Cyber Byte: Real Life Lessons Learned

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CYBERSECURITY IS A BUSINESS RISK

Businesses of all sizes are at risk:

- Resource constraints = operations/security tradeoff
- Smaller businesses are growing target of cyber-attacks
- Less likely to have robust security systems
- May not possess the same resources or knowledge as larger businesses
- May not be able to recover from an attack

DHS offers resources, programs, and tools to help businesses of all sizes at https://www.us-cert.gov/ccubedvp/business

5 QUESTIONS YOU SHOULD ASK ABOUT CYBER RISKS

- What is the current level and business impact of cyber risks to our company? What is our plan to address identified risks?
- How is our executive leadership informed about the current level and business impact of cyber risks to our company?
- How does our cybersecurity program apply industry standards and best practices?
- How many and what types of cyber incidents do we detect in a normal week? What is the threshold for notifying our executive leadership?
- How comprehensive is our cyber incident response plan? How often is the plan tested?

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KEY CYBER RISK MANAGEMENT CONCEPTS

- Incorporate cyber risks into existing risk management and governance processes
- Begin cyber risk management discussions with your Leadership Team
- Implement industry standards and best practice-*don't rely on compliance*
- Evaluate and Manage Specific Cyber Assets
- Provide oversight and review
- Develop and test incident response plans and procedures
- Coordinate cyber incident response planning across the enterprise
- Maintain awareness of cyber threats

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THE GOOD NEWS

You don’t have to outrun the bear!

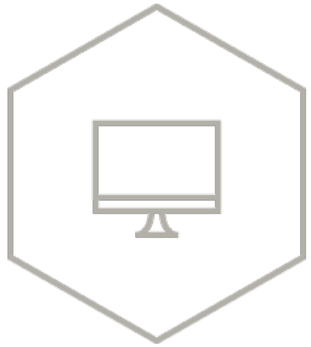
For the Criminal:

Soft, Low-Risk Target → Highest Profit

CYBERSECURITY: WHERE TO START

1. Understand and Address Common Vulnerabilities
   - National Vulnerability Database (https://nvd.nist.gov)

2. Determine what Cyber Events you Monitor
   - Threat, incident, and activity reports
   - Cybersecurity Framework



3. Conduct a Business Impact Assessment
   - Critical business functions
   - Contingency plans

4. Join an Information Sharing and Analysis Organization (ISAO)
   - http://www.dhs.gov/isao

5. Use DHS Programs and Resources
   - http://www.us-cert.gov/ccubedvp

GET INVOLVED

- Check out the website: www.us-cert.gov/ccubedvp
  - Sign up for the monthly bulletin *(located at bottom of website)*
- Familiarize yourself with the NIST Cybersecurity Framework
- Download the Cyber Risk Management Primer for CEOs and the SMB Toolkit
- Download the CRR or contact DHS for an onsite assessment
- Join or establish an ISAO: info@hq.dhs.gov
- Spread the word across your community
- Share with us a Cybersecurity Framework success story or resource, or ask a question: CCubedVP@hq.dhs.gov

Information Sharing: How to Share with DHS

- **Automated Indicator Sharing** (AIS)
  - Our initiative to implement the Cybersecurity Information Sharing Act

- **Cyber Information Sharing and Collaboration Program** (CISCP)
  - A robust analytic platform for public-private cooperation

- **Information Sharing and Analysis Centers** (ISACs) and **Information Sharing and Analysis Organizations** (ISAOs)
  - Fora to facilitate participation in all DHS information sharing programs, including AIS and CISCP

Federal Cyber Landscape

Law Enforcement
DOJ & FBI, Secret Service, Homeland Security Investigations (HSI)

Intelligence
CIA & NSA

Standards & Guidance
NIST (Dept. of Commerce)

Protect DOD Networks
Plan for/Conduct Cyber Operations Against Adversaries
Department of Defense (DOD)

Helping You Deal with Malicious Activity
Department of Homeland Security
National Protection & Programs Directorate (DHS/NPPD)

CYBER INCIDENT REPORTING: WHO CAN YOU CALL?

Asset Response:

- National Cybersecurity and Communications Integration Center NCCIC:
  (888) 282-0870 or NCCIC@hq.dhs.gov
  http://www.us-cert.gov

Threat Response:

- FBI Field Office Cyber Task Forces
  http://www.fbi.gov/contact-us/field

- National Cyber Investigative Joint Task Force
  NCIJTF CyWatch 24/7 Command Center
  (855) 292-3937 or cywatch@ic.fbi.gov

- United States Secret Service
  Field Office & Electronic Crimes Task Force
  http://www.secretservice.gov/contact/field-offices

How DHS Helps the Private Sector Manage Cyber Risk

Best Practices

- NIST Cybersecurity Framework
- Risk Assessments
- Cyber Security Advisors

Information Sharing

- ISACs & ISAOs
- US-CERT & ICS-CERT Bulletins and Portals
- Automated Indicator Sharing
- CISCP: Closest Partners
- Enhanced Cybersecurity Services

Incident Response

- US-CERT
- ICS-CERT

Questions?

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