, social media
 - Avatars, virtual worlds, chat rooms
 - Whatever Google reveals!



Digital Footprint

- **Digital Footprint – the digital “audit trail” that provides a history of everything you’ve ever done online, every time you’ve been mentioned online, every email you ever wrote (as yourself or via pseudonym)**

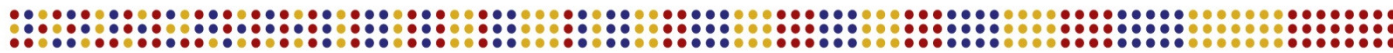




Basic Concepts

Applied to Estate Planning and Administration

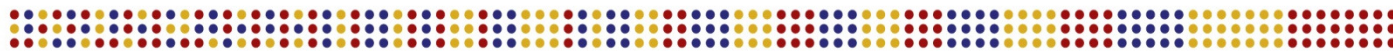
- **Risk management** – maximum realization, maximum client satisfaction, minimum litigation, minimum investigation, fewest surprises
 - Know your client, including his/her digital personae
 - Planning should include digital access and digital asset realization
 - Be aware of what constitutes due diligence and best practice in the digital realm (estate administration)
 - Understand YOUR responsibilities under PIPEDA, criminal code and ethical code of your profession (CA, TEP, CFA, CFP...)
 - Keep stakeholders informed of possible issues



Other Basic Concepts

Applied to Estate Planning and Administration

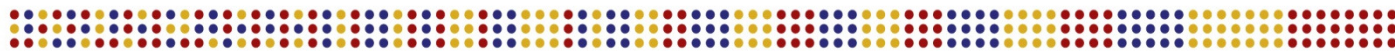
- **Computer security** – technical due diligence expected to protect estate assets and well being of beneficiaries
 - Accepted (best) practices for password security, firewalls, anti-malware
 - Digital forensics terms and concepts (forensic image)
 - Legal and business issues surrounding “ethical hacking”
 - Logging, audit trail, record keeping



Other Basic Concepts

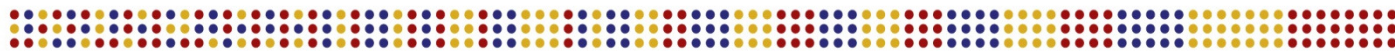
Applied to Estate Planning and Administration

- **Digital privacy** – legal, commercial and ethical responsibilities of a data custodian
 - Nature of personal information and PHI
 - Applicable statutes
 - Privacy policy of YOUR institution
 - PI and PHI of the deceased vs. third parties
 - 10 CSA components of privacy – collection, use, destruction, disclosure, accountability...



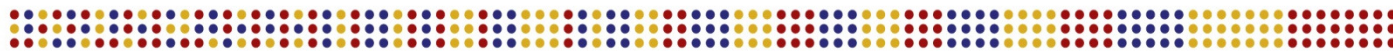
So Why Do We Care Again???

- Upon death, issues may arise for the estate, beneficiaries, executor and engaged professionals surrounding the deceased's digital assets and digital liabilities which can **only be resolved making reference to *digital persona* and *digital footprints***
- Sometimes, these issues will be trivial - other times they can put the **reputation of the deceased, happiness of his/her family, financial situation of the beneficiaries and even the outcome of tax or civil litigation in jeopardy**



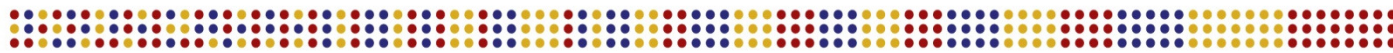
Digital Assets, Digital Liabilities

- **Financial records**
- **Legal records**
- **Litigation matters**
- **Digital assets and properties**
- **Digital money**
- **Tax, business and other liabilities**



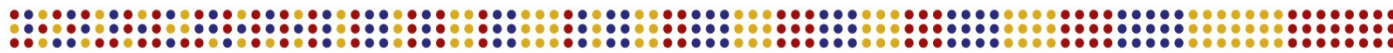
Financial Records

- Any financial or tax records in electronic form? **Are they divergent from hardcopy?**
- Any **unique** electronic records of assets or liabilities (treasure map)?
 - Swiss bank account
 - Unknown SDBs
 - Off shore or other-registered properties
 - Mortgages, promissory notes
- Any record of continuing, automated financial transactions, transfers, investments?



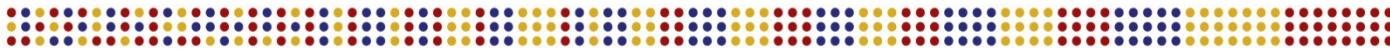
Legal Records

- **Testamentary instructions – last will?**
 - ✓ **Primary or secondary document?**
 - ✓ **Location and jurisdiction (Canada or where) – (physical manifestation or in the “cloud”)?**
 - ✓ **Provable validity (legal, authentic)**
 - ✓ **Version (timing) - supersedes written instructions?**
- **Contracts, agreements (i.e. share purchase options)**
- **Marriage, adoption records**
- **Trust agreements**



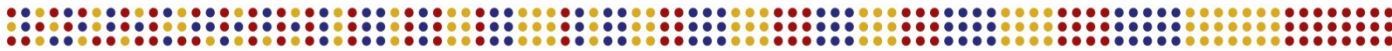
Litigation Matters

- **Information about on going civil, tax or criminal litigation** – smoking gun, contradictory, exculpatory?
 - Privileged?
 - Otherwise available?
- **Information giving rise to cause of action on the part of beneficiaries and family?**
 - Do whom does executor owe fiduciary duty - estate, beneficiaries as a whole, one beneficiary...?
 - Conflicts of interest arising?
- **Where in the legal process does information fit - has discovery (e-discovery) been completed?**



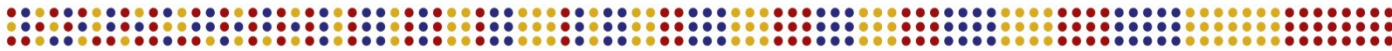
Other Digital Assets

- **Any digital “properties” overlooked?**
 - Domain names (“road.com”)
 - Websites and web-based business (EBay, trading, fulfillment, technology, social media)
 - Customer lists (privacy concerns)
 - Blogs, readership, followers
- **Any unique intellectual property stored electronically locally or on the web?**
 - Investment strategies, business plans
 - Inventions, patents, trade secrets (formula for Coke!)
 - Novels, artistic material, compositions, music
 - Copyright software modifications



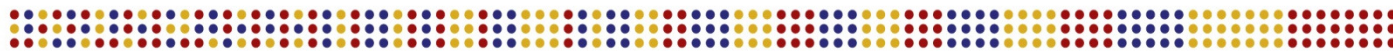
Digital Money – yes its real!

- Linden \$\$
- PayPal accounts
- EBay accounts
- Gold or diamond backed pseudo-currency funds
- On line gambling deposits
- Bitcoin accounts



A Digital World of Possible Liability

- **Tax matters arising**
 - unregistered internet business
 - undeclared foreign property
 - off shore tax havens
 - unrecorded transactions
 - second set of books
- **Click-through contracts, commitments and promises of the testator**
- **Child pornography and other proscribed material**



Administering the Digital Estate

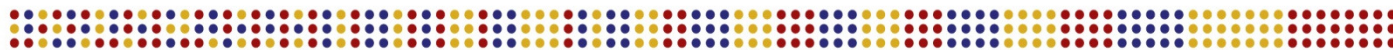
Common Tasks

- **Identification of digital assets and liabilities**
- **Recovery, valuation and sale/liquidation of digital assets and property – IP, domains, web businesses, digital currency and rights...**
- **Analysis and quantification of potential liabilities**
- **Engaging, instructing and managing digital forensics support, as needed**
- **Securing cooperation and assistance of relatives and beneficiaries**



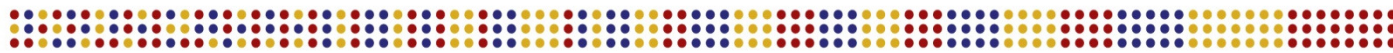
Common Issues Arising Legal

- **Jurisdictional matters:**
 - Location of data vs. server vs. residence at death vs. last will registration
 - Obligation of ISP's to provide assistance, if any
 - Recognition of standing of Canadian Executor/last will if foreign jurisdictions involved
- **Legal status of electronic testamentary instructions and P of A's – jurisdictional and contextual**
- **Recovery of tangible and intangible assets and property where registration was via pseudo or digital identity**



Common Issues Arising Administrative & Technical

- Decoupling the computer from its data
- Obtaining custody/access to the electronic records; securing and analyzing them (custody, inventory, classification, analysis)
- Password custody and management; interim computer security protection for data and assets



Common Issues Arising Social Media

- **Personal and reputational matters – both innocent and incendiary (some of which may involve “secret” inheritance instructions)**
 - Things that spoil reputation
 - Things that damage relationships
 - Things that cause harm or hurt
 - Illegalities (including incriminating documents and kiddy porn!)
- **Social networking, email, on line forums – dealing with the digital persona (or not)...**





Advance Planning Makes **ALL** the Difference



Advance Planning *Makes Things Easier!*

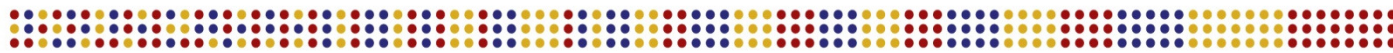
- **Discussions with lawyer, tax and accounting professionals, FAMILY – document wishes in advance!**
- **Physical disposition of computer and local hard drive should be addressed**
- **Digital archive services and digital close-down services (careful!)**
- **Online “buddy” system**
- **Password repository**
- **Deal with unpleasantness beforehand, protected by privilege**



Advance Planning

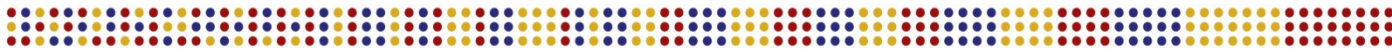
Protecting the Testator Before Death

- Is the testator susceptible to on line fraud or other technologically based scams?
 - On line banking
 - On line purchasing, credit cards
 - On line identity based transactions
 - On line solicitations
- Have suitable protections been put in place?
 - Anti-malware?
 - Web filtering?
 - Identify management?
 - Trusted oversight?
- Have elder abuse risks been considered?

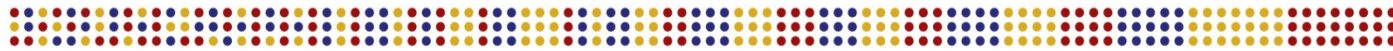


Personal Matters of the Deceased

- **Sensitive, professional, ethical and legal identification, management, disclosure, destruction and reporting of:**
 - ✓ **Personal and health information of the deceased and others**
 - ✓ **On line friends and relationships**
 - ✓ **Gambling, illicit affairs, pornography**
 - ✓ **Family memorabilia and archive information**
- **Social media profiles, communication and update, closure**

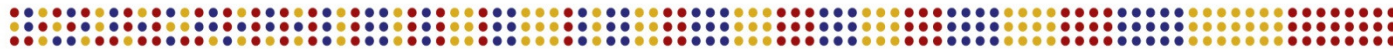


A Word About Fraud



Protecting Against Identity and Other Fraud

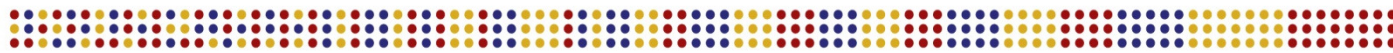
- Same rules as identity theft
- Monitoring activity until accounts closed
- Credit bureau and credit cards
- PayPal and pseudo-banks!
- Employ crawlers and agents if concerned
- Protection of intellectual property, reputation, as well as tangible assets
- Specialized assistance may be required



Case Study #1 - Planning

- **Wealthy tech entrepreneur, age 52 (Joe)**
- **Joe is in relatively poor health**
- **Married, 3 children (7yrs, 14yrs, 19yrs)**
- **Pre-nuptial in place – children and charitable foundation get 85%; wife 15%**
- **Joe has a reputation for “vices”**
- **Joe is a brilliant programmer and businessman**

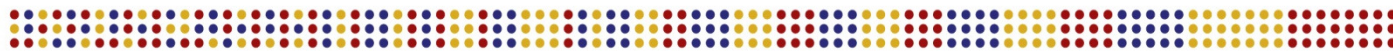
As trustee/executor engaged by Joe, what would you consider critical elements in the planning for the administration of Joe’s digital legacy?



Case Study #2 – Disposition of Assets

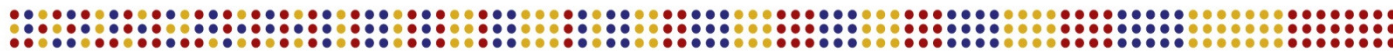
- **As executor of a testamentary estate (Mary), you and your digital legacy specialist have determined:**
 - A domain name is registered to Mary which is worth \$15,000
 - A domain name is registered to a digital pseudonym of Mary's which is worth \$45,000
 - Mary has been operating as an EBay power seller for the last 6 years under a different digital pseudonym. The business has a loyal following and generates \$175,000 per year in profits

How might you dispose of these assets quickly, cheaply and effectively? What other considerations arise?



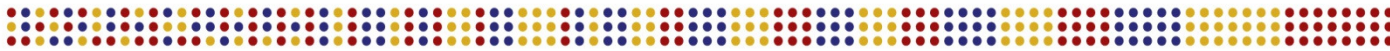
Case Study #3 - Forensics

- **FB is your client. FB has prepared a will, as well as a digital legacy/digital asset disclosure document and instructions.**
- **After FB's death, it becomes apparent to his spouse that a significant portion of the value of FB's estate cannot be accounted for. The spouse is one of four equal beneficiaries.**
- **A forensic accountant determines that over a period of years, funds were transferred offshore using FB's credit cards – however, there are few paper records and no indication of where the funds might be – VISA payments simply indicate various internet gambling and other sites.**
- **Although FB specified his digital legacy instructions before death, his spouse wishes to have a digital forensic investigation conducted.**
- **She approaches the Executor with this request:**

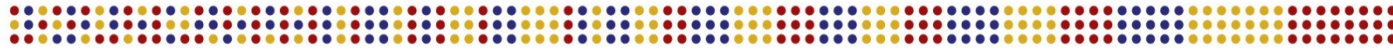
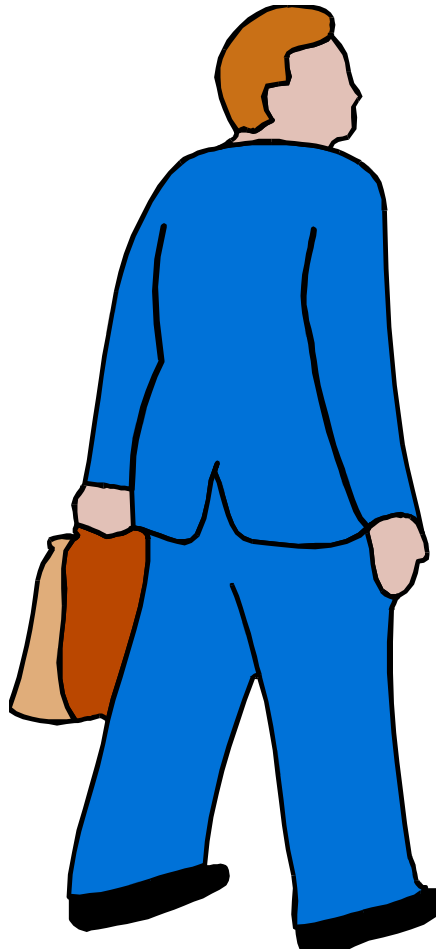


Case Study #3 - Forensics

- Bearing in mind that the proposed investigation could be very costly, and there are existing digital instructions, what is your response to the request for an investigation?
- The spouse subsequently obtains a Court Order mandating the investigation. The Order makes the Executor responsible for the reasonable management, direction and cost control of the digital forensic investigator. As executor, what do you do?



That's all for now



Questions?



Contact Information

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