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

Arlette Hart
Federal Bureau of Investigation
Everything Old is New Again

- 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
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When Toys Attack ...
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

- HR Action
- Long-term job impact
- Criminal Prosecution
## Balancing Priorities

### Organizations

<table>
<thead>
<tr>
<th>Adaptive</th>
<th>=&gt;</th>
<th>Standardized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>&lt;=</td>
<td>Verify</td>
</tr>
</tbody>
</table>

### Technology

<table>
<thead>
<tr>
<th>BYOD</th>
<th>=&gt;</th>
<th>Provided</th>
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</thead>
<tbody>
<tr>
<td>DevOps</td>
<td>&lt;=</td>
<td>Legacy</td>
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</table>

### Employees

<table>
<thead>
<tr>
<th>Autonomy</th>
<th>=&gt;</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy</td>
<td>&lt;=</td>
<td>Oversight</td>
</tr>
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### What about the Internet of Things?
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
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National Cyber Intelligence Joint Task Force (NCIJTF)
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).

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

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

• Carnegie Mellon’s Software Engineering Institute
  – http://www.cert.org/index.cfm

• Other
  – https://www.nacdonline.org/cyber