

Digital Security in an Online World

PROTECTING YOUR CLIENTS AND YOUR BUSINESS

PRESENTED BY RICH DEPIERRO – 2 DOG DIGITAL
919-341-4686 / INFO@2DOGDIGITAL.COM



Just Who is My Instructor?

- Over 35 years in the Information Technology Industry
- Honorably discharged from the US Marines in 2002
- Over 40 industry certifications, including Microsoft, Cisco, Fortinet, HP, CompTia, etc.
- Spent 2 years working contracts for the SBI to catch sex crimes against minors
- Happily married to another Marine for almost 22 years
- Proud father of two UNC Chapel Hill Students
- Lifelong (and forever suffering) NY Mets and Jets fan
- Is still too young for coffee

Should I Be Worried?

- According to the 2019 Data Breach Report from Verizon:
 - 43% of cyber attacks targeted SMB's
 - 69% came from outside entities
 - 83% of SMB's Lack the Funds to Deal with the after effects of a cyber attack.
 - SMB attacks are up 424% from the year before.
 - 1 in 323 Business Emails are malicious
 - 68% of Small Businesses have no Disaster Recovery plan

Cyberattacks are Increasing

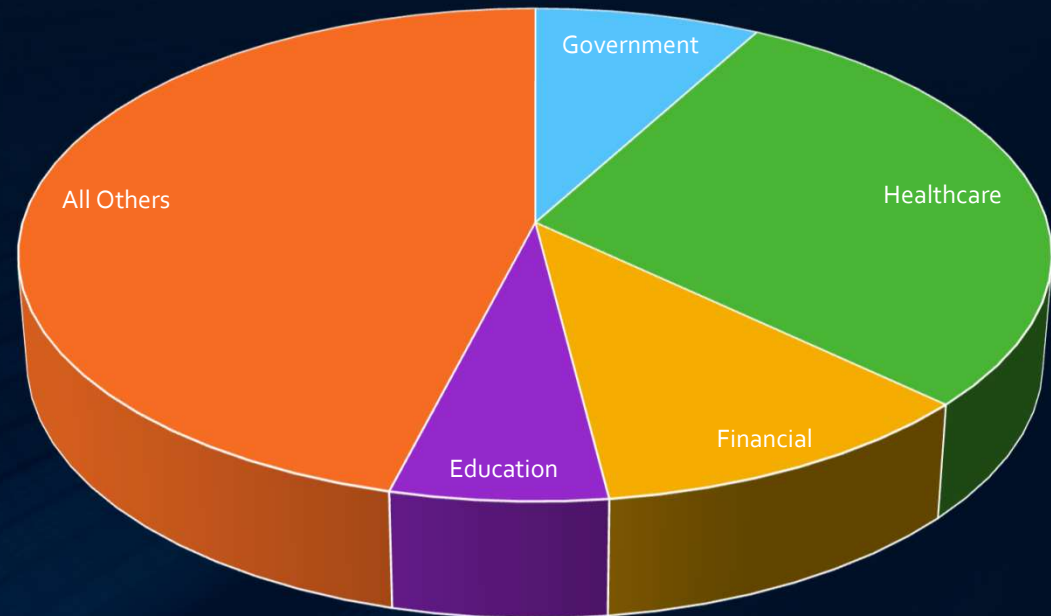
- Cost to Global Economy Today - **\$1.5 Trillion**
- By 2021, could top **\$6 Trillion**
- Average SMB spends on cybersecurity each year - < \$500
- Average cost to remediate a breach - \$148/record

| Year | Losses |
|------|-----------|
| 2014 | \$800.5 M |
| 2017 | \$1.42 B |
| 2018 | \$2.7 B |

Businesses Attacked in 2018 by Industry

Where do you fit in?

Cyber Attacks By Industry



■ Government ■ Healthcare ■ Financial ■ Education ■ All Others

Most Common Attacks

- Viruses/Worms/Spyware/Malware
- “Drive-By” Internet Downloads
- Exploit Attacks
- Denial of Service
- Ransomware
- Phishing Attacks

Virus/Worm/Spyware/Malware

COMMON VECTORS

- Can be caught from websites, emails, IRC, etc.
- Not limited to computers (viruses are now found on ANY networked device)
- Apple is not immune!

PREVENTION/REMEDIATION

- Anti-virus/Anti-spyware Programs
- Smart Internet browsing/email habits

“Drive-By” Internet Downloads

COMMON VECTORS

- Wrong website names
- DNS hijacks
- Hacked sites

PREVENTION/REMEDATION

- Double-check your URL's
- Be observant
- Anti-spyware programs

Exploit Kits

COMMON VECTORS

- Self-contained programs available on “Dark Web”
- Commonly employed by “Script Kiddies” for personal gain
- Commonly used for unauthorized access

PREVENTION/REMEDIATION

- Good Patch Management program
- Update required firmware on network devices (including printers)

Distributed Denial of Service (DDoS)

COMMON VECTORS

- An outside attack
- An attacker uses multiple machines to flood the network and overwhelm the Internet connection
- Attacks are usually from groups of compromised machines

PREVENTION/REMEDIATION

- Firewalls
- Update Firmware

Ransomware

COMMON VECTORS

- Email
- “Drive-By” Downloads
- Generally Uncrackable

PREVENTION/REMEDATION

- Anti-virus Programs
- Training, training, training!
- Backups

Phishing

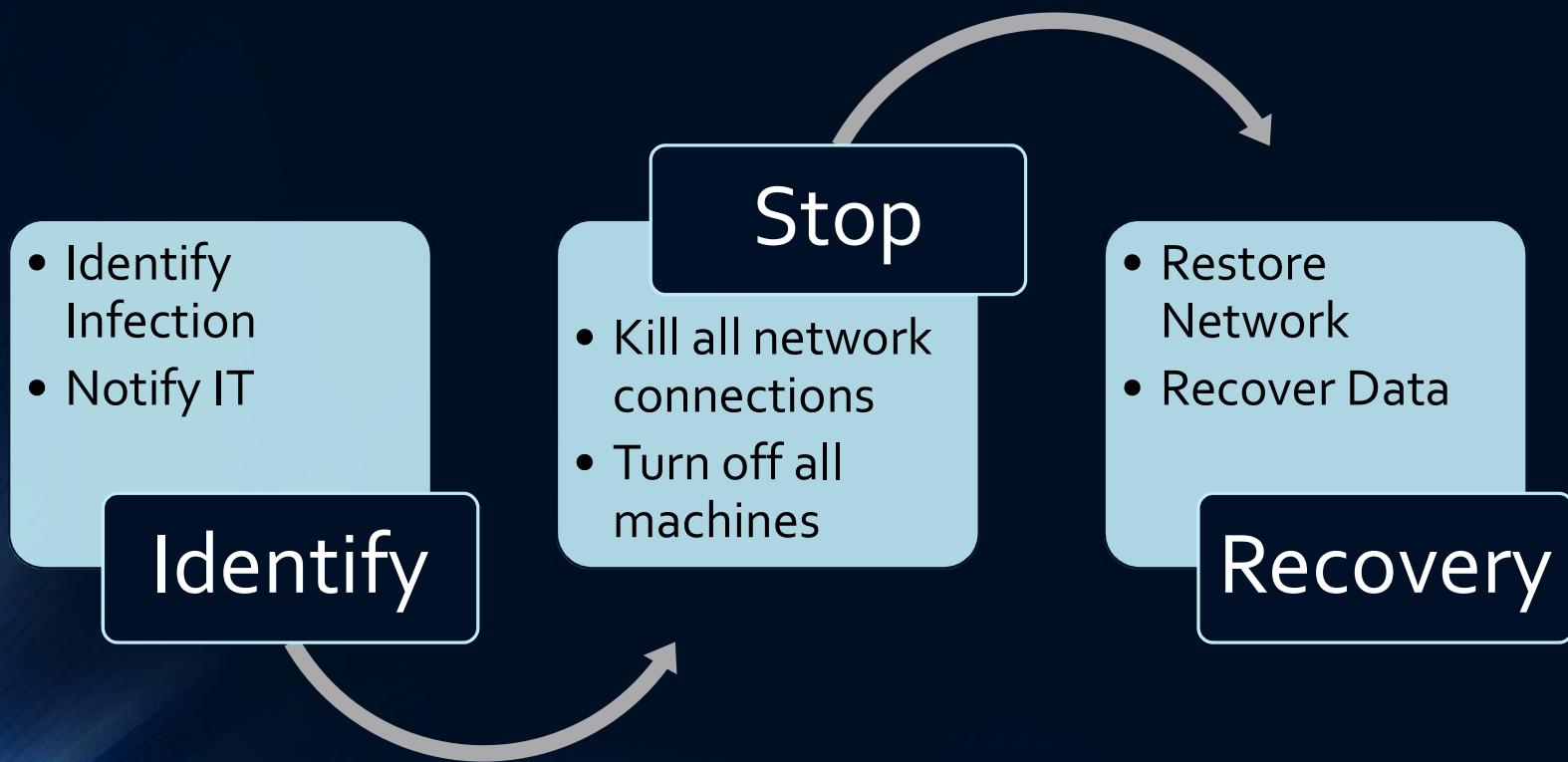
COMMON VECTORS

- Email
- Social Media
- Personal Contact

PREVENTION/REMEDIATION

- Training
- Training
- Training

What to do in a Breach?



Questions?

Thank You

2 Dog Digital

919-341-4686

info@2dogdigital.com

