

# Cybersecurity Threats to Information Governance

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#### Presentation Agenda

- ✓ APPROACH
- ✓ TOOLS
- ✓ CHALLENGES
- ✓ GOVERNANCE



#### Approach

- ✓ Identify the following:
  - 1. What data you have.
  - 2. Who and what has access to it.
  - 3. Where it goes.
- ✓ Determine compliance exposure-based results.
- Regulations, standards, frameworks.
- ✓ Identify risk exposure.



#### Determine Compliance Exposure

#### Negligence Factors

- ✓ Duty
- ✓ Standard of Care
- ✓ Breach
- Causation
- ✓ Foreseeability (proximate cause)
- Damages



#### Assess Against Cybersecurity Frameworks

- ✓ National Institute of Standards and Technology (NIST)
- ✓ Center for Internet Security, Critical Security Controls (CIS CSC)
- ✓ Service Organization Controls (SOC)
- ✓ Payment Card Industry, Data Security Standard (PCI-DSS)
- ✓ International Organization for Standardization (ISO 27001)
- ✓ Cloud Security Alliance (CSA)



### Information Governance Challenges

- ✓ Social Media and business transformation.
- ✓ Rapid expansion in laws and compliance regulation.
- ✓ Data Base Encryption, impact on enterprise strategy
- ✓ On-Premises versus Cloud solutions



## Information Governance Challenges, cont.

- ✓ Reconciling conflicting requirements between:
  - Safety and reliability
  - Privacy
  - Cybersecurity
  - > Retention, disposition, and holds (Gov Code sec. 34090)
- ✓ Disparate Information and 3<sup>rd</sup> Party Risk Management (TPRM)
- ✓ Content producers
- ✓ Federated services
- ✓ Data Processors versus Data Controllers



#### Information Governance

- ✓ Security prevention & Incident Response Planning (IRP)
- ✓ Regulatory compliance
- ✓ Business Intelligence(BI)
- ✓ E-Discovery and retention holds
- ✓ AB 2658, Blockchain bill
- ✓ Integrity of information (CIA triad)
- ✓ Alignment hierarchy
- ✓ Reduce costs, reduce risk, increase value
- ✓ Monetizing in the Internet of Value



#### Governing – Blockchain & Smart Contracts

- ✓ Costs and consensus algorithms
- ✓ Private v. public
- ✓ IBM, AWS, Ethereum, Hyperledger, and Cardano with Haskell code language



# Continuously Monitoring Protections and Defenses

- ✓ How are admins and security professionals securely managed?
  - 1. Privileged Access Management (PAM)
  - 2. Multi-factor Authentication
- ✓ Tools, software, solutions, protective measures
  - 1. Tokens
  - 2. Segmentation
  - 3. Least privileges & Need to know
  - 4. Mandatory vacation
  - 5. Security Information and Event Management (SEIM)
  - 6. Encryption w/ key management
- ✓ IRP management plan



#### Questions?



