Chapter 1

Information Security for Managers

Workman, Phelps, Gathegi

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• Containing costs

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Formulate policies, procedures, practices

Internal vs. External

Attacks can come from within an organization (internal)

OR

Outside of the organization (external)

Definitions

Risk The potential for harm or damage to be caused to people or assets from a potential threat.

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Governance Use of best practices, standards, and requirements to reduce risks.

Regulated Content

HIPAA Health Insurance Portability and Accountability Act

Health care providers required to secure PHI (protected health information)

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FERPA Family Educational Rights and Privacy Act

Gives parents access to their child's education records At age 18, rights transfer to the student

FRA Federal Records Act

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- Create plans for risk mitigation, disaster recovery, business continuity, etc.

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Managers may be required to

- Perform risk analysis
- Conduct threat and vulnerability assessments
- Create plans for risk mitigation, disaster recovery, business continuity, etc.
- Conduct criminal forensic analysis

Cost - Direct Losses

- Loss Stolen IP
- Loss Lost business

Cost - Lawsuits

- Downstream lawsuits
- Upstream lawsuits

Free Speech vs. Due Process

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- Due Process Respond to damage resulting from that speech

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Due Process can take long \longrightarrow SLAPP Strategic Lawsuits Against Public Participation

Asset Planning - What Needs to be Protected

- 1. Enumerate assets (and their value)
- 2. Prioritize the assets (CIA)
 - 2.1 Confidentiality
 - 2.2 Integrity
 - 2.3 Availability
- 3. Determine how to protect assets

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Methodologies such as FIPS (Federal Information Processing Standards) can help

Recognizing an Attack

IDS – Intrusion Detection Systems (Wireshark & SNORT)