

system
Security identity multimedia
CYBER
networks secure attack hack
information encryption



The Risks

Legal liability to others for computer/network security breaches

Legal liability to others for privacy breaches

Loss or damage to data / information

Loss of revenue due to a computer attack

Extra expense to recover / respond to a computer attack

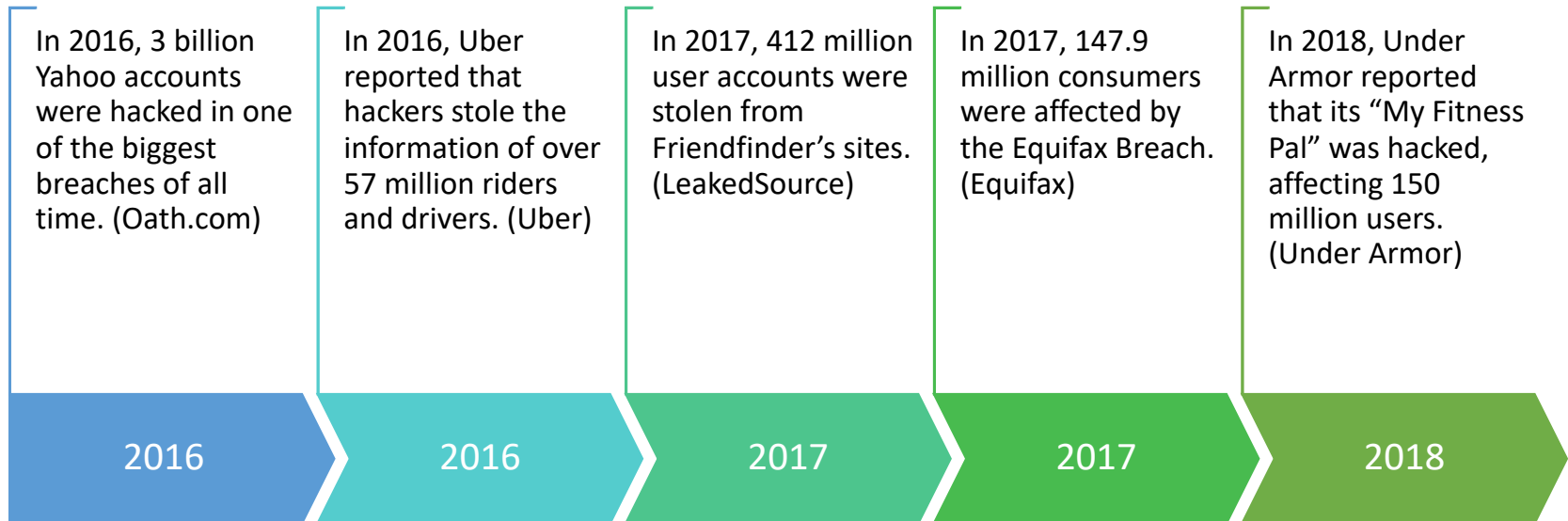
Loss or damage to reputation

Regulatory actions and scrutiny

Cyber-extortion

Cyber-terrorism

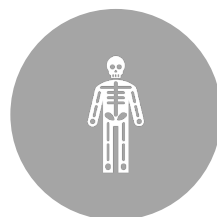
Large Company Breaches



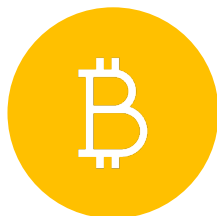
What about the little guys.....



61 percent of breach victims in 2017 were businesses with under 1,000 employees. ([Verizon](#))



21 percent of all files are not protected in any way. ([Varonis](#))



41 percent of companies have over 1,000 sensitive files including credit card numbers and health records left unprotected. ([Varonis](#))



Nearly half of the security risk that organizations face stems from having multiple security vendors and products. ([Cisco](#))

How often is
this
happening....

Thirty-one percent of organizations have experienced cyber attacks on operational technology infrastructure. ([Cisco](#))

There are around 24,000 malicious mobile apps blocked every day. ([Symantec](#))

Cryptojacking increased by 8,500 percent in 2017. ([Symantec](#))

In 2017, 5.4 billion attacks by the WannaCry virus were blocked. ([Symantec](#))

What's the cost.....

- The Equifax breach cost the company over \$4 billion in total. ([Time Magazine](#))
- The average cost per lost or stolen records per individual is \$141 — but that cost varies per country. Breaches are most expensive in the United States (\$225) and Canada (\$190). ([Ponemon Institute's 2017 Cost of Data Breach Study](#))
- In companies with over 50k compromised records, the average cost of a data breach is \$6.3 million. ([Ponemon Institute's 2017 Cost of Data Breach Study](#))
- Including turnover of customers, increased customer acquisition activities, reputation losses and diminished goodwill the cost of lost business globally was highest for U.S. companies at \$4.13 million per company. ([Ponemon Institute's 2017 Cost of Data Breach Study](#))

In 2017, cyber crime costs accelerated with organizations spending nearly 23 percent more than 2016 — on average about \$11.7 million. ([Accenture](#))

The average cost of a malware attack on a company is \$2.4 million. ([Accenture](#))

The average cost in time of a malware attack is 50 days. ([Accenture](#))

From 2016 to 2017 there was an 22.7 percentage increase in cybersecurity costs. ([Accenture](#))

The average global cost of cyber crime increased by over 27 percent in 2017. ([Accenture](#))

The most expensive component of a cyber attack is information loss, which represents 43 percent of costs. ([Accenture](#))

Ransomware damage costs exceed \$5 billion in 2017, 15 times the cost in 2015. ([CSO Online](#))

What does the future look like....

- Damage related to cybercrime is projected to hit \$6 trillion annually by 2021. ([Cybersecurity Ventures](#))
- Ransomware attacks are growing more than 350 percent annually. ([Cisco](#))
- IoT attacks were up 600 percent in 2017. ([Symantec](#))
- The industry with the highest number of attacks by ransomware is the healthcare industry. Attacks will quadruple by 2020. ([CSO Online](#))
- Ransomware damage costs will rise to \$11.5 billion in 2019 and a business will fall victim to a ransomware attack every 14 seconds at that time. ([Cybersecurity Ventures](#))
- Variants of mobile malware increased by 54 percent in 2017. ([Symantec](#))

The background is a dark blue gradient with a pattern of glowing binary code (0s and 1s) in light blue and white. Overlaid on this are several semi-transparent financial charts. On the left, there is a candlestick chart with red and white bars. In the center and right, there are line graphs with red and blue lines, and a bar chart with red bars. The overall aesthetic is high-tech and financial.

The Cyber Market

WOW!!!!!!

DID I PEAK YOUR
INTEREST YET???

CYBER TERMS

A word cloud of various cyber-related terms. The words are arranged in a roughly rectangular shape, with some words being larger and more prominent than others. The colors of the words include shades of blue, green, orange, and red. The terms include: RANSOMWARE, CYBERSECURITY, ATTACK, COMPUTER, SOCIAL, SMISHING, SPYWARE, UTM, MALWARE, TROJAN, SPOOFING, VULNERABILITY, PHISHING, LAYERED, WORM, BOTNET, ADWARE, BCDR, DDOS, FIREWALL, ZERO DAY, ENGINEERING, and VISHING.

RANSOMWARE
CYBERSECURITY
ATTACK
COMPUTER
SOCIAL
SMISHING
SPYWARE
UTM
MALWARE
TROJAN
SPOOFING
VULNERABILITY
PHISHING
LAYERED
WORM
BOTNET
ADWARE
BCDR
DDOS
FIREWALL
ZERO DAY
ENGINEERING
VISHING

CLOUD COMPUTING

Top 10 Cloud Providers





CYBER PERILS

[illegible]



**Corporate
Blog**

**Corporate
Blog**

Blog

CORPORATE BOGGING

Creating or editing a web log, discussion forum post, online comment, or other associated social media activity where the primary purpose of that activity is to promote the insured or the individual's position within insureds industry even if the nature of the content is not directly associated with insureds business activities

Corporate Blog

Corporate

Corporate

DATA BREACH



HACKING ATTACK

Any malicious or unauthorized electronic attack including but not limited to any fraudulent electronic signature, brute force attack, phishing, denial of service attack, that has been initiated by any third party or by any employee and that is designed to damage, destroy, corrupt, overload, circumvent or impair the functionality of computer systems.



DENIAL-OF-SERVICE
DoS ATTACK

DENIAL-OF-SERVICE
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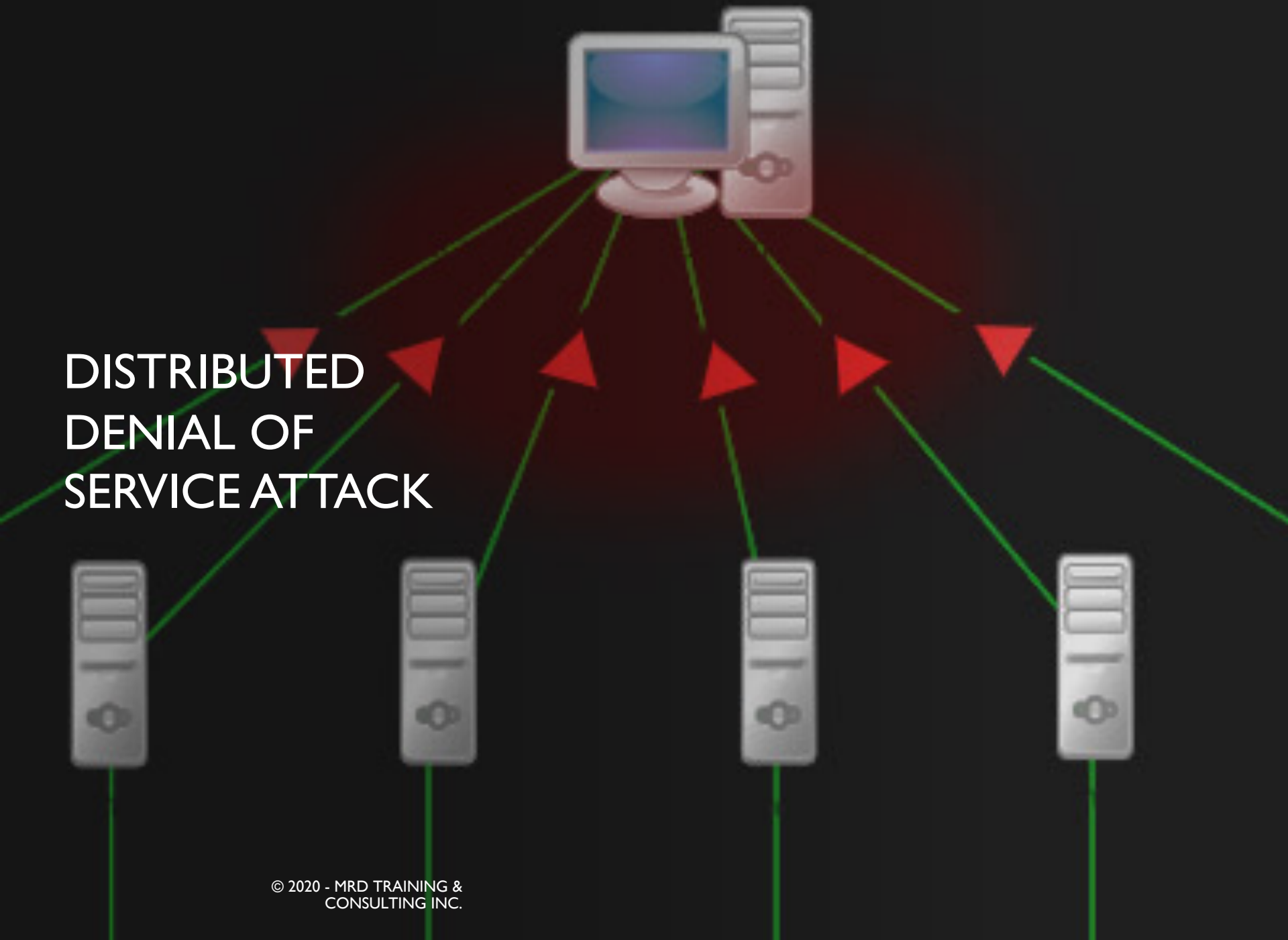
DENIAL-OF-SERVICE
DoS ATTACK

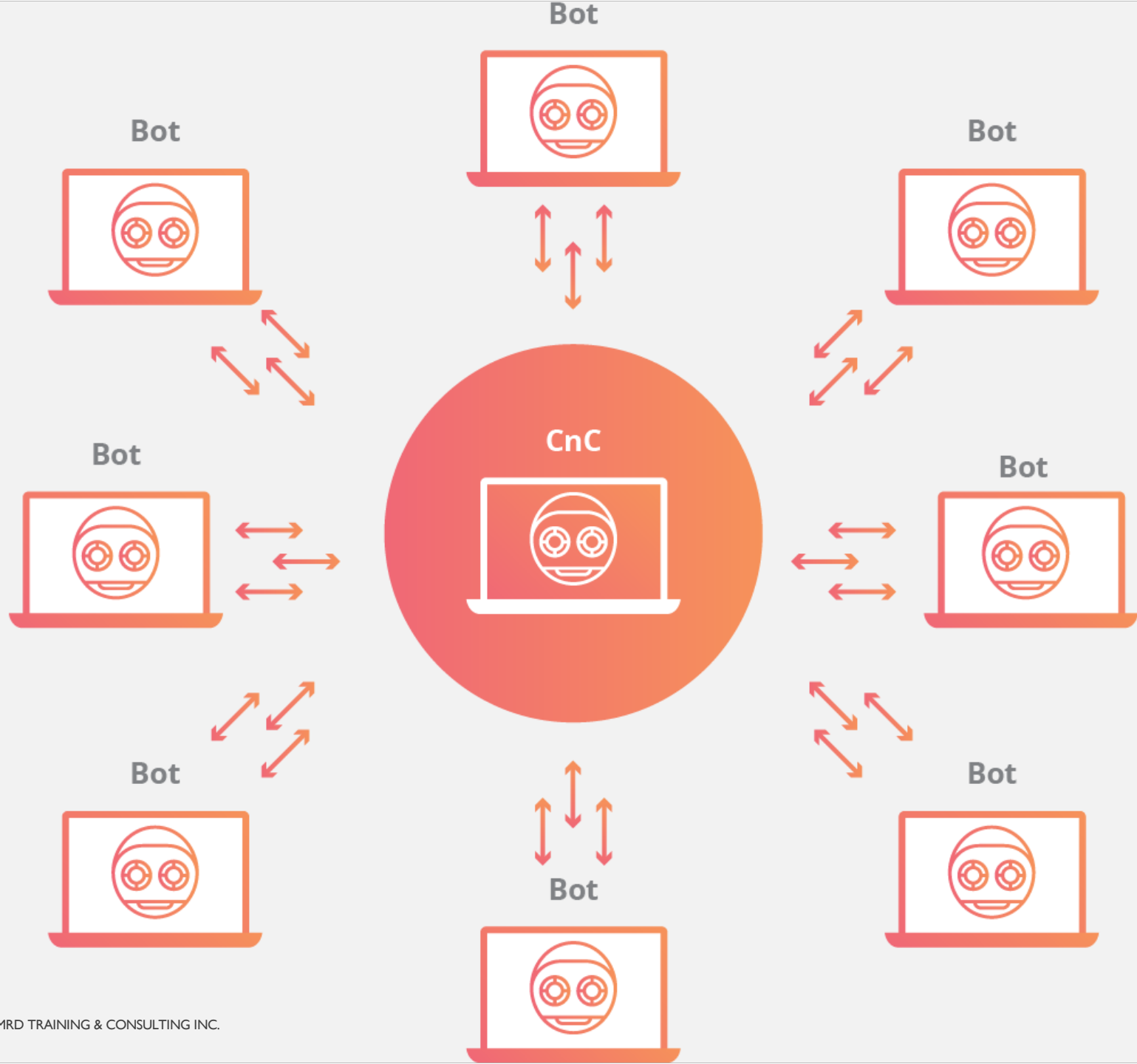
DENIAL-OF-SERVICE
DoS ATTACK

DENIAL-OF-SERVICE
DoS ATTACK

DENIAL-OF-SERVICE

DISTRIBUTED DENIAL OF SERVICE ATTACK









SYSTEM OUTAGE PERIOD

Means the period during which the insured's computer systems or a cloud computing provider's systems are unavailable or operating at less than full operational capacity as a direct result of the cyber peril.



In the event of an intermittent problem causing repeated unavailability of systems as a direct result of the same proximate cause this will be deemed to be one continuous period.



The maximum system outage period is as stated in the Declarations and varies between companies.

USER GENERATED CONTENT

An illustration featuring the text 'USER GENERATED CONTENT' in large, bold, sans-serif font. 'USER' is black, 'GENERATED' is yellow, and 'CONTENT' is blue. Several stylized human figures in business attire are positioned around the text: one stands to the left of 'USER'; another sits on the 'C' of 'CONTENT' with a laptop; two stand between 'GENERATED' and 'CONTENT'; one stands on top of the 'A' in 'GENERATED' with a phone; another sits on the 'T' of 'CONTENT' with a laptop; and a final figure sits on a stool to the right of 'CONTENT' with a laptop. The background is white with scattered colorful confetti (squares, triangles, circles) and faint dashed lines.



**WE KEPT
CALM
AND WE
FINISHED STRONG**

KeepCalmAndPosters.com



The background is a complex digital illustration. It features a central black keyhole shape. Surrounding the keyhole are concentric circles of glowing blue and cyan lines, resembling a tunnel or a data stream. The entire scene is overlaid with a network of white and blue circuit-like lines that branch out towards the edges. The color palette is dominated by dark blues, light blues, and cyans, with black for the keyhole and some circuit elements.

Let's Talk First Party First....

Crisis Event Management Expenses



- Coverage for public relations services to mitigate negative publicity as a result of cyber liability

Security Breach Remediation and Notification Expenses



- Costs incurred to determine whose identity information was accessed
- Notification to those individuals of the security breach
- Credit monitoring
- Identity fraud expense reimbursement for those individuals affected by the security breach



Computer Program And Electronic Data Restoration

- Coverage for expenses incurred to restore data lost from damage to computer systems due to computer virus or unauthorized access

Computer Fraud & Funds Transfer Fraud

- Coverage for loss of money, securities or other property due to unauthorized access to computer system
- Coverage for loss of money or securities due to fraudulent transfer instructions to a financial institution

HACKED



Reputation Guard



- Provides costs to restore Insured's reputation

Cyber Extortion



- Coverage for money paid due to threats made regarding an intent to fraudulently transfer funds, destroy data, introduce a virus or attack a computer system, or disclose electronic customer information
- Coverage for extortion demands by employees
- Network Extortion Demands - what is the currency language in the wording - will policy pay for demands for bitcoin, or only for government issued/regulated currency?



Cyber Media

- Coverage provided for numerous perils including copyright infringement, trademark infringement, defamation and invasion of privacy



Business Interruption

- Coverage for loss of income, and the extra expense incurred to restore operations, as a result of computer system disruption to the company's computer system caused by a virus or other unauthorized computer attack
- Coverage for loss of income, and the extra expense incurred to restore operations, as a result of a disruption to a service provider's computer system that the company relies on caused by a virus or other unauthorized computer attack

Social Engineering

- The use of deceptive tactics to manipulate people into volunteering sensitive information that is then leveraged for fraudulent purposes. Often, perpetrators use social engineering to harvest credentials for Account Takeover (ATO) or Corporate Account Takeover (CATO).





Let's Talk Third Party
Next....



Network and Information Security Liability

- Network and Information Security Liability
- Transmission of computer viruses
- Communications and Media Liability
- Regulatory and Defence Expenses



Let's Talk About Exclusions



Claims and circumstances known at inception arising out of any security breach, crime, hacking attack or virus of which a senior executive officer was aware, or ought reasonably to have been aware, prior to the Inception Date of the Policy, whether notified under any other insurance or not.



RICO - for any actual or alleged violations of the Racketeer Influenced and Corrupt Organisation Act 18 USC Sections 1961 et seq and any amendments thereto, or any rules and regulations promulgated thereunder.



SEC - for any actual or alleged violation of any of the provisions of the Securities Act of 1933, the Securities Exchange Act 1934 or any similar regional, provincial, territorial, federal or state law or any common law relating thereto.

UNLAWFUL SURVEILLANCE



A close-up photograph of a hand turning a metallic dial. The dial has a central black circle with the word 'RISK' in white capital letters. Around the dial's edge are three levels of risk: 'LOW', 'MEDIUM', and 'HIGH', separated by white lines. The hand is shown from the side, with fingers gripping the dial. The background is dark and out of focus.

UNDERWRITING THE RISK

CHALLENGES TO UNDERWRITING CYBER

THE EVOLVING
NATURE OF
CYBER RISK

LIMITED CYBER
LOSS
EXPERIENCE

DIFFICULTIES IN
ASSESSING
POLICYHOLDER
VULNERABILITIES

ACCUMULATION
RISK

NON-
AFFIRMATIVE
EXPOSURE

Let's Talk About The Legal Stuff

PIPEDA/PHIPA



PIPEDA applies to Canadian companies.



Governs collection, use, and disclosure of personal information.



PHIPA deals with freedom of information and the protection of certain private (medical) information.



Neither PIPEDA nor PHIPA provide a civil remedy for privacy infringement.

Bill S-4: Digital Privacy Act

Amendment to PIPEDA.

Requires organizations to inform consumers when their personal information has been lost or stolen.

Companies that fail to inform consumers or that destroy these records of a data breach will face fines up to \$100,000.

Commissioner could publicly name organizations that are non-compliant if in the public interest.

U.S. Patriot Act



Allows U.S. law enforcement officials to seek a court order that allows access to the personal records of any person without that person's knowledge.



Officials could access information about citizens of other countries, including Canada, if that information is physically within the United States or accessible electronically.



Canadian companies that store information on American servers might have little control over that information.



Disclosure to U.S. officials might contravene PIPEDA or PHIPA.



THANK YOU!!!