THE POWER OF BEING UNDERSTOOD

AUDIT I TAX I CONSULTING
CYBERSECURITY—STEPS YOU CAN TAKE TO SECURE YOUR ORGANIZATION

April 27, 2017
CYBERSECURITY
The Latest Statistics
Security Statistics

Compiled from:
- NetDiligence/RSM 2016 Annual Cyber Claims Study

PERCENTAGE OF RECORDS EXPOSED BY DATA TYPE
(N = 120)
Security Statistics (continued)

Compiled from:
- NetDiligence/RSM 2016 Annual Cyber Claims Study

NUMBER OF CLAIMS BY CAUSE OF LOSS
(N = 176)

- Hacker: 47
- Malware/Virus: 37
- Stolen Laptop/Device: 22
- Other: 20
- Staff Malfeasance: 16
- Paper Records: 13
- Rogue Employee: 12
- System Glitch: 10
- Theft of Money: 4
- Theft of Hardware: 1
30% of breaches were due to insiders.

Of those, 77% were unintentional.
Threat Modeling Methodology

- Threats (How)
- Assets (What/Where)
- Actors (Who)
- Risk Tolerance (Why)
- Mitigations and Assessment Strategy

Threat Model
(Actors) Who are the bad actors you’re concerned with?
• Employee
• Contractor
• Customer
• Random attacker
• Focused attacker
• State-sponsored attacker

(Threats) How are the bad actors going to attack you?
• From the Internet
• From your internal network
• From your wireless network
• Via Email
• From USB keys
• From the phone

(Assets) What data do they want?
Customer records
Employee records
Money transfer
Money laundering
Ransomware

(Risk Tolerance) Every “scenario” has a cost. What is your risk tolerance?
• Financial risk
• Brand risk
• Operational risk
The result is a set of scenarios that are most important to you.

You use these scenarios to:

• Assess the likeliness of being impacted from them
• Build a strategy to protect yourself against them
• Hedge your losses against them with cyberinsurance
• Accept the risk
WHAT STEPS CAN YOU TAKE TODAY TO CONTROL RISK?
Threat Overview
Build Your Strategy
Build Your Strategy (continued)

• Network Borders
  o Advanced Firewall Technology
    ▪ Establish regular cadence for rule review and device updates to ensure optimal protection.
  o Intrusion Detection & Prevention Systems
    ▪ Provides bi-directional coverage
    ▪ Outsource to a dedicated provider or bring specialized staff in house to manage.
    ▪ Regular review and update cadence is key to successful performance
Build Your Strategy (continued)
• Business Continuity & Disaster Recovery
  o Evaluate and test the organization’s current BCP/DR posture
  o Test recovery of data and systems quarterly
  o Tabletop Test With Users
  o Evaluate fit of standing solutions against current market offerings:
    ▪ Second site – Legacy DR, internally managed
    ▪ Hybrid cloud – Heavy administration, co-managed
    ▪ Cloud centric solutions – low administration, may be completely provider managed
Build Your Strategy (continued)
Build Your Strategy (continued)

• Endpoints
  o Couple Antivirus Packages with Data Loss Prevention systems
    ▪ Helps to control data proliferation and manage risk of data loss
  o Leverage Application Whitelisting Technology
    Minimizes the threat posed by ransomware and other malicious software in the environment and on organizational systems
  o Encrypt All Data And Drives
    ▪ Controls the risk of data theft on stolen systems
  o Centralized Management Of Each Is Key To Success!
Build Your Strategy (continued)
• Related Policies To Protect The Organization
  o Acceptable Use Policy
    ▪ Establishes guidelines around data and system usage with user community and provides enforceable guardrails for management
  o Cloud Use Policy
    ▪ Provides baselines for acceptable use of cloud technologies
  o Data Handling Policies
    ▪ Define data and information types that require special handling and attention
Build Your Strategy (continued)

• Users
  o Educate users on risks
  o Ongoing education and risk testing of users
  o Retrain as needed based on testing outcomes

• Insurance
  o Cybersecurity, etc.

• Trust But Verify!
  o Establish recurring testing procedures
  o Regular assessment and audit cycles protect the organization
QUESTIONS AND ANSWERS?
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