Cybersecurity Challenges Facing Today's C-Suite: An Inside Look With the FBI

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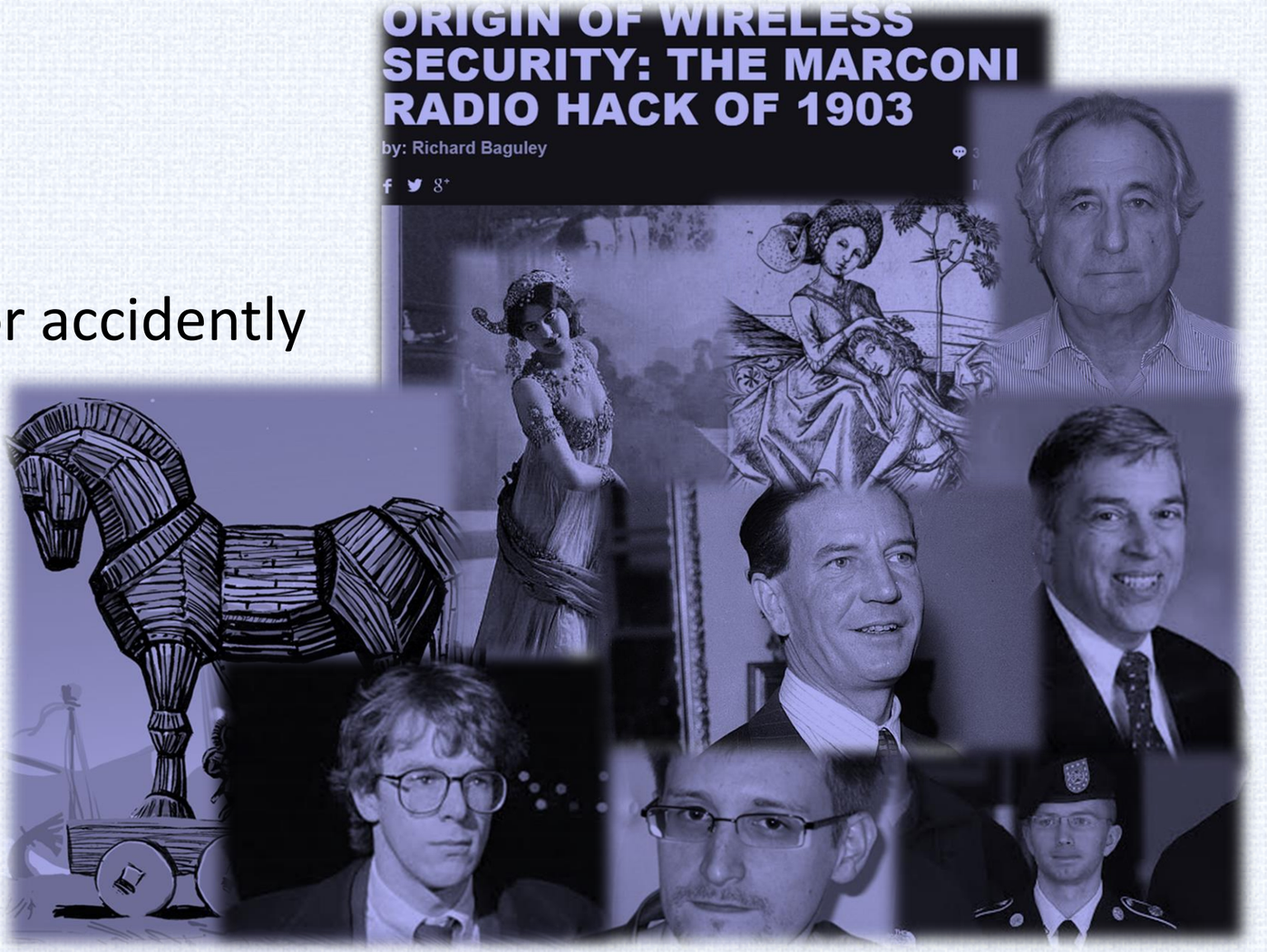
Federal Bureau of Investigation

Everything Old is New Again

https://hackaday.com/2017/03/02/great-hacks-of-history-the-marconi-radio-hack-1903/#more-245251

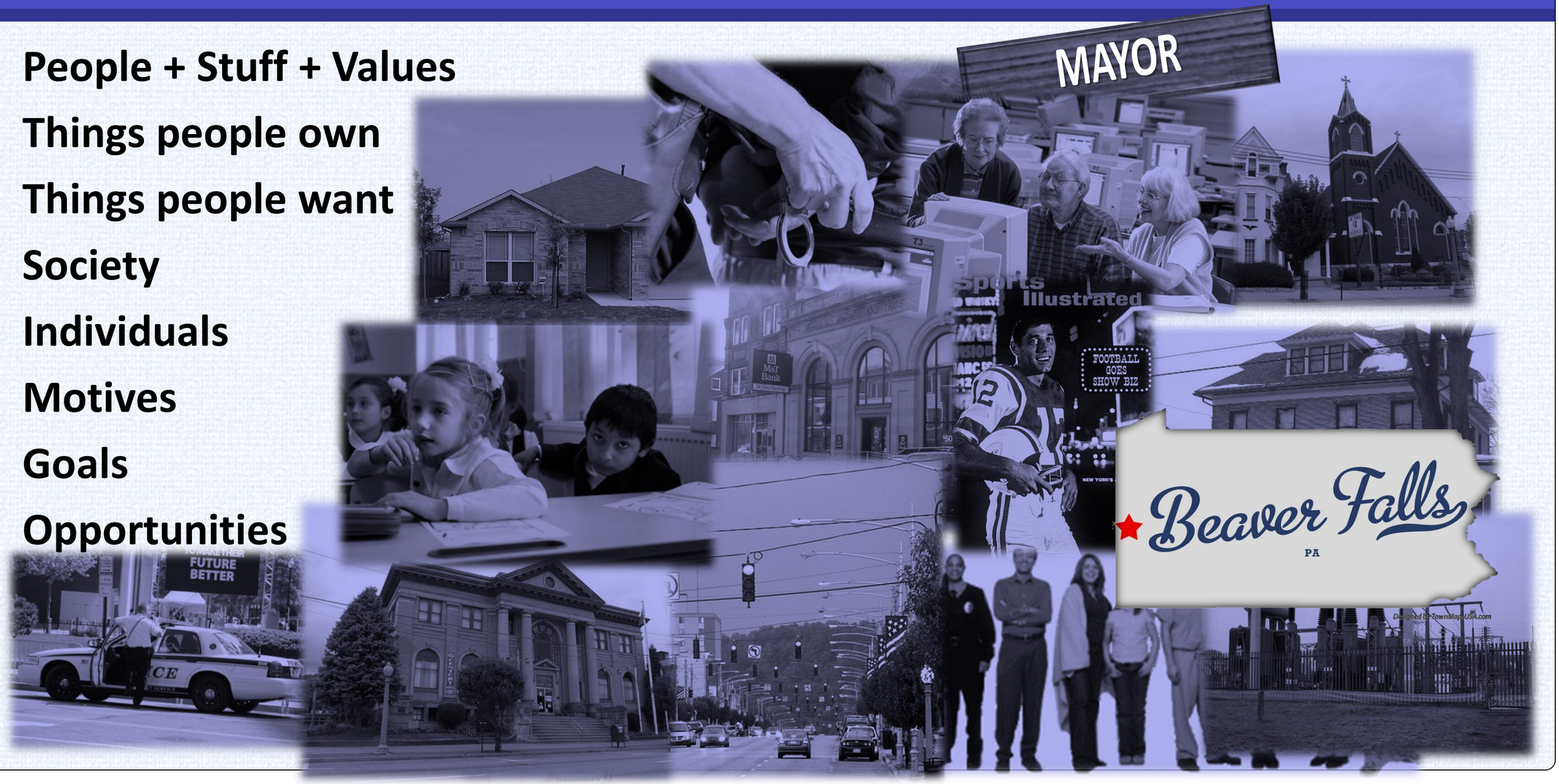
- Started when people started
- People attack from the outside
- People steal from inside
- People deceive – intentionally or accidently and they try to cover it up or escape consequences
- It's easier to compromise from the inside – except you have to hide more.



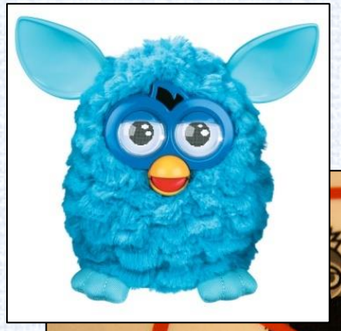
People change; People's motivations change

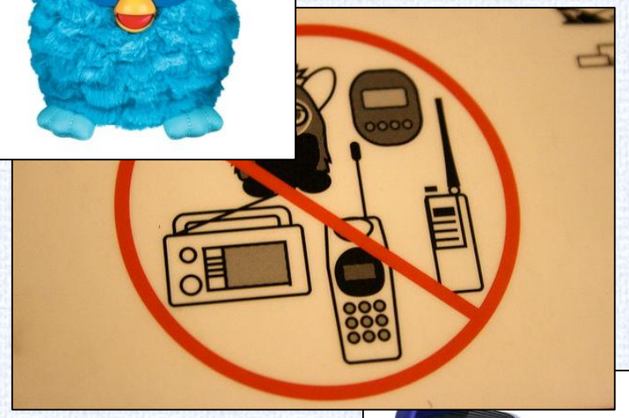
The Landscape

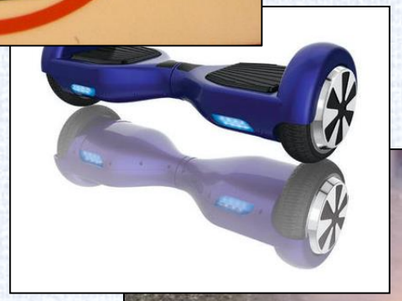
- People + Stuff + Values
- Things people own
- Things people want
- Society
- Individuals
- Motives
- Goals
- Opportunities

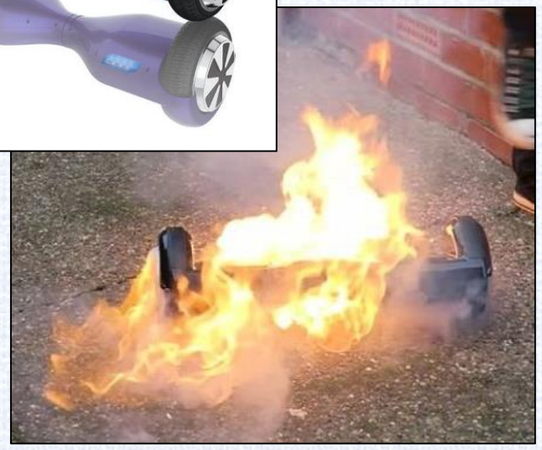


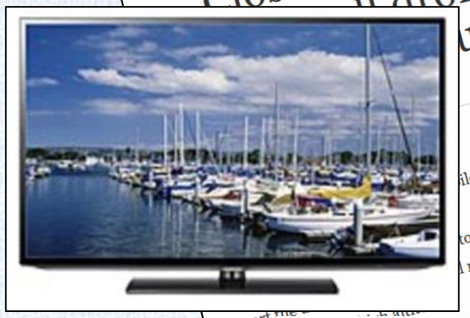
When Toys Attack …

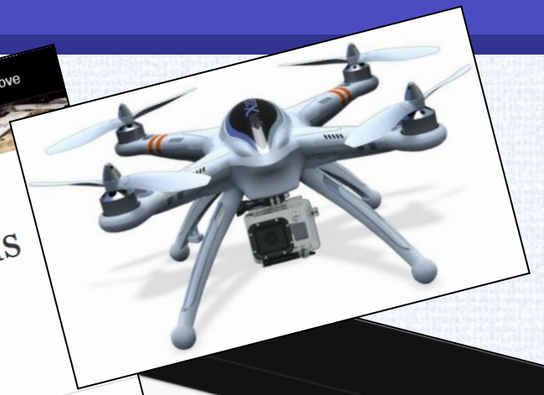












Sections The Washington Post Share Hazard Above

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PART THREE: NEAR MISSES

Close encounters on rise as drones gain in ularity

Story by Craig Whitlock

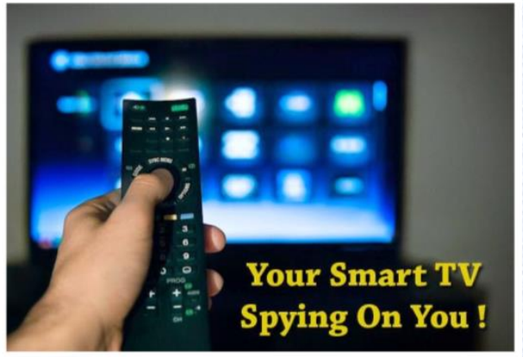
Published on June 23, 2014

The Hacker News™

Security in a serious way

Samsung Admits Its Smart TV Is Spying On You

Sunday, February 08, 2015 Mohit Kumar



ft creates bot you can chat with on Twitter

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2:34 p.m. EDT March 23, 2016

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Microsoft's Chat Bot 'Tay' Gets a Time-Out After Rude Comments

By ALYSSA NEWCOMB

Mar 25, 2016, 11:03 AM ET

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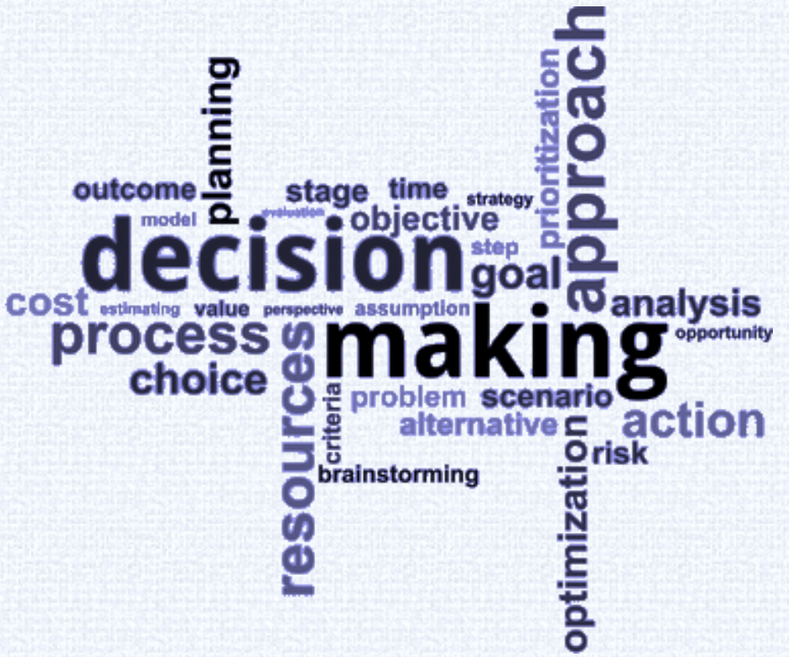
815 SHARES

Microsoft's teenage chat bot "Tay" is in a time-out of sorts after the artificially intelligent system, which learns from interactions on social media, began spewing racist comments within a day of its launch this week, company officials said.

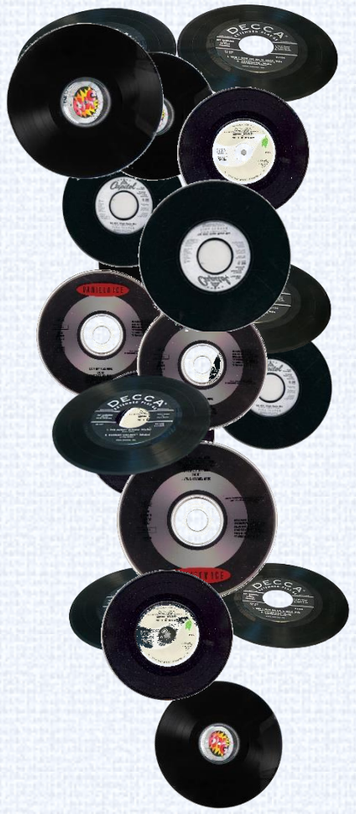
Geared toward 18- to 24-year-olds, Tay was launched as an experiment to conduct research on conversational understanding, with the chat bot getting smarter and offering a more personalized experience the more someone interacted with "her" on social media. Microsoft launched Tay on Twitter and messaging platforms GroupMe and Kik.

What to Secure and How Much is a Business Decision

- Cybersecurity is part of the risk picture.
- What functions are core to business?
- How much security can an organization afford to accomplish those functions?
- What else can create business-ending impacts?
- Fraud, security, and margins all matter.



What's Acceptable Loss? What's Acceptable Behavior?



Spearphishing
Drive-bys

Lateral Movement
Exposed Vulnerabilities

Media Leaks
Espionage

Insurance or Payment

Managed Response

Long-term Impact

Volume

Intent

HR Action

Long-term job impact

Criminal Prosecution

Balancing Priorities

Organizations

Adaptive ⟷ Standardized

Trust ⟷ Verify

Technology

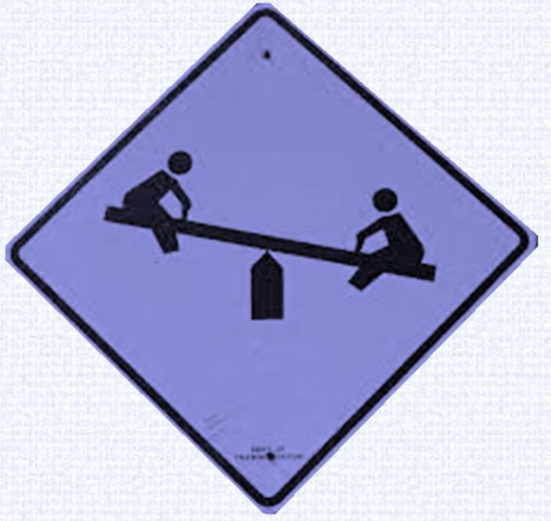
BYOD ⟷ Provided

DevOps ⟷ Legacy

Employees

Autonomy ⟷ Control

Privacy ⟷ Oversight

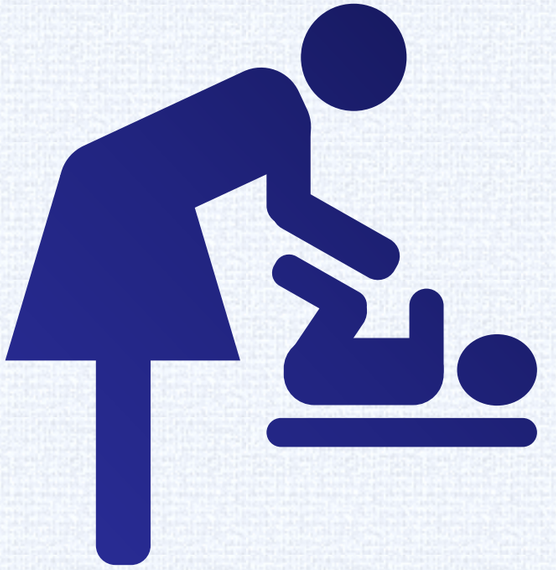


What about the Internet of Things?

Ch Ch Ch Ch Changes …

D. Bowie

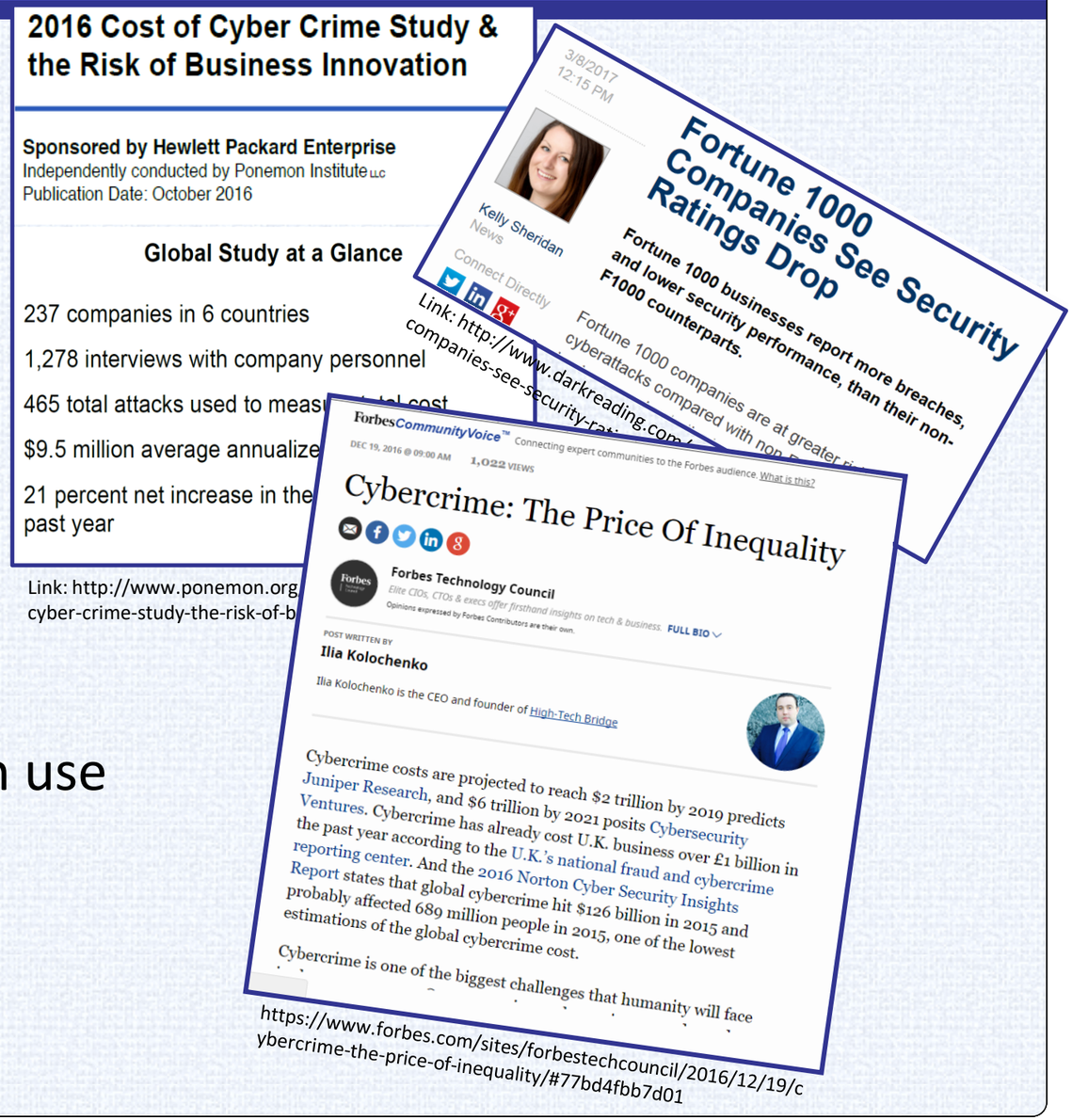
- **It's Hard to Keep a Security Perspective With …**
  - New lines businesses
  - Different competitive landscape
  - Mergers and acquisitions
  - Technology innovations
  - Reorganizations
  - People leaving, coming, being promoted, being demoted …



Changes leave people feeling vulnerable …
and that increases the insider threat.

The Costs and Opportunities Are Increasing

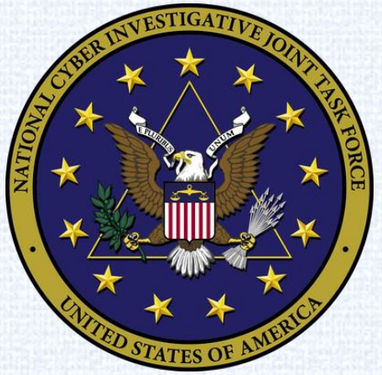
- Fraud enabled by IT
  - Traditional financial fraud by insiders and outsiders and combinations
  - Affects every type of organization
- Other Cybercrime
  - IP Theft
  - Sabotage
  - Approach is specifically logical, although it can use logical to attack physical
- As Businesses Move Online, the Threat Moves Online

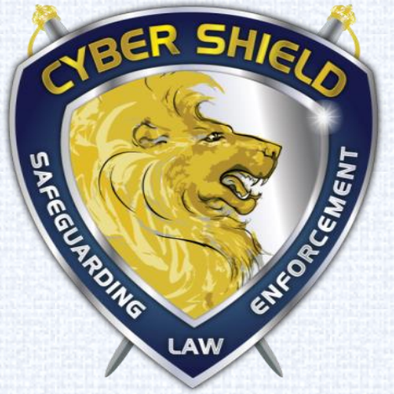


FBI Fights Cybercrime Across the Board

The FBI engages State and Local Law Enforcement officials in the fight against cyber crime through a number of different initiatives including:

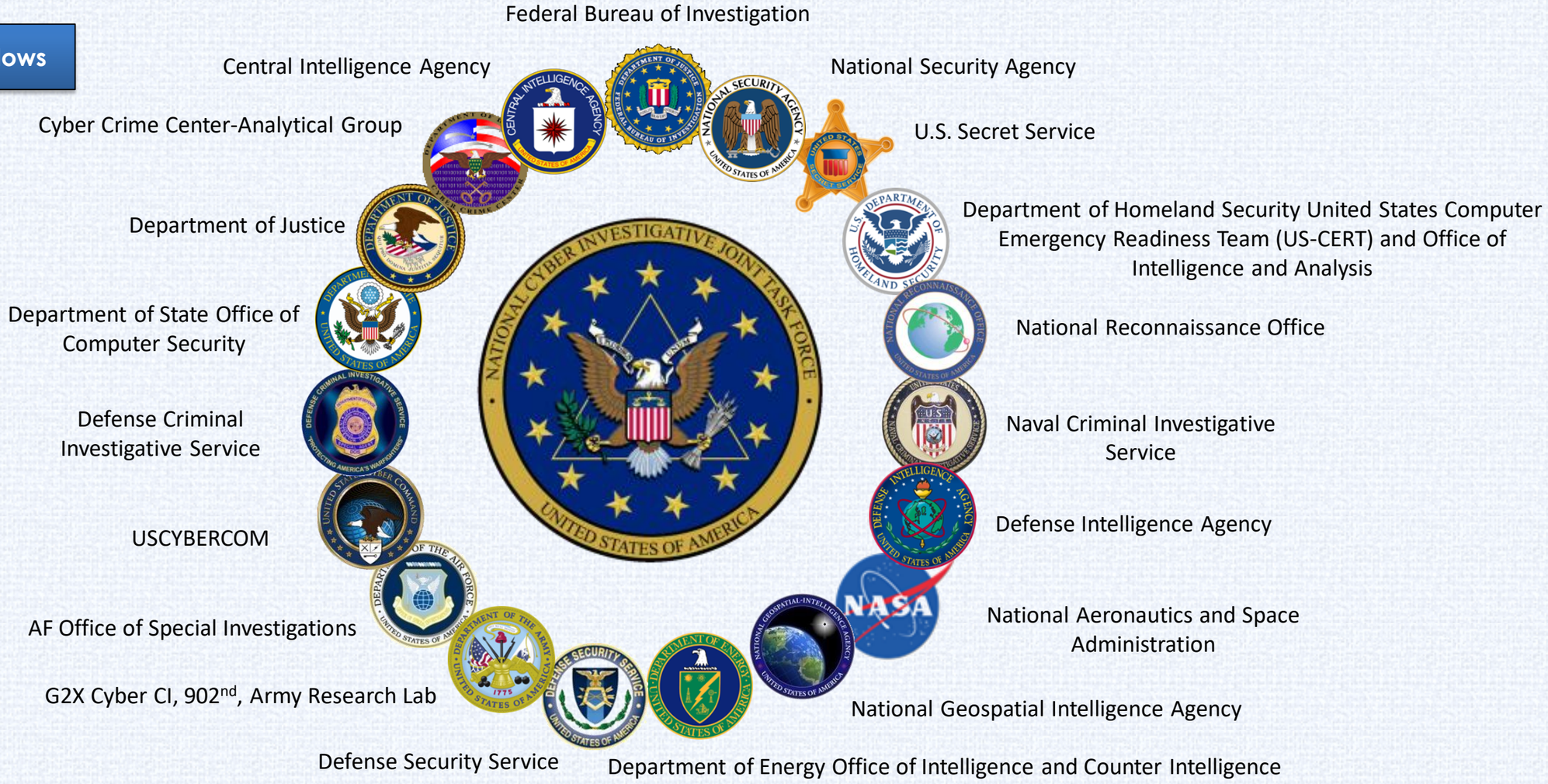
- National Cyber Investigative Joint Task Force
- Cyber Shield Alliance
- National Cyber-Forensics and Training Alliance





National Cyber Intelligence Joint Task Force (NCIJTF)

LE Fellows



InfraGard

- Information sharing partnership between FBI and public/private sectors to protect the nation's critical infrastructures.
- Over 25,000 members and more than 80 InfraGard Chapters through the United States.
- Access through the Law Enforcement Enterprise Portal (LEEP).

Access to Suite of Intelligence Products

Networking Opportunities

Alerts to Threats and Vulnerabilities

Understand Emerging Trends

www.infragard.org

Internet Crime Complaint Center (IC3)

- Intelligence Center for Internet Enabled Crime
- IC3 was established in May 2000
- More than 269,000 complaints received in FY2014 for a reported loss of more than $800M

Extortion

Romance Scams

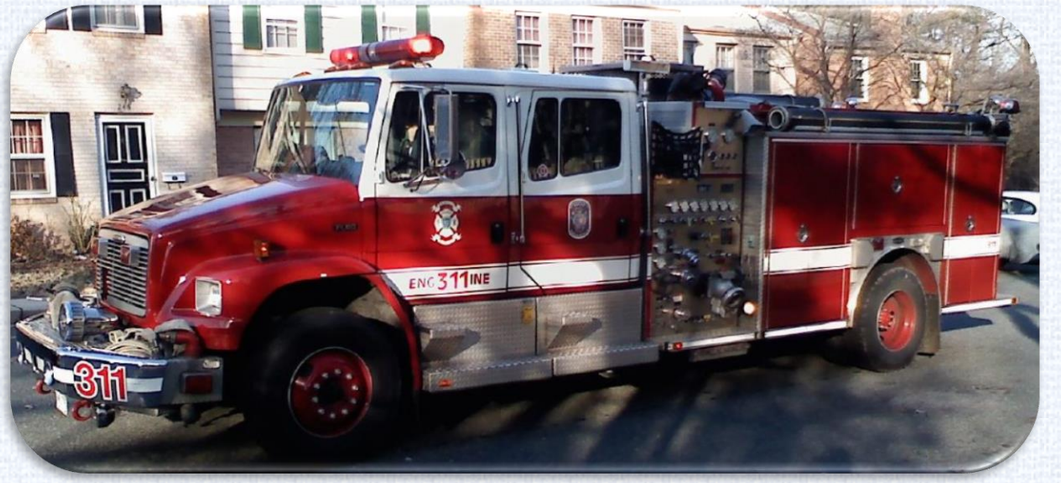
Mass Marketing Fraud

Auto Fraud

www.ic3.gov

Incidents Will Happen … Prepare and Practice!

- Internal and external, small and big
- Make the small ones routine and get used to the rhythm
- Prepare for the big ones before they happen



- Practice your Incident Response Plan, including:
  - **Senior Executives** – Who needs to know what, and when?
  - **General Council** – What can you disclose to who?
  - **Communication** – What are you telling your executives, your staff, the press, the public?
  - Conquer the stove-pipes

Report suspected cyber crime – Get to know your local FBI agent

Useful Links

- **Federal Bureau of Investigation**
  - https://www.fbi.gov/investigate/cyber
  - https://www.infragard.org/Application/Account/Login
- **National Counterintelligence and Security Center Resources**
  - https://www.ncsc.gov/index.html
  - https://www.ncsc.gov/issues/docs/Insider_Threat_Brochure.pdf
- **Carnegie Mellon's Software Engineering Institute**
  - http://www.cert.org/index.cfm
  - http://www.cert.org/insider-threat/cert-insider-threat-center.cfm
- Other
  - https://www.nacdonline.org/cyber