

## Cyber Insurance Product Development SRMC Spring 2017 Conference

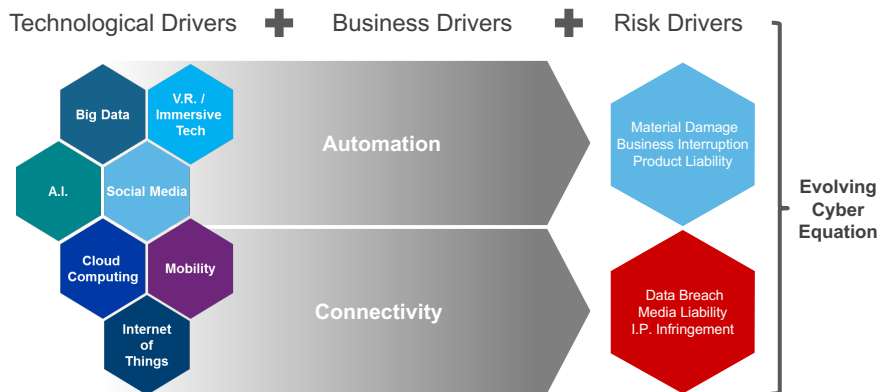
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Prepared by Aon Risk Solutions

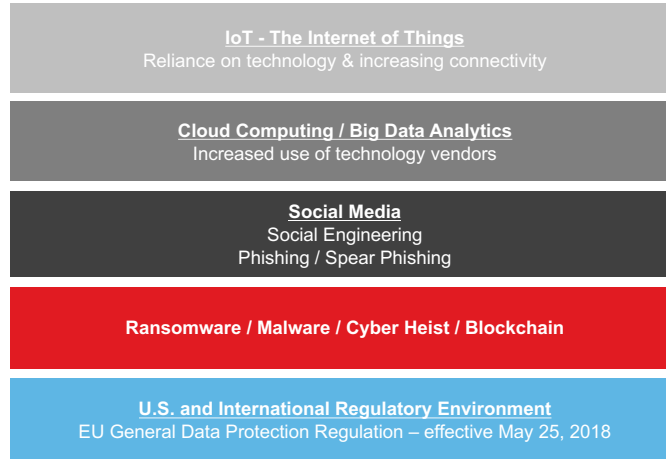


### The Evolving Cyber Threat

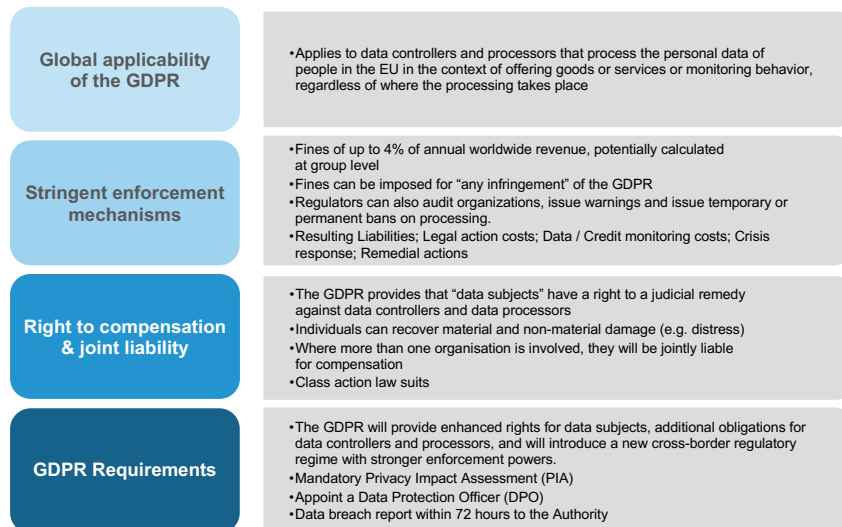
*( Across all industries, our clients are continuing to invest in deploying digital technologies to stay competitive and drive quality and efficiency objectives )*



## 2017 Cyber Exposure Trends



## The General Data Protection Regulation (GDPR) Compliance Deadline: May 25, 2018



## Cyber Coverage For Regulatory Investigations

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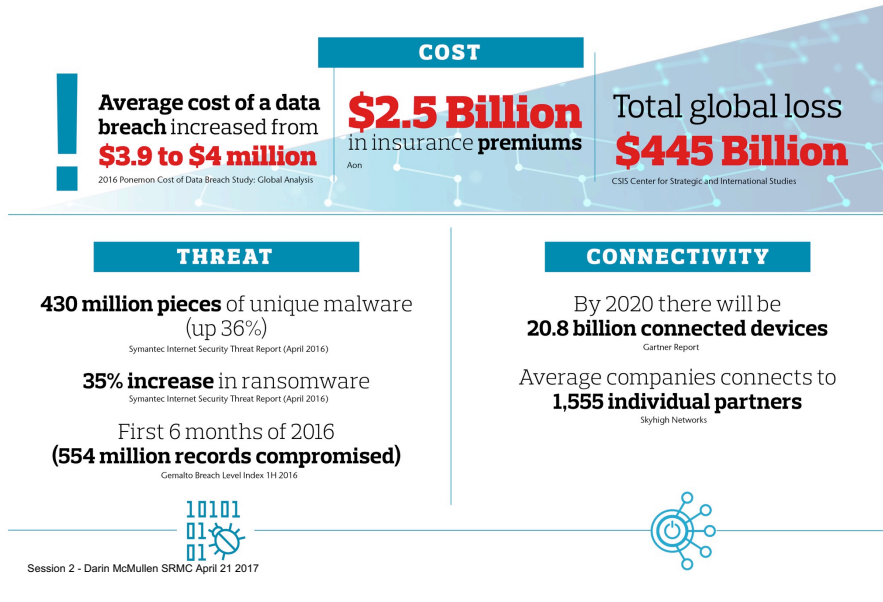
- No uniformity in language or coverage
- Definition of “Regulatory Action” varies
  - Some definitions may exclude coverage for critical investigatory agencies or authorities.
- PCI fines and penalties contractual in nature, not regulatory
- Trend away from sublimits and toward full limits
- Costs of compliance with regulatory orders
- Foreign government investigations included?

## Cybersecurity Industry Challenges

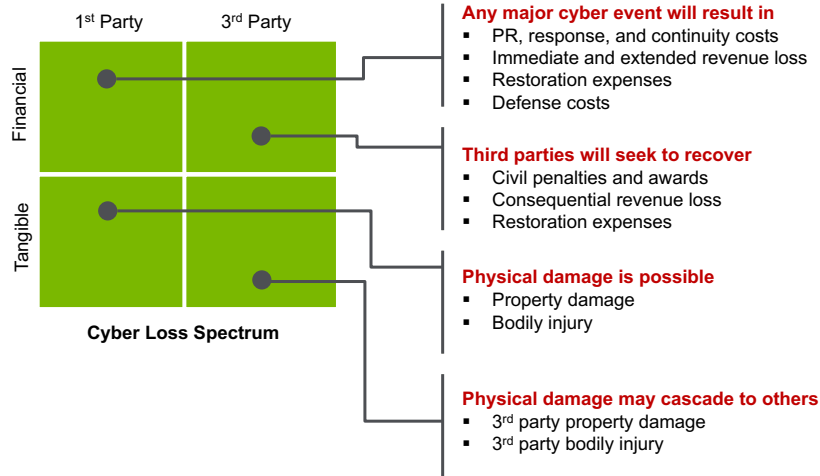
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- Cyber threats **evolve rapidly** and can quickly endanger a company that can't keep pace.
- Organizations are under persistent pressure to **refine** their **defenses** against **attackers** who are **constantly advancing** their techniques.
- **Regulators** are also trying to **keep pace** further complicating an organization's risk management approach.
- Organizations must commit to a **continuous process** of **evaluation** and **improvement**.
- Regular assessments, testing, refinement, and responsiveness are essential to **keeping critical assets protected** and **ensuring strong governance** and compliance.
- Organizations need to be constantly focused on **limiting** the **economic** and **reputational damage** from incidents.

## Cyber Threat Landscape



## Cyber Risk Impacts All Loss Quadrants



## Quantify

### Quantify the financial impact from cyber risks to inform risk reduction and transfer strategies

Leveraging analytics and innovative modeling techniques to quantify and proactively manage threats to the corporate balance sheet

- Understand the financial losses from cyber risk through the modeling of first and third party exposures
- Evaluate the effectiveness of risk financing strategies and offer insights in addition to traditional insurance benchmarking
- Establish appropriate limits of liability when cyber insurance is part of the solution
- Leverage data-driven decision making to demonstrate "economic value" (ROI) of investment in cyber mitigation and transfer strategies
- Enhance board-level understanding of shareholder value of risk associated with the cyber risk profile
- Utilize evidence-based prioritization of cybersecurity programs and improvement roadmaps based on cyber loss modeling

## Cyber Insight: Probable First & Third Party Total Losses



*\$ in million*

Confidence Level	Year / Event	First Party	Third Party	Total
90%	10	\$0.29	\$0.71	\$1.00
95%	20	\$0.53	\$1.44	\$1.97
96%	25	\$0.62	\$1.67	\$2.29
97%	33	\$0.74	\$2.05	\$2.79
98%	50	\$0.94	\$2.63	\$3.57
99%	100	\$1.51	\$4.35	\$5.86
99.5%	200	\$3.50	\$11.57	\$14.99
99.9%	1,000	\$13.15	\$55.12	\$68.40
99.95%	2,000	\$22.14	\$95.58	\$119.95
99.99%	10,000	\$50.01	\$245.80	\$290.94

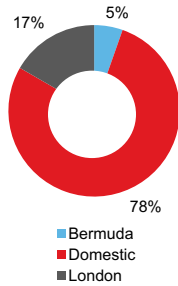
The biggest First Party cost is Forensics

The biggest Third Party cost is Class Action

There is a 99% chance that losses will be \$5.86 million or less, or every 1 in 100 years there will be a loss of \$5.86 million

## Global Cyber Insurance Marketplace

### Aon Client Premium Spend



- AIG
- Allianz
- Arch
- Argo
- Aspen
- AXIS
- AWAC
- BCS
- Beazley
- Berkshire Hathaway
- Chubb
- CNA
- CV Starr
- Endurance
- Nationwide
- Hartford
- HCC
- Hiscox
- Ironshore
- Liberty
- Mutual
- QBE
- RLI
- RSUI
- SCOR Re
- Swiss Re
- Travelers
- XL- Catlin
- Zurich



- ANV
- Ascent
- Aspen
- AIG
- Axis
- Barbican
- Beazley
- Brit
- CFC
- Chubb
- Emerging Risks
- Hannover Re
- HCC
- HDI Gerling
- Hiscox
- Kiin
- Liberty
- Markel
- Munich Re
- Novae
- Principia
- Sceimus
- SCOR
- Swiss Re
- Talbot
- Zurich



- AIG
- Chubb
- Markel
- Argo
- Aspen
- AWAC
- AXIS
- Endurance
- Iron-Starr
- XL - Catlin

## Scope of Cyber Insurance Coverage

Defense Costs + Damages + Regulator Fines	Insured's Loss	Expenses Paid to Vendors
<b>Liability Sections</b> <ul style="list-style-type: none"> <li>▪ Failure of Network Security</li> <li>▪ Failure to Protect / Wrongful Disclosure of Information, including employee information</li> <li>▪ Privacy or Security related regulator investigation</li> <li>▪ All of the above when committed by an outsourcer</li> <li>▪ Wrongful Collection of Information (some policies)</li> <li>▪ Media content infringement / defamatory content</li> </ul>	<b>First Party Sections</b> <ul style="list-style-type: none"> <li>▪ Network-related Business Interruption</li> <li>▪ Extra Expense</li> <li>▪ System Failure Business Interruption (some policies)</li> <li>▪ Dependent Business Interruption (some policies)</li> <li>▪ Intangible Asset damage</li> </ul>	<b>Expense / Service Sections</b> <ul style="list-style-type: none"> <li>▪ Crisis Management</li> <li>▪ Breach-related Legal Advice</li> <li>▪ Call Center</li> <li>▪ Credit Monitoring, Identity Monitoring, ID Theft Insurance</li> <li>▪ Cyber Extortion Payments</li> </ul>

## Q1 2017 Market Snapshot



Capacity

Capacity is continuing to grow across geographies

- Over 65 Insurers providing E&O / Cyber capacity
- Capacity is available in US (primary and excess), London (primary and excess) and Bermuda (excess only, generally excess of \$50M)
- From a primary perspective, there continues to be a growing number of Insurers developing appetites for large, complex risks
- There is over \$500M in theoretical capacity available in the E&O / Cyber market place



Coverage

Coverage continues to evolve and become more valuable

- Coverage breadth and limit availability continues to expand
- Insurers continue to differentiate their offerings with new or enhanced coverage components
- Breach response coverage continues to increase and expand to meet insured's needs
- Insurers continue to build out pre-breach offerings as part of their policy package



Claims & Losses

Stronger data is being gathered as more breaches are reported

- Increased ransomware activity and business interruption concerns
- Complexity of breaches has driven an increase in incident response expenses incurred by Insureds
- Claims and loss data has expanded coverage offerings and improved actuarial data for loss modeling purposes
- Increasingly punitive legal and regulatory environment
- Plaintiff's bar continues to advance proof of "damages" theories in security / privacy context
- Open privacy-related litigation can take years to conclude



Retentions

Retentions have normalized since 2015 pressures

- Retentions of all levels are available in the market, but can vary greatly based on industry class, size and unique exposures
- Adjusting retentions can lead to increased coverage and / or increase flexibility in limits and pricing



Pricing

Pricing trends are stable

- Depending on loss history and claims experience, pricing has stabilized and is competitive
- Renewal premiums are commensurate with exposure and breadth of coverage
- Excess rate environment is competitive

*Note: This is a general summary and could vary based on client industry and size*

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## Cyber Claims Environment

- Considerations for Coverage
  - Notice Requirements
  - Consent Requirements Under Cyber Policies
- Developing Case Law
  - PF Chang's Decision
  - Evolving (and Potentially Inconsistent) Rulings on Standing in Class Actions
- Coverage for "cyber-related" Losses under Traditional Policies

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Risk, Reinsurance, Human Resources.  
Session 2 - Darin McMullen SRMC April 21 2017

