

How to severely lower the risk of cyber crimes and best practices to being compliant

MAHU Meeting
June 16, 2022

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TOP 20 CYBER INSURERS					
2020 RANK	2019 RANK	GROUP NAME	DIRECT WRITTEN PREMIUM	LOS RATIO WDCO	MARKET SHARE
1	1	CHUBB LTD GRP	\$404,144,104	81%	14.7%
2	2	AXIS INS GRP	250,025,192	79.2%	10.3%
3	3	AMERICAN INTNL GRP	228,424,771	100.0%	8.3%
4	4	ST PAUL TRAVELERS GRP	206,977,200	95.9%	7.5%
5	5	BRAZELBY GRP	177,746,192	47.2%	6.5%
6	6	AXIS CAPITAL GRP	133,548,704	46.2%	4.8%
7	7	CNA INS GRP	119,512,768	102.7%	4.3%
8	10	NATIONAL FINANCIAL GRP	108,997,536	75.0%	3.9%
9	11	HARTFORD FIRE & CAS GRP	102,864,533	75.4%	3.7%
10	8	ING INS GRP	86,582,899	103.1%	3.1%
11	14	TOKAI MARINE HOLDINGS INC GRP	78,160,355	104.9%	2.8%
12	12	DOMPO GRP	72,588,641	104.1%	2.6%

U.S. Senate Unanimously Passes Cybersecurity Legislation Requiring 72 Hour Cyber Incident Notification

Thursday, March 17, 2022
on March 16, 2022, the American Cybersecurity Act of 2022 (H.R. 2631) was sent to President Biden's desk.

Introduced by Senators Mark Warner (D-VA) and Chris Van Hollen (D-MD), the bill requires federal agencies to report a cybersecurity incident to the President within 72 hours of discovery. The bill also requires state and local government agencies to report a cybersecurity incident to the state or local government within 72 hours of discovery.

North Carolina has become the first state to prohibit its agencies and local governments from paying ransomware.

FTC Chair Poised To Offer Glimpse Into Privacy Priorities

By Alison Grady April 6, 2022, 10:47 AM
Chair prepares to deliver her first report to Congress on helping and protecting consumers.

Insurance industry being ravaged by high rate of cyberattacks

A new report from Black Kite shows the entire sector may be ripe for ransomware attacks.

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Compliance Security Productivity

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Agenda

- #1 Cyber Crime Today
- 5 Myths of Cyber Risks
- 3 Practices to Protect Against Crimes & Fines

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Let's bridge the gaps



Daniel Metcalf
Managing Partner - CyberFin

- 15+ years of experience building technology solutions and services
- 5 years of experience providing cyber solutions for banks, credit unions and financial services organizations
- Responsible for bringing the technology and services together to protect your businesses

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The #1 Cyber Crime Today



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#1 Crime – The Execution

- Email Threats
- Malware infiltration
- Social Engineering
- DDoS
- Phishing
- Spyware



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#1/2 Malicious E-mail Threat + Malware

From: [Redacted]
Subject: Your Xero Invoice 1:29 pm

Here's your latest Xero subscription invoice. The amount will be debited from your credit card on or after 23 Oct 2018.
View your bill online: INV.7309009

If you have any queries about your invoice amount, please see the support article at [Xero Central](#).

Regards,
The Xero Billing Team

Note: we have recently seen fake Xero subscription invoice emails being sent out by scammers. A genuine Xero subscription invoice email:

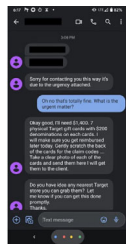
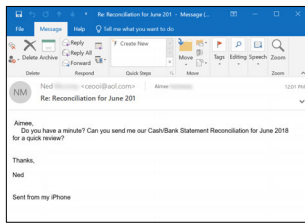
- Will be sent from: [Redacted]

48% of malicious email attachments are Microsoft Office files

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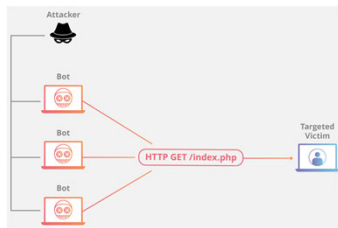
#3 Social Engineering



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#4 DDoS



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#5 Phishing

From: netflix <[REDACTED]>
 Subject: Update Payment Subscription - We can't authorize payment September 13, 2020. Order Number : 3845246

NETFLIX

Update current billing information

Hi,

Unfortunately, we cannot authorize your payment for the next billing cycle of your subscription. Netflix was unable to receive a payment because the financial

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#6 Spyware

Adware
Any software application that displays advertisements while the program is running.
E.g. banners, pop-up windows

Keyboard Loggers
A type of surveillance technology used to monitor and record keystrokes. Cyber-criminals can use these to steal sensitive information such as authorization credentials, enterprise data and computer activity.

Trojans
A software application that appears harmless but can inflict damage or data loss to a system.

Mobile Spyware
A type of spyware that can infect mobile devices that typically enters via SMS or MMS communication channels.

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Cybercrime – The Reality and Aftermath

Average downtime for a ransomware attack!

22 Days

Percentage of cyber attacks that target SMBs?

75%

Average ransomware payments 2018-2021*

2,000%

Fact 61% of SMBs reported at least one cyber attack during the previous year¹.

Fact The average payout by a mid-sized company² was **\$170,404** in 2021.

\$2 MILLION AVERAGE REMEDIATION COST FOR RANSOMWARE IN 2021

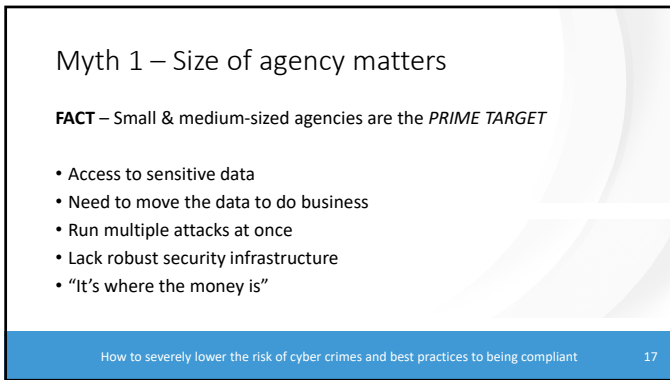
*CrowdStrike Marketplace Report (Q4 2020), ¹Coverandling: Size of Companies Impacted by Ransomware in Q2 2021 (July 2021), ²Corporate Compliance Insights (October 2020) and 2020 Incident Response & Data Breach Report by Cypsis. ³Stats found on www.crowdware.com for Q1 2021(\$220,298), Q2 2021(\$156,576) and Q3 2021(\$139,739) indicate the average payment in Q1-Q3 was \$165.53. ⁴https://www.verizon.com/business/resources/reports/stor/20cyberwithpaper:state-of-ransomware-2021

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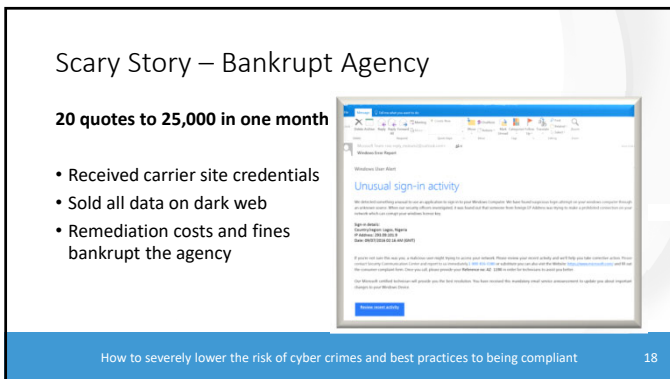
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Myth 2 – The Cloud Protects Me

FACT – Cloud computing brings threat to the agencies that rely on it

- You are now the front door to data
- Cloud back up overwrites
- Cloud security and business-based app systems have severe gaps
- You become a mule

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Myth 3 – The Homework is Easy

FACT – Clients do not necessarily want or need knowledge about cyber risk; what they really want is protection.

- Questionnaires, due diligence, audits, requirements... oh my...
- Few business/agency owners want to become Cyber Experts
- As bad guys get more sophisticated so does the information needed to protect yourself from each specific attack.

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Myth 4 – Cybersecurity Risk Rating Tools are Best Indicators of Client Technology Risks

FACT – A glowing “cyber report” often leads to a false sense of security

- The best rating tools are rife with inaccurate results and false security
- Zero capability of predicting a problem or one’s risk resiliency
- Does not include cloud computing or storage capabilities
- Simply does not tell you enough to make a judgement of cyber risk

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Myth 5 – Choosing the Right Tools and Technology is the Best Place to Start


FACT – The technology and tools are only as powerful of who is managing it

- Alerts, updates, patches and remediation is an always-on activity
- Volume and sophistication are only increasing
- Fitting the tools for the management is more important than the technology itself

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3 Best Practices to Severely Lowering Your Risk as an Agency



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Auto Industry Example

Layered protection at the user level



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Best Practice #1 – Mind the Gaps

FACT – A layered security approach focusing on the end user severely lowers your risk profile.

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Practice 2 – Ignorance is a Bad Defense

FACT – Follow the national guidelines

****Actively managing cyber security tools, policies and protocols keeps cyber-criminals, regulators, and underwriters out of your business**

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Practice 2 – Ignorance is a Bad Defense

A.C.T. Cyber Guide 3.0

Independent insurance agents and brokers must properly collect and protect sensitive client information every day.

CYBER GUIDE COMPLIANCE AND PROTECTION ROADMAP

1. Risk Assessment
2. **Written Security Policy**
3. Incident Response Plan
4. Staff Training & Monitoring
5. Penetration Testing & Vulnerability Assessment
6. **Access Control Protocol**
7. Written Security Policy For Third-Party Service Providers
8. **Encryption of Non-Public Information**
9. Designation of Chief Information Officer
10. **Audit Trail**
11. **Implementing Multi-Factor Authentication**
12. Procedure for Disposal of Non-Public Information

****ACT Guidelines**

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Practice 2 – Ignorance is a Bad Defense



NIST crosswalk to HIPPA

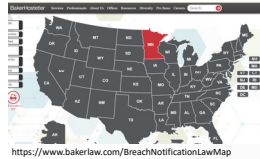
**Independent organization designed to create a national standard framework

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Practice 2 – Ignorance is a Bad Defense

State Reporting – Definitions by state of:

- Personal information
- Persons covered
- Encryption / Notification Trigger
- Content requirements
- Timing
- Penalty
- Other Provisions



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Practice 3 – Look Less Attractive to Criminals



FACT – Criminals are lazy and are looking for R.O.I. Make your agency less attractive to crime.

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Practice 3 – Look Less Attractive to Criminals

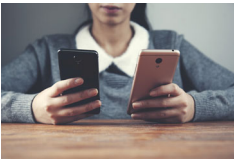
Create and require complex passwords with Multi-Factor Authentication

- 14+ characters
- Numbers, Upper and Lower Case
- Add Two Factor to e-mail, cloud and remote access

Number of Characters	Numbers Only	Letters Only	Upper and Lower Case Letters	Numbers, Upper and Lower Case	Numbers, Upper and Lower Case, Symbols
4	10,000	1,000,000	1,000,000	1,000,000	1,000,000
5	100,000	10,000,000	10,000,000	10,000,000	10,000,000
6	1,000,000	100,000,000	100,000,000	100,000,000	100,000,000
7	10,000,000	10,000,000,000	10,000,000,000	10,000,000,000	10,000,000,000
8	100,000,000	1,000,000,000,000	1,000,000,000,000	1,000,000,000,000	1,000,000,000,000
9	1,000,000,000	10,000,000,000,000	10,000,000,000,000	10,000,000,000,000	10,000,000,000,000
10	10,000,000,000	100,000,000,000,000	100,000,000,000,000	100,000,000,000,000	100,000,000,000,000
11	100,000,000,000	1,000,000,000,000,000	1,000,000,000,000,000	1,000,000,000,000,000	1,000,000,000,000,000
12	1,000,000,000,000	10,000,000,000,000,000	10,000,000,000,000,000	10,000,000,000,000,000	10,000,000,000,000,000
13	10,000,000,000,000	100,000,000,000,000,000	100,000,000,000,000,000	100,000,000,000,000,000	100,000,000,000,000,000
14	100,000,000,000,000	1,000,000,000,000,000,000	1,000,000,000,000,000,000	1,000,000,000,000,000,000	1,000,000,000,000,000,000
15	1,000,000,000,000,000	10,000,000,000,000,000,000	10,000,000,000,000,000,000	10,000,000,000,000,000,000	10,000,000,000,000,000,000
16	10,000,000,000,000,000	100,000,000,000,000,000,000	100,000,000,000,000,000,000	100,000,000,000,000,000,000	100,000,000,000,000,000,000
17	100,000,000,000,000,000	1,000,000,000,000,000,000,000	1,000,000,000,000,000,000,000	1,000,000,000,000,000,000,000	1,000,000,000,000,000,000,000
18	1,000,000,000,000,000,000	10,000,000,000,000,000,000,000	10,000,000,000,000,000,000,000	10,000,000,000,000,000,000,000	10,000,000,000,000,000,000,000

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Practice 3 – Look Less Attractive to Criminals



Maintain separation of business and personal devices and activities

- Business only devices both in and out of office
- Home office extension of field office
- Business only e-mail boxes and log-ins
 - (eliminate @gmail, @yahoo, @live, @outlook)

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Recap

- User-based layered security provides best protection
- Actively manage to one cyber security standard
- Authentication and complex passwords make your agency unattractive to cybercriminals



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Q&A


- Contact me directly for any additional questions
 - dm@cyberfin.net or
 - 612-888-0032

For more information visit us at www.cyberfin.net/TMA

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Thank You



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