



# IT Security

Steps to Mitigate Security Risk

# Introduction

- ▶ Employee Security Awareness
- ▶ Monitoring and Management
  - Policy
  - Tools
  - Scheduled Maintenance
- ▶ Scanning and Testing
- ▶ Security Questionnaire in Request for Proposals



# Employee Security Awareness

- ▶ Employee Security Awareness Education Program
- ▶ Structured Training for All Employees
- ▶ Continuous Training
- ▶ Products: SANS Litmos/KnowBe4



# Monitoring and Management

- ▶ Security Policies (Sample at SC Department of Admin – [https://admin.sc.gov/technology/policies\\_procedures](https://admin.sc.gov/technology/policies_procedures))
  - IT Governance (A decision making framework that reflects an organization's goals and priorities, and how the enterprise intends to achieve them)
    - Data Protection and Privacy
    - Access Control
    - Asset Management
    - Business Continuity
    - Mobile Security
    - Threat and Vulnerability Management
- ▶ Tools
  - Web Filters/Virtual Private Networks
  - Anti-Virus, Logs and Alerts
  - Email Safe Links, Email Attachment Scan
- ▶ Scheduled Maintenance



# Testing and Scanning

- ▶ Third-Party Testing
  - Internal/External Penetration Testing
  - Password Database Audit
  - Wireless Access Point
  - IT Audit
  - Phishing Test
- ▶ Password Complexity, Password Spreadsheets
- ▶ Network Scans (PII, SSN, Employee Records), Software Vulnerabilities



# Security Questionnaire in Request for Proposals

- ▶ Included in All Proposals
- ▶ Addendum to Current Vendors
- ▶ Understand Vendor Security Risks
- ▶ Questionnaire
  - Describe Policies and Procedures
  - Describe Disaster Recovery and Business Continuity Plans
  - Safeguards to Vet Employees/Contractors
  - List Security Certifications
  - Describe Data Encryption and Safeguards Preventing Unauthorized Access
  - Describe Incident Management Procedures for a Data Breach



# Summary

- ▶ Design, Build and Configure with Security Focus
- ▶ Train and Test Employees on Security Awareness
- ▶ Create and Enforce Security Policies and Procedures
- ▶ Initiate Third-Party Penetration Testing
- ▶ Complete Annual Security Audit
- ▶ Monitor and Manage systems





