

Colorado Springs

2018 COLORADO CHAMBER OF COMMERCE EXECUTIVES SPRING CONFERENCE

WEDNESDAY, MAY 2ND, 2018 | 10:15AM



Cybersecurity for Small Business

Dr. Shawn P. Murray, C|CISO, CISSP, CRISC

President & Chief Academic Officer, Murray Security Services





2018 CCCE CONFERENCE

Agenda

- IT & Cyber
- Information Security
- Cybersecurity
- Governance
- Operations
- Risk Management
- Cultures and Attitudes
- Homework





IT & Cyber

- Information Technology
 - Information Technology (IT) refers to all of the computer systems and service support contract agreements that the business uses to be productive.
- Cyber
 - This is a concept that relates the computing environment to the business environment.
 - Cyber = Information Technology which is used to enable the business as described in the previous bullet





Information Security

- The holistic approach for identifying, categorizing and protecting information related to business activities.
 - Written (hard copy),
 - patient files, business plans, engineering schematics, manifests
 - Electronic
 - computerized information that is processed, transmitted or stored using computing systems (Fax machines, computers, mobile devices)
 - All information that the organization creates, uses or receives should have an information classification scheme.
 - sensitive
 - proprietary
 - confidential
 - PII
 - public





Cybersecurity

- Cybersecurity is the new "sexy" term for information security.
- While the focus appears to be primarily related to the IT systems, most IT security professionals agree that all aspects of Information Security are encompassed into this new discipline "brand".
- It also includes contractual agreements for service providers of IT and cybersecurity.
 - Many small businesses don't do IT work and hire people or companies to provide these services which introduces risk.
 - Who has access to your data and information?
 - Do you have Non-disclosure Agreements (NDAs)?





Governance

- What laws does the business need to comply with?
 - Based on Industry
 - HIPAA, FERPA, GLBA, FISMA
 - Based on business activities
 - HR, patients, clients, employee, credit card transactions
- What standards does the business need to comply with?
 - PCI-DSS
 - GAAP
 - NIST
 - ISO





Governance

- How does your internal governance strategy align with external governance requirements?
 - Plans
 - Policies
 - Procedures
 - Standards
 - Guidelines





Operations

- How do employees accomplish daily tasks?
 - Scenario - Chiropractor Credit Card Information
 - Scenario - Dentist and Front Desk PII Breach
 - Phishing - Scenario - Retail Organization Social Engineering Attack
- Cyber Security Awareness Program
 - includes annual training
 - Posters, articles tabletop exercises





Operations

- Socialize what is important
 - Reward good behavior
 - Develop strategy to correct unacceptable behavior
- How do you conduct incident response and remediation?
 - Who needs to be notified?
 - Internal - Call Trees
 - External - Law enforcement, Federal or State





Risk Management

IT & Cybersecurity Risk is a business process or activity

- Mitigate
- Accept
- Avoid
- Transfer





Cultures and Attitudes

- What is the culture related to security in your organization?
 - Should be supported from the top
 - Should be enforced
 - Sometimes you need to slay a lion!
 - Be consistent





Homework

- Develop a Checklist

- Look at how your employees are accomplishing tasks identify risks
- Create Acceptable Use policy - Audience is everyone
- Create Privileged Use policy - Audience is IT personnel
- Identify critical Resources, Information & Personnel (RIP Model)
 - Develop strategies to protect disruption to your business
 - Identify multiple resource sources
 - Protect and backup data & information
 - Cross train critical personnel





Homework

- Develop a Checklist (cont.)
 - Create an information classification scheme
 - Categorize the information
 - Identify the computer systems that inherit the scheme and protect them as well. (Process, transmit or store)
 - Do not make it complex
 - At least identify the important information that you think should be protected and categorize it.
 - How are you vetting your service providers?
 - Do you have signed SLAs?
 - Do they have insurance?
 - Do you have NDAs?





Questions?

