Cybersecurity and Trade Secret Theft

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What is a Trade Secret?

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What is a Trade Secret?

Examples:

- Customer lists / information
- Employee lists
- Cost, price, billing and profit information
- Designs, methods, formulae, processes, code, algorithms
- Business plans
- Negotiations

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Legal Definitions – Common Thread

EU Directive – (1) secret; (2) commercial value; and (3) subject to **reasonable steps**. . . . Art 2.1.

UTSA – (1) information; (2) economic value; and (3) the subject of **efforts, reasonable** under the circumstances to maintain its secrecy. UTSA § 1.4.

DTSA – (1) information; (2) **reasonable measures** to keep such information secret; (3) independent economic value. 18 U.S.C. § 1839(3).

What are these measures/steps/efforts up against?

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Scope of the Threat

- Recent examples of cybersecurity breaches?
- No such thing as perfect cybersecurity
- Often a lag between breach and detection
- IP Theft is costly
  - Estimated $250 billion in US industries in 2012*
  - Estimated $300 billion in annual losses to US economy in 2013*
- Trade secrets are typically the most vulnerable type of IP cybersecurity risks, especially from insiders

Sources: John Villasenor, "Corporate Cybersecurity Realism: Managing Trade Secrets in a World Where Breaches Occur," *American Intellectual Property Law Association Quarterly Journal*, Volume 43, Numbers 2/3, Spring/Summer 2015; Elizabeth A. Rowe, *RATs, TRAPs, and Trade Secrets*, 57 B.C. L. Rev. 381 (2016).

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Recent Trends in Threats to Clients

Business Segments Impacted by 2017 Data Breaches

Source: Verizon, 2018 Data Breach Investigations Report (11th Ed. 2018)

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Recent Trends in Threats to Clients

2017 trends:

- Increase in mobile malware
- Decrease in number of ransomware
- Increase in coin mining
- Increase in software supply chain (i.e., updates) attacks
- Increase in attacks on IoT devices

Sources: Symantec, Internet Security Threat Report, vol. 23 (2018); Verizon, 2018 Data Breach Investigations Report (11th Ed. 2018)

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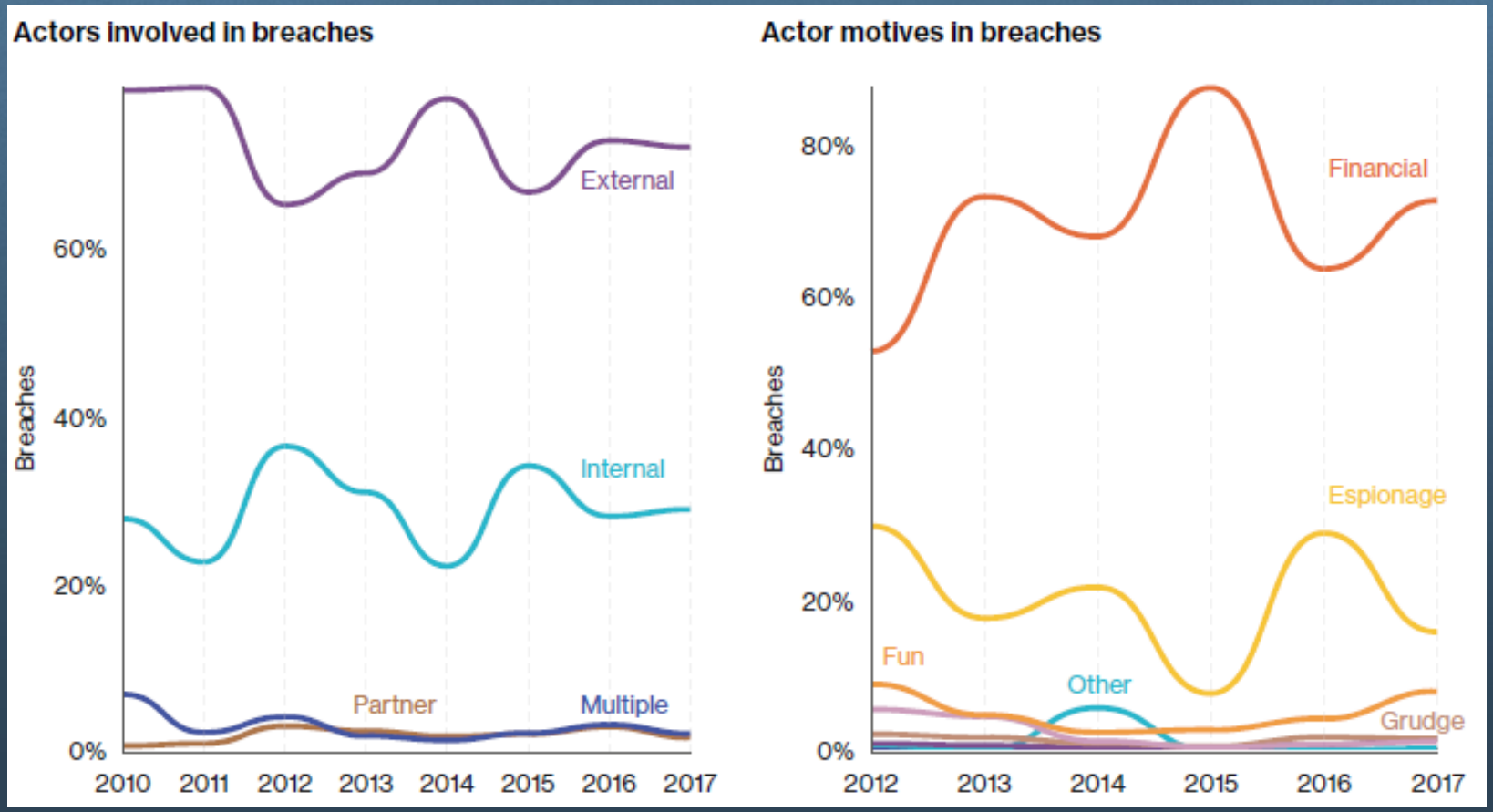
Recent Trends in Threats to Clients



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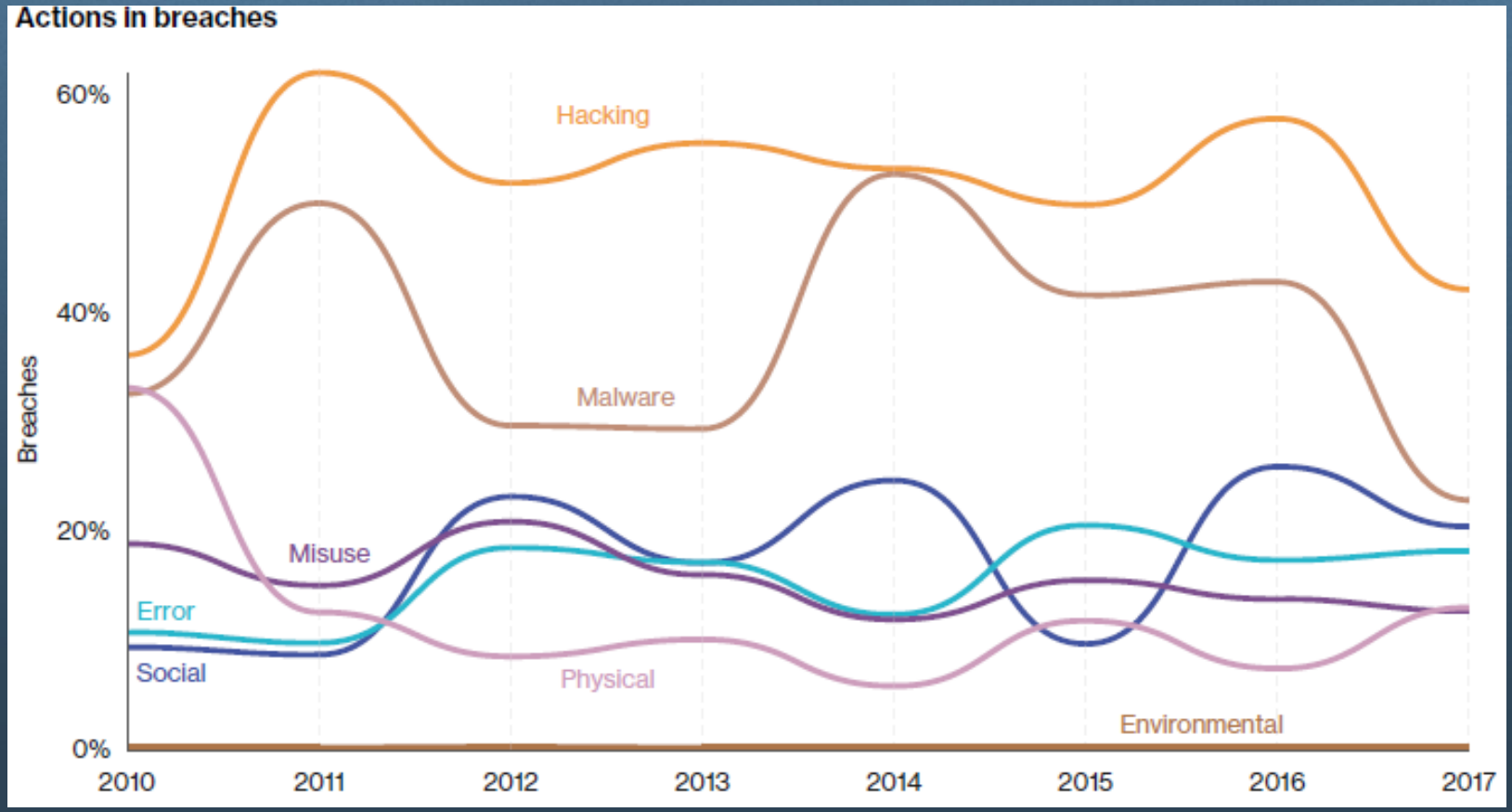
Recent Trends in Threats to Clients



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Threat Sources

- State-sponsored entities
  - *United States v. Dong* (alleged PRC)
  - *United States v. Xu* (alleged PRC)
  - *United States v. Park* (alleged DPRK)
  - *United States v. Morenets* (alleged RF)
- Competitors / Former Employees
  - Uber / Waymo
  - HP / IBM
  - Lutonix / Urotronic
- Organized crime – "Carder.su"

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Threat Sources

- Current employees
  - *United States v. Xu (alleged PRC)*
  - *United States v. Snowden*
  - *Enargy Power Co. v. Wang*
  - *Charles Schawb & Co. v. Carter*
- Others with access
  - Potential business partners
  - Contractual counterparties
  - Supply chain (e.g., Super Micro Computer, Inc.)

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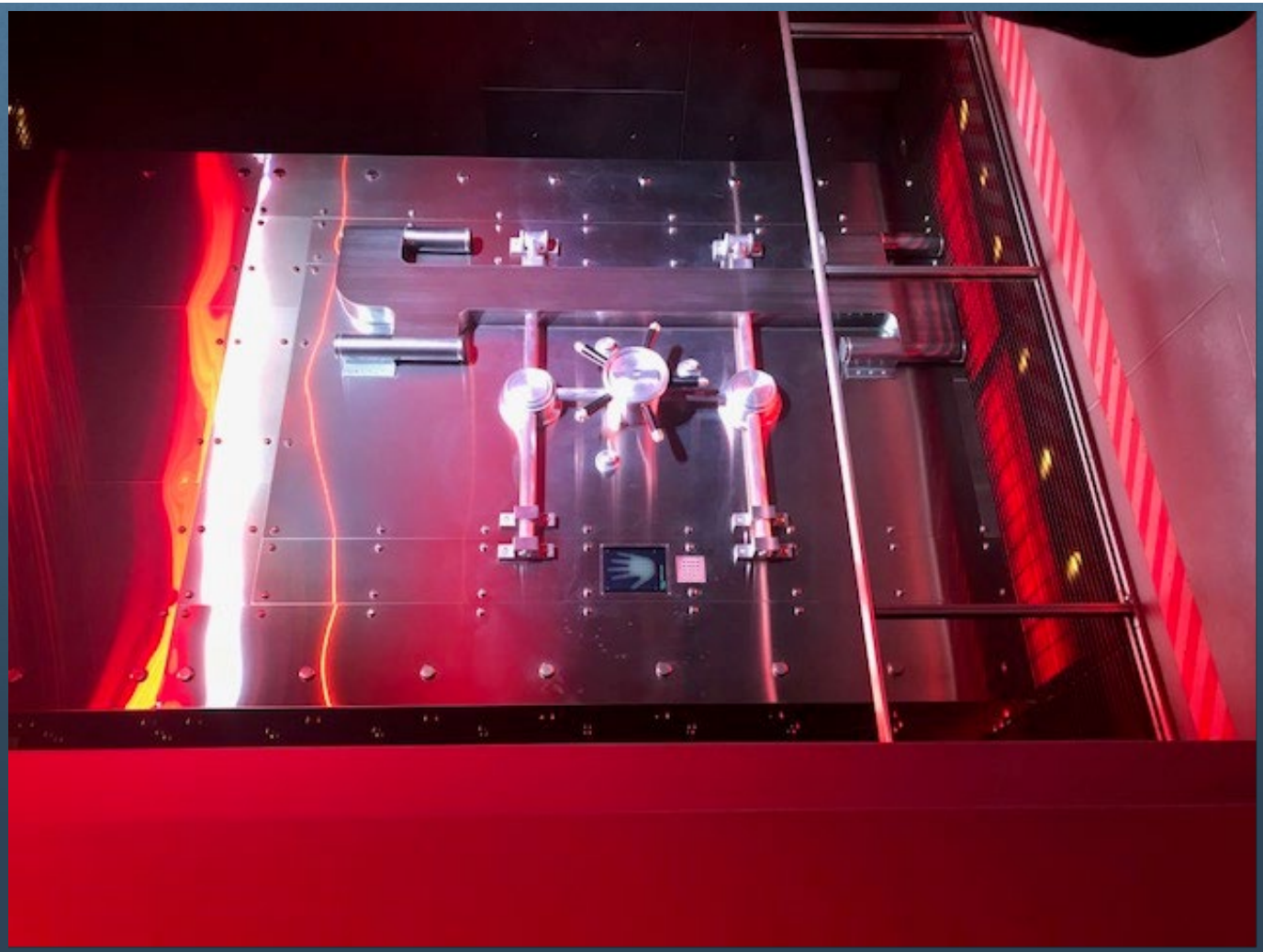
Threat Reduction



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Threat Reduction

What steps do you advise your clients to take?

What reasons do clients give for not using those precautions?

What has worked in the past?

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Threat Reduction – Low cost /tech

- Don't overshare information externally
- Restrict physical access to data / trade secret
- Employee training – have a plan
- Use in-program passwords
- Restrict cameras / recording equipment
- Update software and firmware including security patches (Mossack Fonseca)

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Threat Reduction – Low cost /tech

- Employee policies and agreements
  - Robust Non-Disclosure agreements
  - Develop and implement security and confidentiality employee policies, including BYOD policy
  - Restrictions on use of personal devices
- Thorough exiting / exit interview process

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Threat Reduction – Personal Devices

Personal Mobile Device Vulnerability

Rank	Category	Percent Malware
1	Lifestyle	27.3
2	Music & Audio	19.7
3	Books & Reference	9.9
4	Entertainment	6.2
5	Tools	5.5
6	House & Home	4.5
7	Education	3.9
8	Art & Design	3.7
9	Photography	2.7
10	Casual Games	2.2

Source: Symantec, Internet Security Threat Report, vol. 23 (2018)

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Threat Reduction – Exiting Employees

Terminated / Resigning employees are a significant risk for theft

- Collect all business-owned devices (if any)
- Remove network access immediately
- Create an archive of the former employees email and data and preserve it
- Follow up with a reminder about confidentiality obligations
- Consider legal action sooner rather than later

Sources: Kevin Cloutier, et al., "Employer Cybersecurity Measures for Trade Secret Protection," Lexis Practice Advisor (May 11, 2017); Elizabeth A. Rowe, *RATs, TRAPs, and Trade Secrets*, 57 B.C. L. Rev. 381 (2016).

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Threat Reduction – Higher Cost

- Firewalls / Website Access Blocking / Internet Use Restrictions
- Data encryption / File locking
- Segment network data
- Data use tracking software
- Diligence on counterparties' practices
- Separate modular products, don't overshare
- Patent your trade secret
- Legal action

Sources: John Villasenor, "Corporate Cybersecurity Realism: Managing Trade Secrets in a World Where Breaches Occur," *American Intellectual Property Law Association Quarterly Journal*, Volume 43, Numbers 2/3, Spring/Summer 2015; Jeanne Gills, "What's Reasonable? - Protecting and Enforcing Trade Secrets in the Digital Age," AIPLA (Spring 2016).

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Client Compliance with Reporting

Once there has been a data breach, clients will have reporting requirements and may face fines:

- GDPR
- New York, California, several other states rolling out legislation
- SEC / FTC / CFPB / Irish DPC
  - Breach and failure to report has resulted in fines for: Equifax, TransUnion, Yahoo, Facebook, Vtech, Lenovo, Uber, D-Link, PayPal/Venmo
  - May result in fines for: Facebook, Google+
- Private lawsuits

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