Cyber Insurance 101

FOR SECURITY PROFESSIONALS



JEFFREY SMITH

Cyber Risk Underwriters 866.292.3092 jsmith@cyberriskuw.com

Cyber Insurance 101

KEY TAKEAWAYS

Common Ground
Value Proposition
What's Included & What's Not
Calculating Claims Costs
Market Intel

Q: Cyber Insurance or InfoSec?

"It's scary and confusing...but at least it's boring..."

CFO Healthcare Services Provider 2019

A: Yes



CEO: "Last time I saw you, I gave you money for more security"

CISO: "We've been hacked!"



CYBER INSURANCE 101: FOR SECURITY PROFESSIONALS



"Jeffrey, slow down. I didn't understand a word you said"

Robert "@RSnake" Hansen 2017

Cyber Insurance Value Proposition

UTSIDE PERSPECTIVE

Free second look under the hood can validate existing security efforts

IMMEDIATE SUPPORT

Access to vetted legal, forensics, notification and other related experts who know how to resolve problems

FINANCIAL RECOVERY

Reputation management, lost income, fines & penalties, and credit monitoring

GET BACK TO BUSINESS

Continued legal and financial support as well as security tools tools to augment your existing efforts

Cyber Insurance: What is it?

INSURANCE CONTRACT

Stand-alone policy or endorsed to other business insurance policies such as property, medical malpractice, and crime

DISTRIBUTION

Primarily via property & casualty insurance agents and brokers

WARRANTIES & CHANNEL

Also used to back security vendor warranties and MSSP offerings

Cyber Insurance: Product Offering

FIRST PARTY COVERAGE

Your stuff

THIRD PARTY COVERAGE

Liability claims brought by a third-party

SERVICES

Vetted vendors & evolving security services



Cyber Insurance: "First-Party" Remedies Your Direct Expenses

BREACH RESPONSE

- Incident Response
- Legal Expenses
- Notification
- Forensics
- Public Relations
- Credit Monitoring
- Post Breach Remediation

CYBER CRIME

- Extortion
- Funds Transfer Fraud
- Phishing
- Telecom Fraud

BUSINESS INTERRUPTION

- System Interruption
- Dependent System Interruption
- Reputational Damage
- Net Income & Expenses
- Data Recovery

OTHER STUFF

- Hardware
- Court Attendance
- Reward Expenses
- Cryptojacking
- Claims Preparation

Cyber Insurance: Third-Party Coverage

Legal Defense and Indemnity

SECURITY & PRIVACY

- Defense & Damages
- Assumed Under Contract
- Malware Transmission
- Unauthorized Release of PHI/PII

REGULATORY DEFENSE

- Regulatory Defense
- Compensatory Awards
- Fines & Penalties
- Federal, State, Local or Foreign
- Insurable by Law

PCI-DSS LIABILITY

- Defense & Damages
- Assessments
- Fines
- Penalities

MULTIMEDIA LIABILITY

- Electronic & Written
- Libel, Slander & Disparagement
- Infringement: Copyright, Domain Name, Trademark
- Plaigarism

Cyber Insurance: Insurer Services Vetted Response & Recovery

- Legal
- Incident Response/Forensics
- Notification & Credit Monitoring
- Forensic Accounting
- Public Relations

Claim & Services Timeline



Breach Report & Evaluation



Managing Short-Term
Crisis



Managing Long-Term Consequences



Mitigation Tools & Consultation

- Breach coach
- IT Forensics
- Claim legitimacy
- Legal and regulatory
- Engage other resources

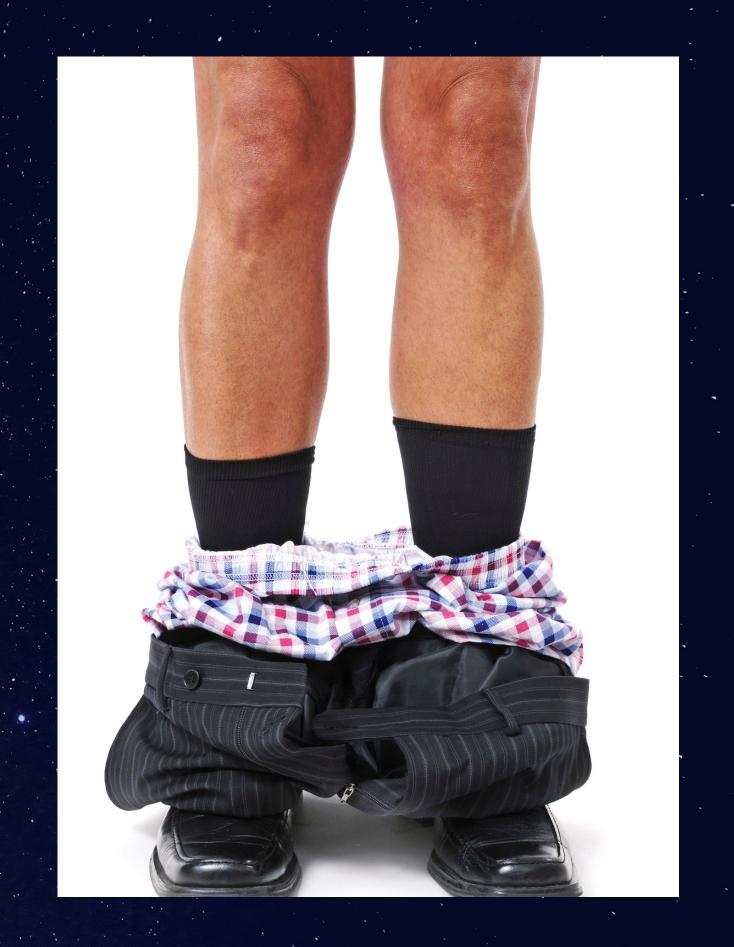
- Notification
- Credit monitoring
- Public relations
- Data recovery

- Loss of income,
- Brand Management
- Legal Defense
- Class Actions
- Regulatory fines & penalties

- Training
- Phishing simulations
- Domain protection
- Network monitoring
- Patch management
- Password management
- Legal/PR & security consulting

Coverage Limitations

Coverage limitations include policy exclusions but are also buried in conditions and definitions....



Limitations: Typical Exclusions

INSURED ELSEWHERE

- Anti-Trust
- Bodily Injury & Property Damage*
- IP/Patent Infringement
- Management Liability

UNINSURABLE

- Nuclear
- War*/Terrorism*
- Core Internet
 Infrastructure Failure
- Utility Power Failure*
- Domain Revocation

AGAINST PUBLIC POLICY

- Intentional Acts of Senior Executives
- Sanctions
- Criminal Acts
- Fines & Penalties Not Insurable By Law

OTHER

- Outside Policy Period
- Contractual*
- Betterment*
- Technology E&O*
- Government Orders

Limitations: Conditions & Definitions

To name a few...

- Representations & Warranties
- Reporting Provisions
- In The Event of a Claim
- Retentions and Wait Periods

How Much Do We Need?

Scenario 1

1,500,000
Personally Identifiable (PII)
Hack
No
100%
rs? No
Medium
Medium (regional news)
Average

FINAL ESTIMATE & FAO

A data breach could cost Cyber Risk Underwriters:

\$5_4\footnote{1}\$
\$3.59 per record

Breach Coach	\$130,000
Forensics	\$250,000
Crisis Management	\$150,000
Notification	\$840,000
Call Center	\$730,000
Credit Monitoring	\$870,000
PCI Fines and Assessments	\$0
Regulatory Fines & Defense	\$420,000

How Much Do We Need?

Scenario 2

	Customer and Employe
2. How many individuals' data	? 1,500,00
3. Type of records?	Health and Credit Card (PHI & PC
4. Type of breach?	Hac
5. Based out of California?	Ye
6. Store customer mailing add	Iresses? 1009
7. Publicly disclosed breach in	n last 2 years?
8. Network complexity?	Mediu
9. Size of news story?	Medium (regional news
10. Security controls?	Averag

View Frequently Asked Questions and Disclaimer

A data breach could cost Cyber Risk Underwriters: \$36.4 M

\$24.28 per record

Breach Coach	\$130,000
Forensics	\$500,000
Crisis Management	\$200,000
Notification	\$840,000
Call Center	\$730,000
Credit Monitoring	\$1,200,000
PCI Fines and Assessments	\$11,000,000
Regulatory Fines & Defense	\$820,000
Class Action Settlements & Defense	\$21,000,000

Courtesy of At-Bay Insurance

STATE OF THE MARKET 2019

"The cyber insurance market continues to grow and underwriting performance in this sector remains strong. As well as things are going, there are challenges, with uncertainty around pricing being just one. Underwriting business interruption remains difficult. Also, the threat that insurers are most worried about remains a systemic event that could cause extensive losses and jeopardize a cyber insurers solvency."

- AM BEST

Cyber Insurance Market Evolving and competitive

- 1% of business insurance premiums
- Some 200 insurers providing coverage but only about 20 serious players
- Two distinct markets: Enterprise & SME
- Take up rates difficult to measure but under 50%

