

Cybersecurity Awareness

Why and How

Dennis King, President
Working Security Inc.
CISSP, C|EH, C|CISO, GCFA,PMP,
CSM, MBA





1



2



References:

"Fair Use" Disclaimer – THANKS TO:

Pirates of the Caribbean Film Series
Owned by Walt Disney

<https://pirates.disney.com/>

[https://en.wikipedia.org/wiki/Pirates_of_the_Caribbean_\(film_series\)](https://en.wikipedia.org/wiki/Pirates_of_the_Caribbean_(film_series))

Cybersecurity and the Age of Privateering: A Historical Analogy

Florian Egloff
florian.egloff@cybersecurity.ox.ac.uk
Clarendon Scholar
DPhil Candidate in Cyber Security
Centre for Doctoral Training in Cyber Security
and Department of Politics and International Relations, University of Oxford



3

Dennis King

- Certified Information Systems Security Professional (CISSP)
- Certified Chief Information Security Officer (C|CISO)
- Certified Ethical Hacker (C|EH)
- GIAC Certified Forensic Analyst (GCFA)
- Project Management Professional (PMP)
- Certified Scrummaster (CSM)
- Missouri License Private Investigator
- MBA – Washington University in St. Louis
- Engineer –Purdue University, Indiana
- FAA Certificated UAS Pilot (Drone)
- FCC Licensed Amateur Radio Operator (Extra)

[focus] : Health Care and Energy Services



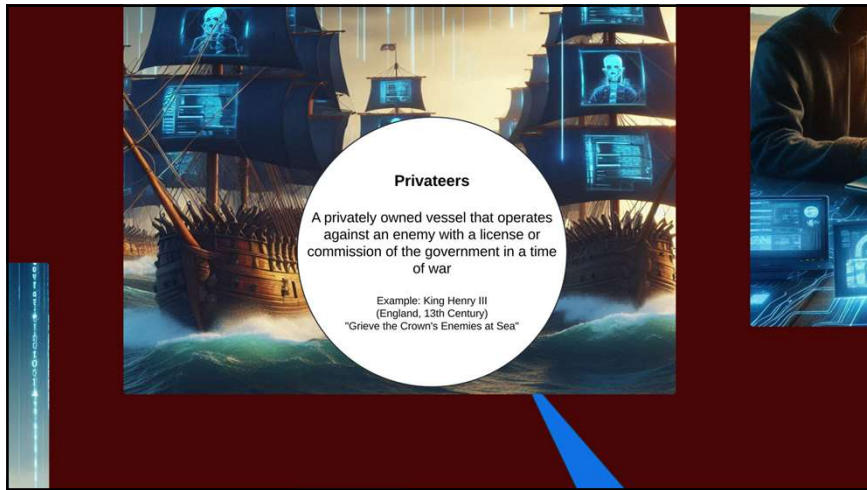
4



5



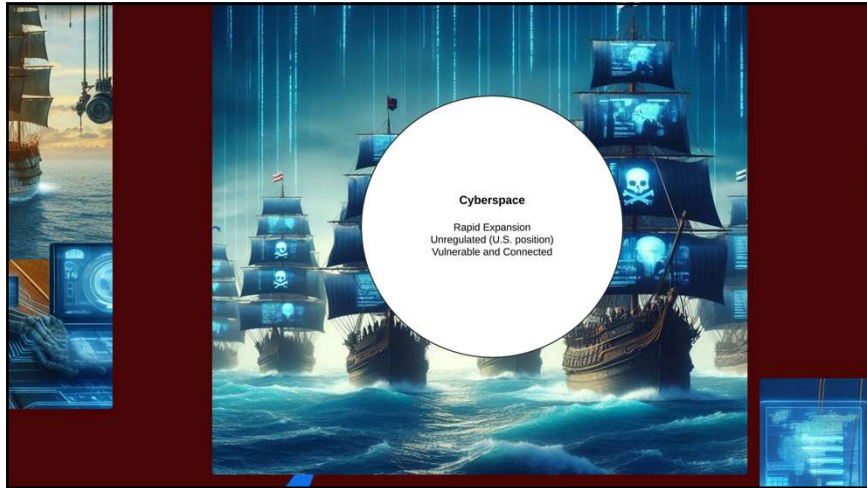
6



7



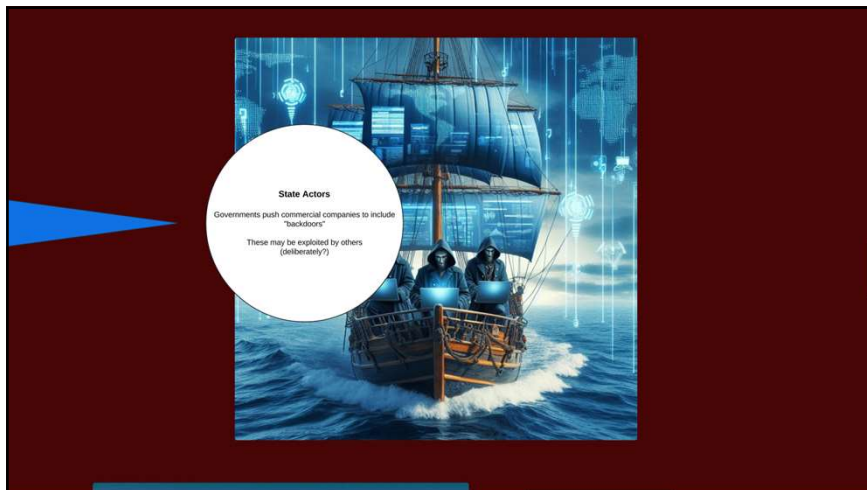
8



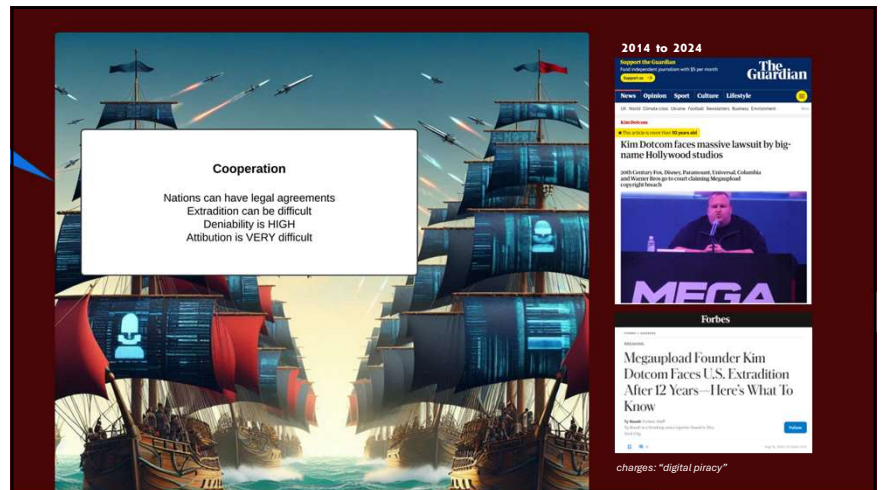
9



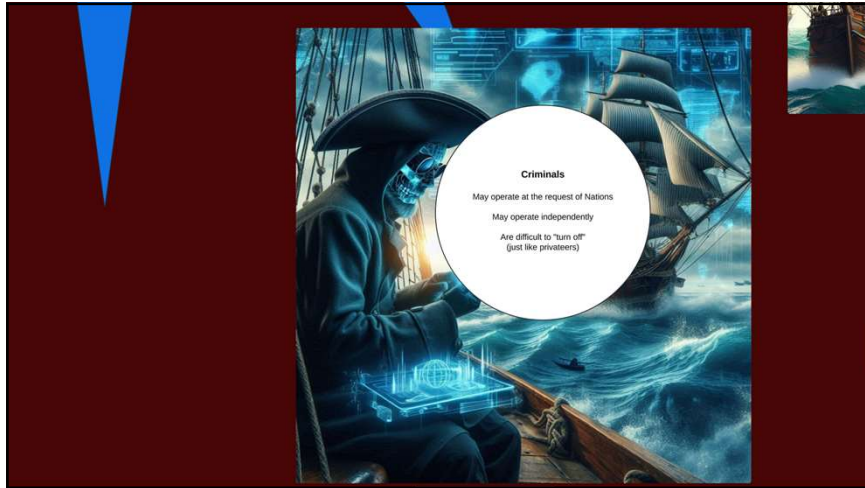
10



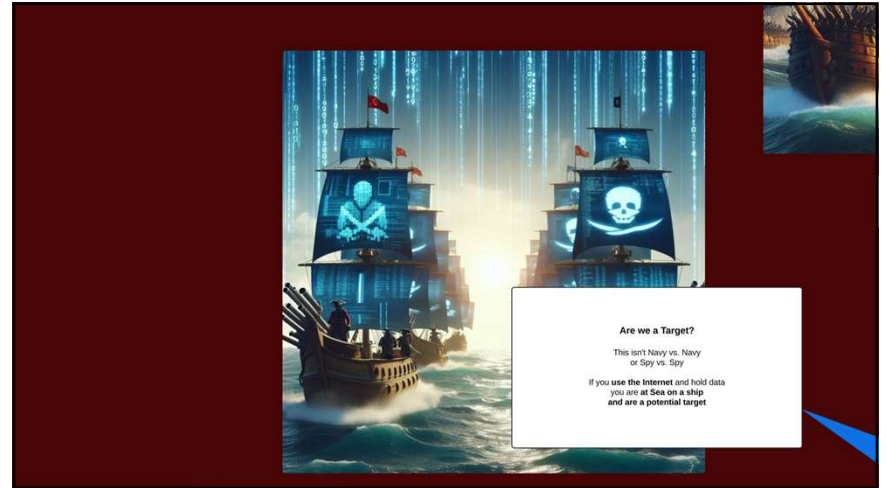
11



12



13



14

Differs from Piracy on the High Seas

- Cyber is a Force Multiplier
 - Very Small Groups Can "act Big"
- Very High Volume Probing Attacks (to find targets)
- Follow Up with "professional grade" Social Engineering
- Doesn't Cover all Threats
 - We are still at risk from traditional "local" threats like disgruntled employees, B&E, lost devices

15

Harvard Business Review
 Latest
 Cybersecurity And Digital
Effects of Cyber Breaches
 Immediate Costs vs. Long Term Cost
 Loss of Competitive Position
 Reputation - Customer Loss
 Disruption and Recovery from Breach

The Devastating Business Impacts of a Cyber Breach
 by Keman Huang, Xiaoping Wang, William Wei, and Stuart Madnick
 May 04, 2023

16



17



18

FBI Internet Crime Report (2023)

- Investment Fraud at **\$4.75 billion**
- Business Email Compromise at **2.9 billion**
- Ransomware at **\$59.6 million**

https://www.ic3.gov/Media/PDF/AnnualReport/2023_IC3Report.pdf

19

***2023 Investment Complaints Reported to IC3 by Age Range**

Age Range	Complaints
Under 20	387
20-29	3,361
30-39	6,604
40-49	6,680
50-59	5,008
Over 60	6,404

Investment Fraud Losses Reported to IC3

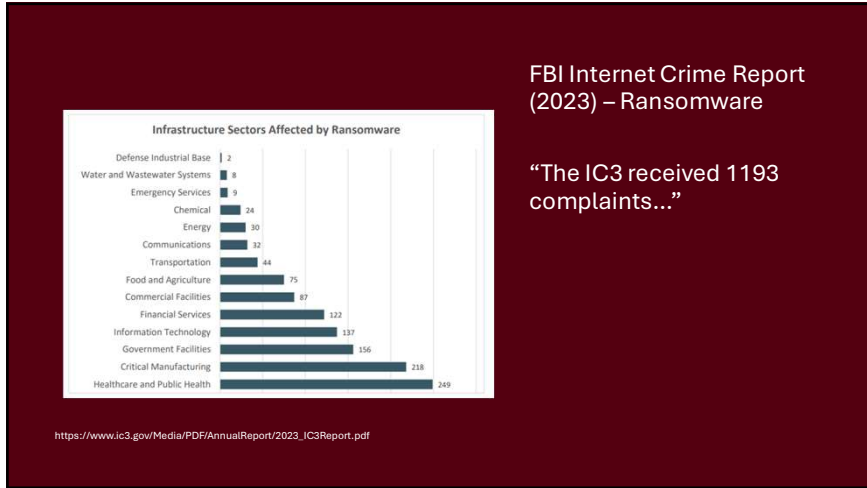
Year	Investment Losses	Crypto-Investment Losses
2019	~\$500,000,000	~\$100,000,000
2020	~\$1,000,000,000	~\$200,000,000
2021	~\$2,500,000,000	~\$500,000,000
2022	~\$3,500,000,000	~\$1,000,000,000
2023	~\$4,750,000,000	~\$1,500,000,000

FBI Internet Crime Report (2023) – Investment Fraud

“These scams are designed to entice those targeted with the promise of lucrative returns on their investments.”

https://www.ic3.gov/Media/PDF/AnnualReport/2023_IC3Report.pdf

20



21

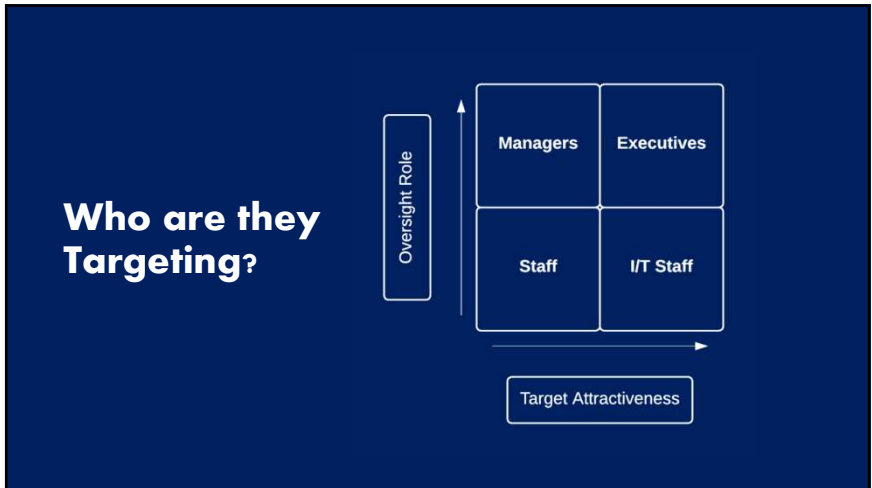
Defense Against the Dark Arts

What we can do at the office, at home, and everywhere in between.

22



23



24



25




26



27



28



Ransomware & Malware

Short for "Malicious software", malware may attempt to ransom your data, access bank accounts, or merely disrupt your business.

One of the most well known examples, LockBit will encrypt your data and demand crypto payment.

29



Apple, Android Phones and Tablets

- Enable screen locks
- Don't store data locally
- "DON'T" save a local copy
- "DON'T" download to phone
- Enable "remote locate and wipe"
- Follow "lost device" policies to notify
- Use malware protection


30



Physical Security

- Locked cars aren't secure
- Use locks on doors and cabinets
- Secure server and network rooms
- Wipe or destroy USB drives / removable disks
- Keep the desk clean and use shredders

31

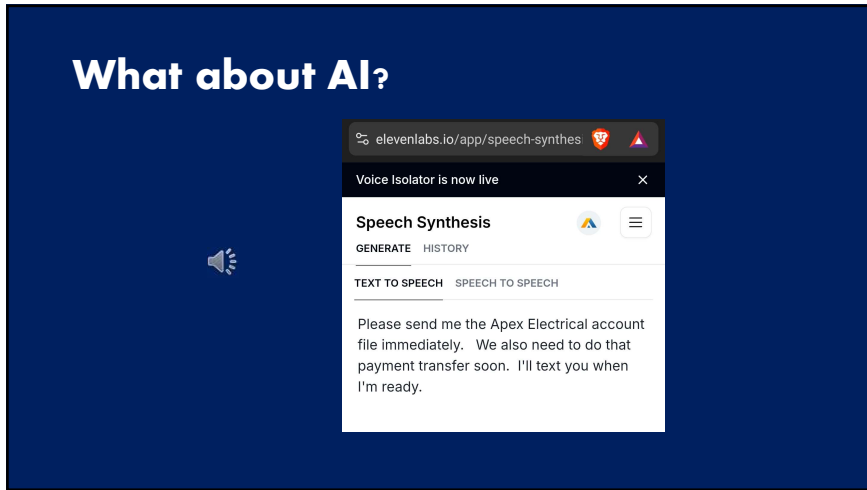


Communicate Securely

Be Skeptical - Authenticate Humans

- Use encrypted Instant Messengers
- Assume Email and "text messaging" are unsecured
- Only use systems with (at least) IDs and passwords
- Don't leave it on the Cloud
- Avoid "Open URL" Sharing

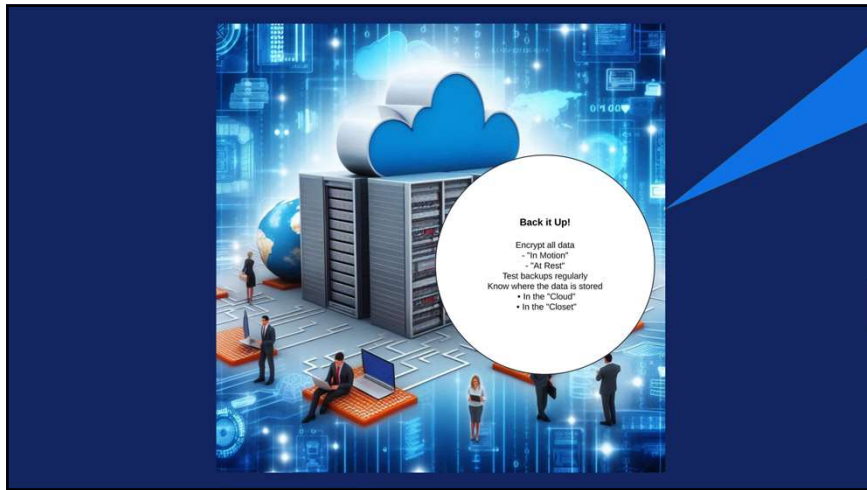
32



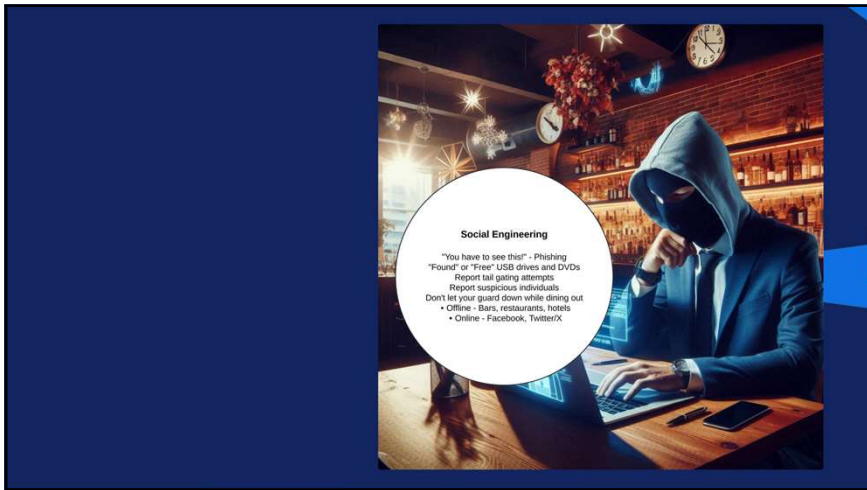
33



34



35



36



Playing Cyber Defense


You are the "best defense" against a security breach

- Be safe @work and @home
- Be aware of "sensitive information"
- Ask questions and report unusual events
 - Exercise Caution
- Phones, tablets and laptops - Don't store it!
- USB drives - avoid, secure, leave them at work
 - Mobile Computing
- Use Passwords AND Encryption
- Use Tracking Software with Remote Wipe

37



38



Thank You

Dennis King
Working Security
314-632-6334
www.workingsecurity.com

39

Questions

- If we have time, here and now!
- Email: dennis@workingsecurity.com
- Web: www.workingsecurity.com

40