

# Cyber

May, 2016

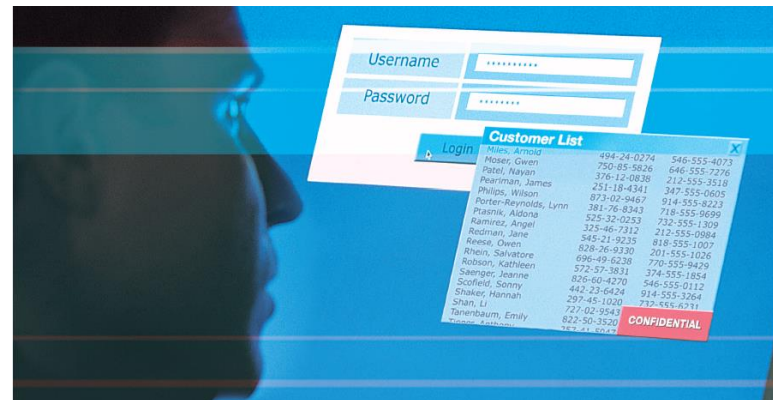


SERVE | ADD VALUE | INNOVATE



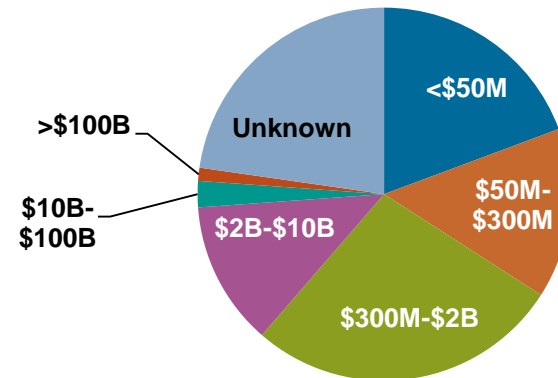
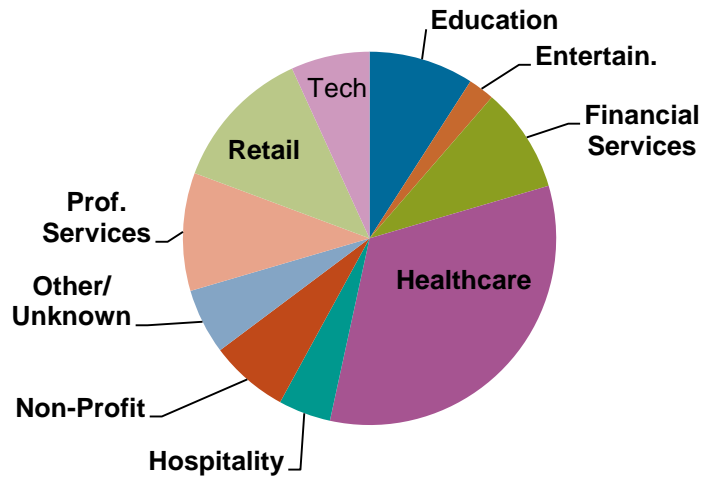
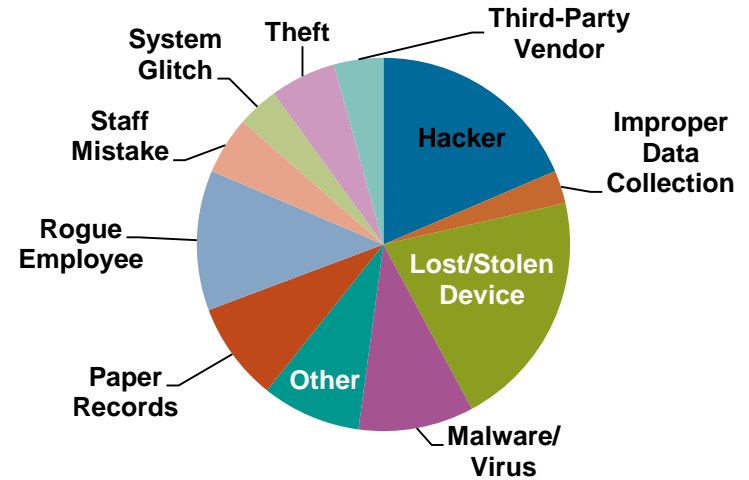
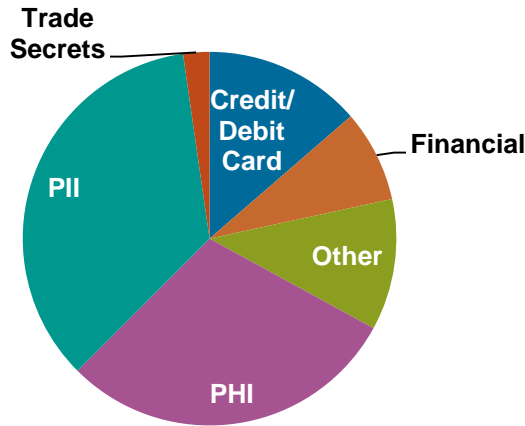
# Increased Consumer Awareness

- News reports
- Personal experiences
- Education (Agents | Brokers | Insurers)
- Executive/Board of Directors Priority
- Government activity





# NetDiligence: Insured Cyber Loss Breakdowns



Source: NetDiligence® Cyber Claims Study 2014

# The Cyber Insurance Market





# Cyber Insurance

- **Insurance coverage approaches**
  - Stand-alone insurance policies
  - Commercial Package Policies
  - Roll-on coverage to existing insurance policies (e.g., Businessowners, D&O, Professional Liability, etc.)
- **Typical coverages and rating approaches**
  - 1<sup>st</sup> and 3<sup>rd</sup> Party coverages
  - Revenue/Assets | Number of Records



# Cyber Insurance Market Overview

- **Admitted Market vs. Nonadmitted Market**
  - Standard policies | Manuscript policies
- **Cyber insurance – in its infancy, but maturing**
  - Increasing number of carriers are writing cyber insurance
- **Cyber insurance take-up rate**
- **Marketplace capacity**
  - Currently estimated to be \$1B – \$2B
  - Industry experts project it to grow to \$5B, or more



# Emerging Cyber Issues

- Cloud Computing
- Medical Devices
- Internet of Things (IoT)
- Autonomous Cars
- Broadening coverage expectations
- Black Hat Hackers – more creative and relentless

# Regulatory Landscape



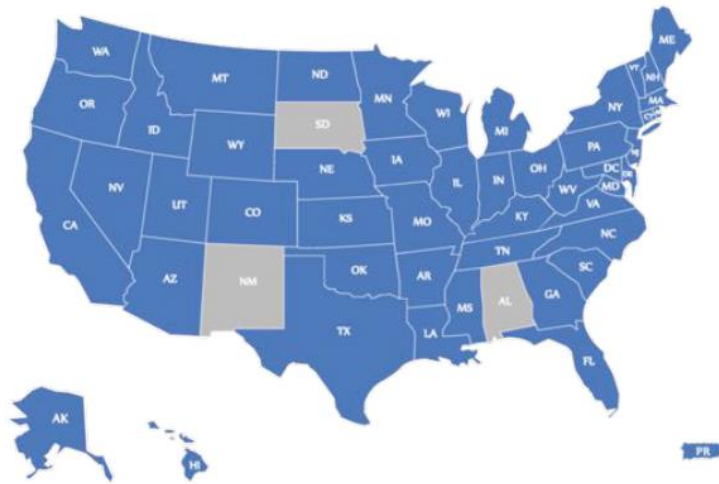




# Regulatory Landscape

- **State Laws / Regulations**

- Data Breach-related and Notification Laws in 47 States, the District of Columbia, Puerto Rico, U.S. Virgin Islands and Guam (as of June 2015)



**California was first state (2003).**

**Today, Alabama, New Mexico and South Dakota are the only states without a current law**



# U.S. Regulatory Landscape

- **Federal Legislative and Regulatory Initiatives**

- The Health Insurance Portability and Accountability Act (HIPAA) and Health Information Technology for Economic and Clinical Health (HITECH) Act
- Graham-Leach-Bliley
- Efforts to encourage development of Information Sharing and Analysis Organizations (ISAOs)
- Monitor how Financial institutions manage cyber threats
- Various Proposed Bills (2015)
  - A national standard for data security and reporting data breaches (to preempt and replace existing state laws)
  - Limiting legal liability for those that voluntarily sharing certain cyber threat data with the government

- **NAIC – Cybersecurity Task Force**

# Cyber Data





# Cyber Data Considerations

- What is the intended use of the data?
- Who is going to contribute the data?
- How is the data going to be contributed?
- How is the data going to be aggregated?
- How is the raw data going to be turned into useful information?
- What is the desired data?



# Cyber Database Examples

## Cyber Threat (Live/Occurring) Database

A real-time compendium of known and emerging threats within the cyber realm, including mitigation recommendations and threat analysis (to assist in the mitigation of cyber threats).

## Post Incident Database

A compendium of post-cyber incident event details.

## Insurance Claims and Pricing Database

A tool for the centralized reporting of insurance policy, premium and claims information, to assist insurers in underwriting and pricing risk.



# Where is Cyber Data?

- Insurance Carriers and Brokers
- Cyber Service Providers | Research Firms
- Information Sharing and Analysis Centers (ISACs)
- Information Sharing and Analysis Organizations (ISAOs)
- Property Casualty Statistical Reporting Agents





# Publicly Available Cyber Resources

- Betterley Reports (Cyber Risk | Tech E&O | Media Liability)
- Data Loss Data Breach (<http://datalossdb.org/>)
- Identity Theft Resource Center (<http://www.idtheftcenter.org/IN-THE-NEWS/Alerts/>)
- Insurance Information Institute (*Cyber Risks: The Growing Threat* [June 2014])
- NetDiligence (*2014 Cyber Claims Study* [December 2014] and other studies)
- Ponemon Institute (*May 2015 Cost of Data Breach Study* | *September 2014 Is Your Company Ready For A Big Data Breach?* Study, and other studies)
- Verizon (*April 2015 Data Breach Investigations Report*)
- White papers | Webinars (Insurers – Brokers – Law Firms – Vendors)
- ISO Cyber Risk Solutions ([www.iso.com/cyber](http://www.iso.com/cyber))
- Industry and cyber-specific conferences



# Wide Range of Risks

- Alternative energy
  - solar, wind, geothermal
- Artificial intelligence
- BYOD
- Climate change
- Cyber security
- Counterfeit/hazardous products
- Driver/vehicle issues
  - autonomous vehicles
- Drones
- Food-related issues
- Genetically Modified Organisms
- Green Movement
- Internet of Things
- Hydraulic fracturing
- Litigation financing
- Medical/recreational marijuana
- Nanotechnology
- Pandemic
- Ridesharing
- Social media liability
- Space weather
- Supply chain vulnerability
- Terrorism
- 3D Printing
- Water quality/scarcity





# Emerging Issues

"When preparing for a crisis, it is instructive to recall that Noah started building the ark before it began to rain."

*Norman Augustine, retired chairman and CEO of Lockheed Martin*



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