



PERFORMING EFFECTIVE HIPAA RISK ASSESSMENTS

DO's and DONT's

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PRESENTER



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Why Risk
Management

How to
Determine
Risk

Risk Mitigation,
Not Risk
Eradication



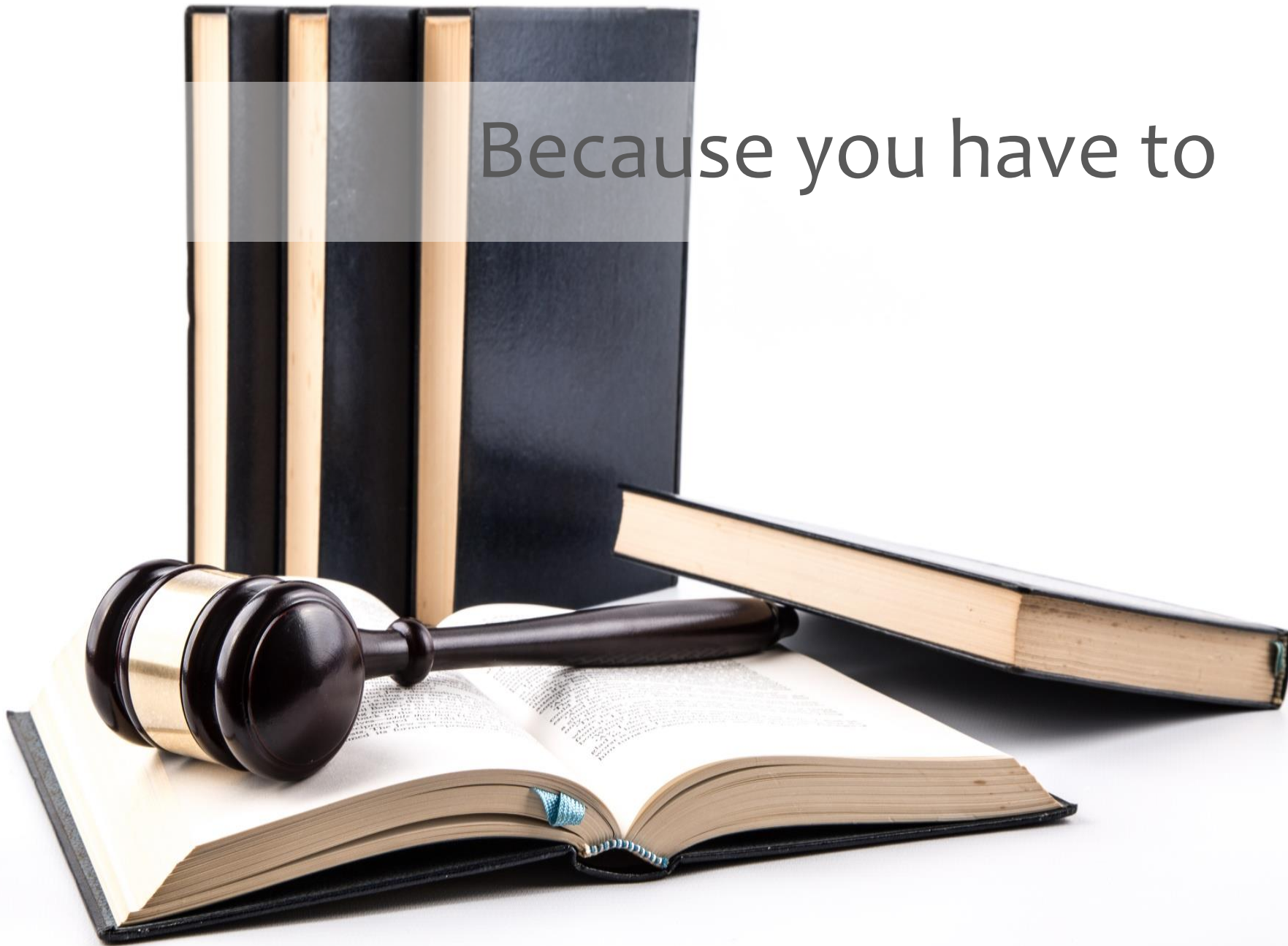
PEOPLE WHO CARE

WHY RISK MANAGEMENT

Bald Tire Scenario



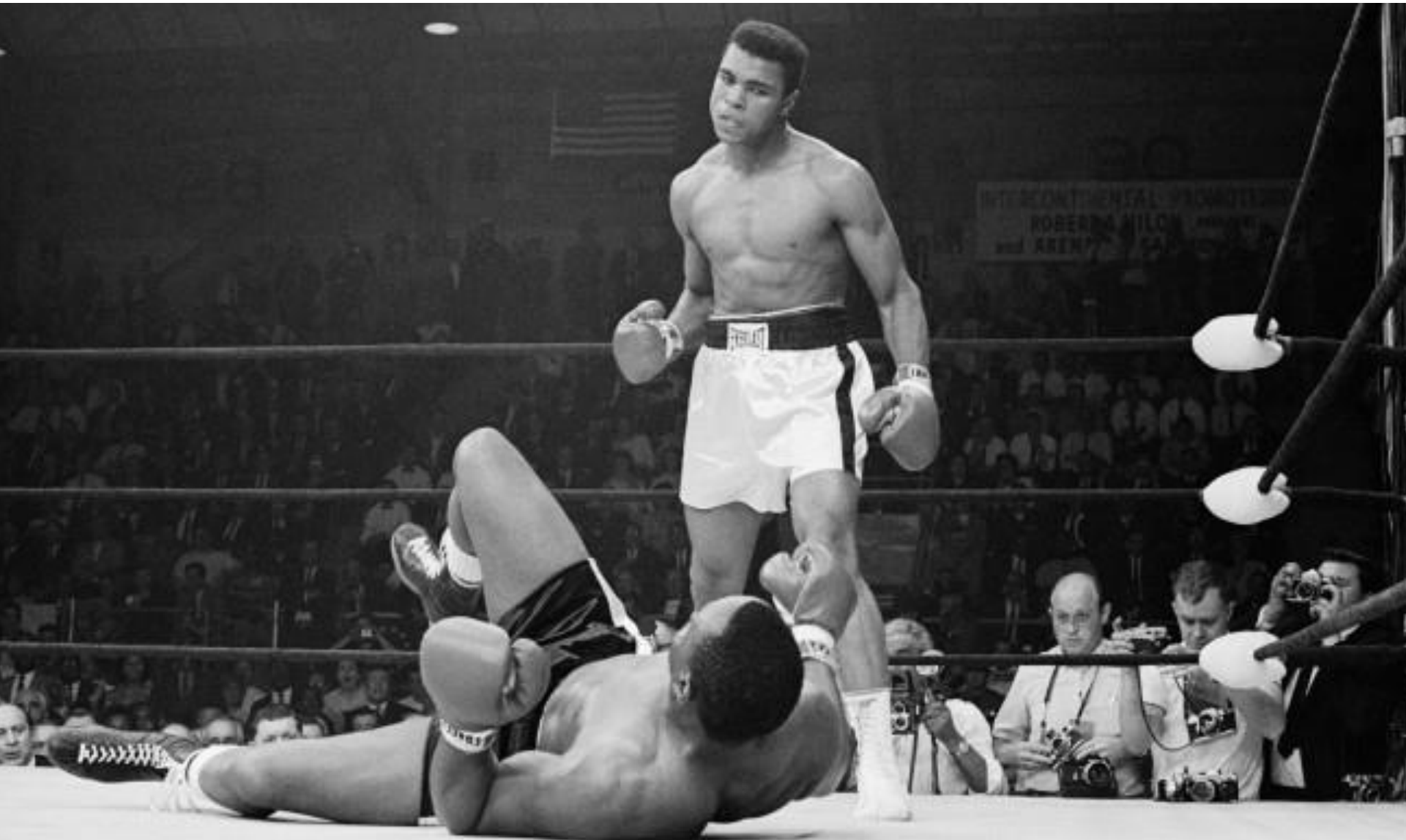
Because you have to



A person is sitting in a chair, wearing a large, knitted sock as a hood. The sock is orange and white. The person is wearing a white t-shirt and blue jeans. In the background, there is a computer monitor displaying a blue screen. The text "Because you can't always be completely secure" is overlaid on the image.

Because you can't always be
completely secure

Security VS. Compliance



HIPAA & RISK MANAGEMENT

WHAT DOES HIPAA SAY?

- RISK ANALYSIS (Required). Conduct an accurate and thorough assessment of the potential risks and vulnerabilities to the confidentiality, integrity, and availability of electronic protected health information held by the [organization].
- The outcome of the risk analysis process is a critical factor in assessing whether an implementation specification or an equivalent measure is reasonable and appropriate. Organizations should use the information gleaned from their risk analysis as they, for example:
 - Design appropriate personnel screening processes. (45 C.F.R. § 164.308(a)(3)(ii)(B).)
 - Identify what data to backup and how. (45 C.F.R. § 164.308(a)(7)(ii)(A).)
 - Decide whether and how to use encryption. (45 C.F.R. §§ 164.312(a)(2)(iv) and (e)(2)(ii).)
 - Address what data must be authenticated in particular situations to protect data integrity. (45 C.F.R. § 164.312(c)(2).)
 - Determine the appropriate manner of protecting health information transmissions. (45 C.F.R. § 164.312(e)(1).)

WHAT HAPPENS WHEN WE FAIL?

Three of the last four HIPAA Resolution Agreements required organizations to:

- Perform a risk analysis
- Perform risk management

Resolution Agreements

Resolution Agreements and Civil Money Penalties

A resolution agreement is a settlement agreement signed by HHS and a covered entity or business associate in which the covered entity or business associate agrees to perform certain obligations and make reports to HHS, generally for a period of three years. During the period, HHS monitors the covered entity's compliance with its obligations. A resolution agreement may include the payment of a resolution amount. If HHS cannot reach a satisfactory resolution through the covered entity's demonstrated compliance or corrective action through other informal means, including a resolution agreement, civil money penalties (CMPs) may be imposed for noncompliance against a covered entity.

- [UMass settles potential HIPAA violations following malware infection](#) – November 22, 2016
- [\\$2.14 million HIPAA settlement underscores importance of managing security risk](#) – October 17, 2016
- [HIPAA settlement illustrates the importance of reviewing and updating, as necessary, business associate agreements](#) – September 23, 2016
- [Advocate Health Care Settles Potential HIPAA Penalties for \\$5.55 Million](#) - August 4, 2016
- [Multiple alleged HIPAA violations result in \\$2.75 million settlement with the University of Mississippi Medical Center \(UMMC\)](#) - July 21, 2016
- [Widespread HIPAA vulnerabilities result in \\$2.7 million settlement with Oregon Health & Science University](#) - July 18, 2016
- [Business Associate's Failure to Safeguard Nursing Home Residents' PHI Leads to \\$650,000 HIPAA Settlement](#) – June 29, 2016
- [Unauthorized Filming for "NY Med" Results in \\$2.2 Million Settlement with New York Presbyterian Hospital](#) - April 21, 2016

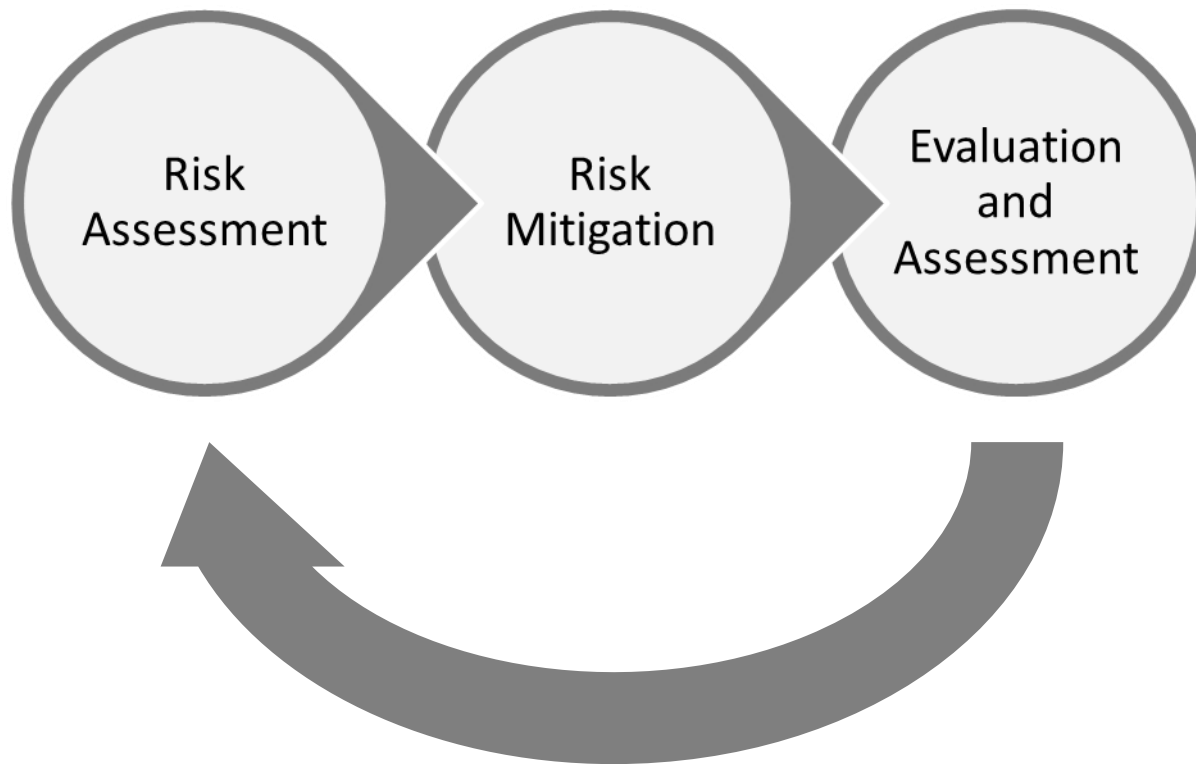
SHOW ME THIS THING YOU CALL RISK MANAGEMENT

RISK MANAGEMENT 101

“the total process of identifying, controlling and mitigating information system-related risks”*

* National Institute of Standards in Technology (NIST) SP800-30

RISK MANAGEMENT 101



RISK MANAGEMENT 101

- Focus on:
 - Confidentiality
 - Integrity
 - Availability
- Qualitative or Quantitative
- Balances risk, effort and costs

RISK ASSESSMENT

4 phase approach

Phase 1 – System Characterization

- Characterize system boundaries, criticality and sensitivity based on:
 - Hardware
 - Software
 - Interfaces and integrations
 - People
 - Mission
 - System and data criticality
 - System and data sensitivity



Data (Asset) Inventory

Phase 2 – Gap Assessment

- Identify vulnerabilities to organizational systems based on:
 - Industry standards (NIST, ISO, CIS)
 - Security violations
 - External intel
- Identify current controls:
 - Done in practice
 - Formalized and repeatable
 - Non-existent



CODE: 2345A

1

2

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A

B

C

Phase 3 – Risk Management

- Determine the overall likelihood that a vulnerability will be exploited, based on:
 - Threat-source motivation and capability
 - Existence and effectiveness of controls
 - All other factors
- Determine the impact if an event occurs:
 - Financial
 - Operational
 - Reputational

Phase 4 – Control Recommendations

- Recommend controls to reduce risk to an acceptable level, based on:
 - Cost-benefit analysis
 - Feasibility
 - Legislation and regulation
 - Organizational policy
 - Operational impact
 - Safety and reliability
- Produce a management-level report that helps senior management make decisions on budget, process and control recommendations



RISK vs. REWARD

Recap – Four Phases to Risk Assessment

1. Determine Scope:
 1. Characterize **system boundaries, criticality and sensitivity**
2. Perform Gap Assessment
 1. Identify **vulnerabilities**
 2. Identify **threats**
 3. Review **existing controls**
3. Conduct Risk Management
 1. Determine **probability** of a threat exploit
 2. Assess the impact of threat exploitation
 3. Calculate risk
4. Identify **reasonable controls** to mitigate risk
 1. Document the **findings**
 2. Document **risk treatment plan**

PROTIP

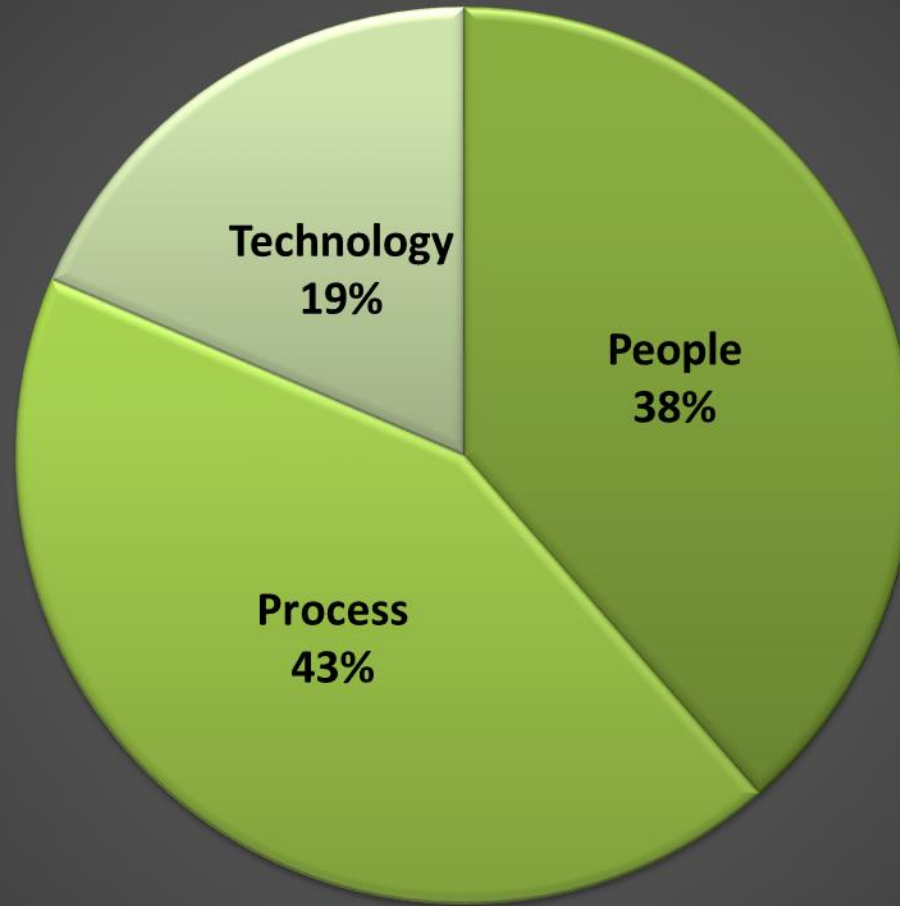
Scheduling and Logistics

COMMON TOP RISKS AND FINDINGS

TOP 10 RISKS

1. Governance
2. Policy/Procedure/Control
3. Data Classification
4. Access Control
5. Incident Response
6. Vendor Risk Management
7. Awareness & Training
8. Secure Configuration Baselines
9. Logging & Monitoring
10. Vulnerability Management

Findings by Category



■ People ■ Process ■ Technology

Identify
Your Gaps

Prioritize

Reasonably
Mitigate Risk



QUESTIONS?

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