

Internet of Things: Security, Privacy and Risk Considerations for a Connected World

Speakers:

- Steve Bridges, Senior Vice President, Cyber/E&O Practice, JLT Group
- Ellen Shew Holland, Associate Vice President & Chief Risk Officer, Southern Methodist University
- Darren Teshima, Partner, Orrick, Herrington & Sutcliffe LLP

Overview of IoT

- **Overview of IoT**
 - Digitizing the physical world
 - Transforming interactions between consumers, business & government
 - Rapid adoption



Issues to Consider

Litigation & Brand Risks

- Product Liability/Medical Malpractice
- Cybersecurity
- Privacy
- IP Issues



Identifying Key Risks in IoT

- Identify the “Thing” or “Things”
- Industry norms related to the “Thing”
- What does the “Thing” do?
- What data is related to the “Thing”
- Security of the “Thing”
- “Ecosystem” of the “Thing”
- How Can Others Use the Thing

Mitigating the Risks

- Contract Language
 - Warnings
 - Provide warnings re security and safety risks
 - Disclose duration of security and firmware updates
 - Implement strict password requirements
 - Warn about hazards of unattended use of devices and appliances
 - Disclaimers
 - Can be used to mitigate liability
 - User negligence in security measures
 - Unintended or unauthorized use
 - Stopping firmware updates
 - Third-party interference

Mitigating the Risks (cont.)

- Terms of Service
 - Connected devices provide unique opportunity to enter into a contractual relationship with typical consumer
 - Forum for warnings, disclaimers
 - Warranties, limitations of liability
 - Arbitration agreements and class action waivers
 - Technology allows terms of service to be interactive
- Insurance
 - New connected devices also raise questions concerning whether or not traditional insurance policies will cover potentially novel claims
 - Careful review of policies to see if they would cover consequences of a cyber incident / gap analysis
 - Insurance underwriters require documentation of strict security controls

Regulatory Considerations

- **Current Legal Framework for IoT**

- California Online Privacy Protection Act (Cal. Bus. & Prof. § 22575-22579)
- Information Security (Cal. Civ. Code § 1798.81.5)
 - 20 Center for Internet Security Controls
- Data Breach Notification Law (Cal. Civ. Code § 1798.82, 1798.29)
- Computer Intrusions (Cal. Pen. Code § 502)
- Unfair Competition Law (Cal. Bus. & Prof. Code § 17200 et seq.)
- IoT Specific Laws (connected cars and TVs, Smart Grid, etc.)
- FTC: Section 5 under the FTC Act

IoT Lawsuits

- **FTC Enforcement Actions**

- TRENDNet Home Security (connected video cameras)
- ASUSTeK Computer, Inc. (home routers and cloud services)

- **Consumer Lawsuits**

- Smart TVs (Vizio)
- Connected Toys (VTech, Hello Barbie)
- Connected Sex Toys

- **FDA Actions**

- In-Home Monitoring Devices (Abbott St. Jude)

TRENDNET

ASUS

VIZIO



IoT Best Practices

- California AG's Data Breach Report, Feb. 2016
 - Center for Internet Security's 20 Critical Security Controls
 - Minimum Standard of Care for Reasonable Security
- California AG's Recent Press Release on Botnets Attacks
 - Change default passwords on your household electronics (e.g., webcams, DVRs, routers, printers)

<https://www.oag.ca.gov/news/press-releases/attorney-general-kamala-d-harris-urges-consumers-protect-their-devices-potential>

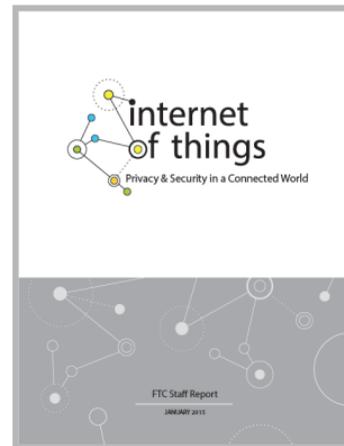


IoT Best Practices (FTC)

- FTC's Recommended Privacy & Security Practices

(“Internet of Things: Privacy & Security in a Connected World”, FTC Staff Report, January 2015)

- Building security into devices by design
- Equipping devices with the minimum connectivity necessary to function
- Creating devices that default out-of-the-box to the highest security settings
- Providing necessary security patches throughout devices' life
- Giving consumers data deletion mechanisms to use before device disposal
- Developing and following privacy policies that reasonably limit the collection and retention of consumer data
- Considering data minimization, i.e., limiting the amount of data collected
- Deidentifying personal information collected
- Empowering consumers to personalize their devices' privacy settings



Overview of Cyber Coverages

- **First Party**

- Data Breach Expenses
- Network Extortion
- Digital Asset Loss
- Business Interruption Loss

- **Third Party**

- Technology Errors & Omission
- Security and Privacy Liability
- Regulatory Liability
- Multimedia Liability

Overview of Cyber Coverages (cont'd)

- **Characteristic Features**

- Claims-made coverage
- Coverage grants are broadly-worded and cover out-of-pocket losses as well as third-party claims
- Coverage extends beyond “suits”
- Often include first-party coverage (data restoration and business interruption)
- Often “modular” in nature, permitting the policyholder to select specialized coverages appropriate to its operations

Key First Party Coverages

- **Data Breach Expenses**
- Covers incident response costs, including:
 - Forensic investigation
 - PR firms and law firms retained to minimize harm and restore public confidence
 - Costs of providing breach notice
 - Identity theft protection services
 - Restoration, recreation, or recollection of Electronic Data
- **Business Interruption Loss**
- Coverage for losses due to an Interruption, including:
 - Extra expenses that would not have been incurred but for interruption
 - Reduction in net income due to interruption plus continuing normal operating expenses

Key First Party Considerations

- **Breach of Cloud Provider's System**
 - Is your data covered wherever it resides—at a cloud provider; on mobile devices?
 - Check definition of “Your System”
- **Cyber Extortion Coverage for Ransomware**
 - Ransomware often doesn't result in destruction or theft of data, so policy must also cover loss of access to data
 - Policies that provide cyber extortion coverage may cover a ransom payment, if the insurer provides prior consent
- **No Coverage for Loss of Your IP**
 - Loss of IP-value of information or other digital assets not covered

Key Third Party Coverages

- **Security & Privacy Liability**
- Covering liability arising out of breach of duty, neglect, error, or omission resulting in:
 - Failure of Security or Security Breach
 - Loss of access to computer system; hacking attack that results in theft, destruction, or corruption of data; transmission of malicious code to other systems
 - Privacy Injury or Privacy Peril
 - Theft, loss, or unauthorized disclosure of “private information,” “personal information,” or “personally identifiable information”
 - Failure to notify
 - Violation of federal, state, local, or foreign privacy statute or regulation

Key Third Party Coverages (cont'd)

- **Regulatory Coverage**

- Extends to government investigations or proceedings and civil actions
- Civil governmental fines and penalties may be covered
- May include duty to defend and/or duty to pay defense expenses
- Often is subject to a sublimit

- **Professional Services**

- Covers liability arising out of acts, errors, omissions, misstatements in the performance of professional services, which can include:
 - Application service provider services
 - e-Commerce transaction services
 - Electronic exchange and auction services
 - Internet hosting services
 - Internet service provider services

Cyber Coverage Exclusions

- **Key Exclusions**

- Criminal, dishonest, fraudulent or malicious acts; intentional violation of a privacy policy; or intentional or knowing violation of law
- Collection of information through electronic spyware or similar means, wire tapping or bugging, etc.
- Breach of an express warranty or guarantee
- Violations of antitrust and unfair competition laws; violations of consumer protection laws; false, deceptive, or unfair trade practices; false advertising; patent infringement; misappropriation of trade secrets
- Assumption of the liability of others under contract, or in some cases any obligation under contract

Thank You



Steve Bridges, Esq.

Senior Vice President
Cyber/E&O Practice
JLT Group

T 312 637 6119

E steve.bridges@jltus.com



Darren Teshima

Partner
Orrick, Herrington & Sutcliffe LLP

T 415 773 4286

E dteshima@orrick.com



Ellen Shaw Holland

Associate Vice President and Chief Risk Officer
Southern Methodist University

T 214 768 2083

E esholland@smu.edu