A Practitioner's View of the Ohio Data Protection Act

Presented to the 2019 Central Ohio Infosec Summit

Justin Hall
Director, Security Consulting





#### /usr/bin/whoami

cbts

- Cincinnati native
- Husband & dad
- •20+ years in IT
- 14+ years in security

- Director of Security Consulting at CBTS
- GCIH Gold / GCFA / GPEN
- University of Cincinnati College of Business alumnus



# I am not a lawyer.

This presentation is not intended to be legal advice, but a general discussion about the Ohio Data Protection Act.

If you require legal advice, you are advised to consult a qualified lawyer in your jurisdiction.

# All of this is speculation.

The Ohio Data Protection Act is brand spankin' new.

There is no existing case law involving this legislation.

I'm guessing on pretty much all of this (but it's an educated guess FWIW).

#### In the last decade...





Date of breach: Nov 2013 Settlement: \$18.5 million



Date of breach: April 2014 Settlement: **\$27.5 million** 



Date of breach: July 2016 Settlement: **\$50 million** 



Date of breach: 2013/2014 Settlement: \$85 million (possibly more)

# About the ODPA





#### **About the Ohio Data Protection Act**





Ohio SB220 Signed August 3, 2018 **Effective November 2, 2018** 



Provides an "affirmative defense" from tort claims originating from a breach that involve personal information



Requires that covered entities "create, maintain, and comply with a written cybersecurity program"

#### Terms to understand: Affirmative Defense





"This is a defense in which the defendant introduces evidence, which, if found to be credible, will **negate criminal liability or civil liability**, even if it is proven that the defendant committed the alleged acts."

Cornell Legal Information Institute, Affirmative Defense, available at https://www.law.cornell.edu/wex/affirmative\_defense (last visited 4/8/2019)

#### Terms to understand: Cybersecurity Program





A document that:

"contains administrative, technical, and physical safeguards for the protection of both personal information and restricted information and that reasonably conforms to an industry recognized cybersecurity framework"

The program described **must**:

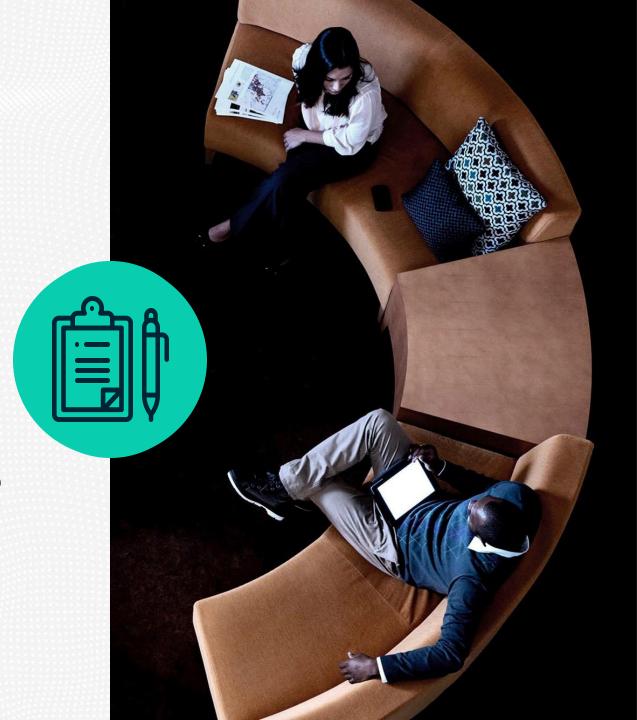
"Protect the security and confidentiality of the information;

Protect against any **anticipated threats or hazards** to the security or integrity of the information;

Protect against unauthorized access to and acquisition of the information that is likely to result in a material risk of identity theft or other fraud to the individual to whom the information relates."

#### **Program Requirements**

- The entity must create, maintain, and comply with the cybersecurity program
  - Create = write it down
  - Maintain = keep it up to date
  - Comply with = do the thing you wrote down
- The cybersecurity program must be designed to protect information
- The cybersecurity program must conform to an approved framework
- The cybersecurity program must be "appropriate" for the covered entity



#### **Approved Security Frameworks**





Cybersecurity Framework
Special Publication 800-53
Special Publication 800-171
FedRAMP



ISO27000 Family



CIS Top 20 Critical Security
Controls





PCI Data Security Standard

#### Terms to understand: Appropriate Program



**Five factors** determine if your security program is appropriate for your organization:



- 1. The size and complexity of the covered entity
- 2. The **nature and scope of the activities** of the covered entity
- 3. The sensitivity of the information to be protected
- 4. The **cost and availability of tools** to improve information security and reduce vulnerabilities
- 5. The resources available to the covered entity



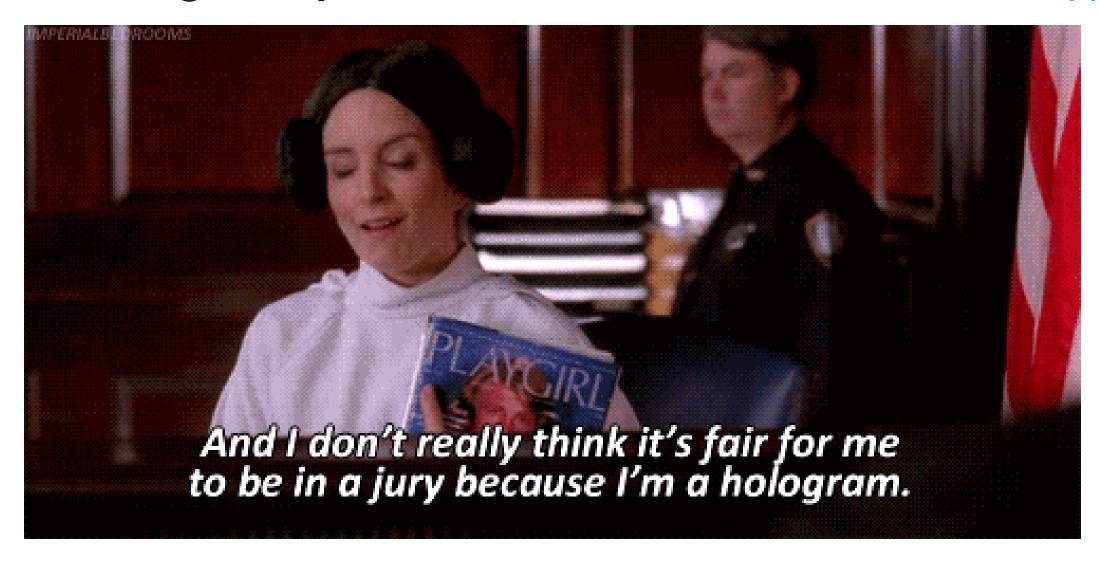
#### To Summarize:





#### Convincing a Jury





#### **Building a Convincing Case**

cbts

What kind of evidence is impactful?



## **Policy**

- Broad Information Security Policy
  - Mission and vision
  - Roles and responsibilities
  - Metrics
- Incident Response Policy
  - How Breaches Are Handled
  - Notification & Communication
- Data Protection/Classification Policy
- Acceptable Use Policy
- Application Security Policy

- Security Architecture/Infrastructure Design Requirements
- Endpoint Hardening Policy & Process
- Data Retention/Destruction Policies
- Security Monitoring & Logging Policy
- Third Party Vendor/Supplier Security
   & Risk Policy
- Physical Security Policy

#### **Building a Convincing Case**

cbts

What kind of evidence is impactful?

# #2

## **Operational Playbooks**

- Incident Response
  - Ongoing monitoring, triage, analysis (Identification phase)
  - Specific investigation use cases
  - Forensics & live response
  - Containment, Eradication, Recovery, Lessons Learned phases
- Security Architecture
  - Design, Build, Run phases

- Vulnerability Management
  - Bulletin collection, triage
  - Ongoing vulnerability assessment
  - Red team/purple team
  - Third party assessment
  - Patch management, testing, validation
- Software Development
  - SDLC & Security Reviews
  - DevSecOps

#### **Building a Convincing Case**

cbts

What kind of evidence is impactful?



## **Security Metrics**

- NIST Cybersecurity Framework
  - Company's current Framework Profile and Framework Implementation Tier (Tier 1-4) for each domain
- ISO27K Information Security Management System
  - 27001 has 18 domains
  - No inherent scoring/measurement system
  - Carnegie Mellon CMM helps

- Vulnerability Management
  - Patching metrics & vulnerability remediation
  - Results of third party assessments
- Security Monitoring & Response
  - Mean Time To Detect & Mean Time To Remediate
  - Size & scope of monitoring and response effort, staffing, toolset
- Growth strategy for all areas!

# Q&A



