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Cybersecurity
Are you protecting your organization?

Lisa Dunnigan, Principal and CIO
Olsen Thielen CPAs

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Who am I?

- Principal and CIO at Olsen Thielen CPAs
- Top 25 Twin Cities CPA firm
- Offices in Roseville and Eden Prairie
- 30+ years in Information Systems
- Recently received my CISSP certification
- Security advocate and evangelist

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Agenda

- What is cybersecurity?
- Why should we care?
- What can we do?
- Free stuff!

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Cy·ber·se·cur·i·ty (definition)

- Measures taken to protect against the criminal or unauthorized use of electronic data.
- The practice of protecting systems, networks, and programs from digital attacks
- Techniques used to protect the integrity of networks, programs and data from attack, damage or unauthorized access.
- The practice of ensuring the integrity, confidentiality, and availability (CIA) of information.

What Cybersecurity is NOT

- Cybersecurity is NOT an IT problem. It's an organizational problem that can use IT to help solve it.

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Let’s break this down!

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Cy·ber·se·cur·i·ty (definition)

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Protection

- Can you really protect yourself 100%?
- Cybersecurity is about managing risk

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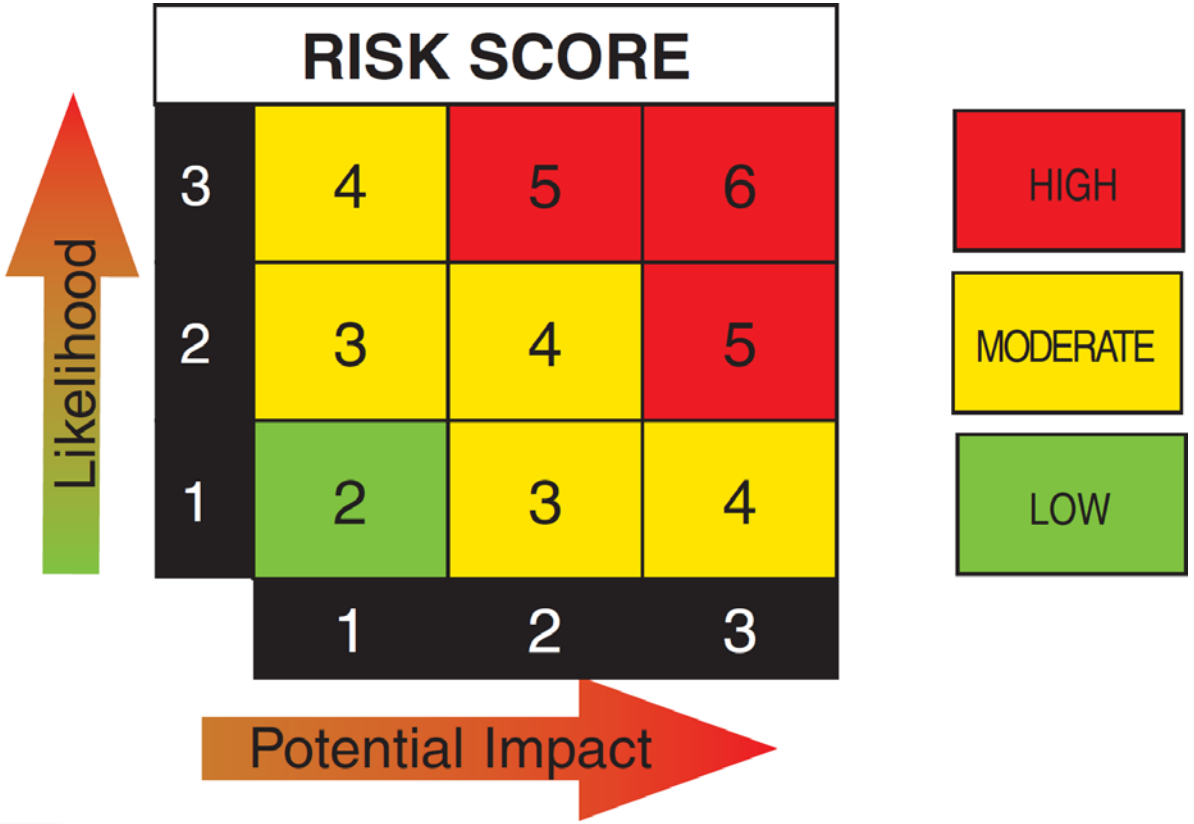
Assessing Risk

- Vulnerabilities
- Threats
- Impact

Vulnerabilities x Threats x Impact = Risk

Qualitative Risk Assessment



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Managing Risk – You can…

- Accept the risk
- Mitigate the risk
- Transfer the risk
- Avoid the risk

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Risk Assessment Process

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Protection

- Can you really protect yourself 100%?
- Cybersecurity is about managing risk
- Where do you spend your next security dollar?
- How will you respond? Are you prepared?

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Let’s break this down!

1. Managing risks

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Information Systems

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Confidentiality

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Data breaches are big money

- 10,000,000 records exposed each day
- Street value of data $1 - $100 per record

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Integrity

- Is your data reliable? Who relies on it?
- Has your data been tampered with?
- Hactivists
- Sometimes harder to recognize

Availability

- Ransomware
- Denial of Service
- Virus infections
- Cryptojacking

Let’s break this down!

1. Managing risks
2. Protecting information (CIA)

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Why should we care?

- 61% of breaches were against small organizations
- Easy targets – limited resources
- Small organizations are used as gateways to larger ones
- Outsourced services
- Breach notification laws

Does your organization…

- Process memberships, donations or event registrations online?
- Capture “personally identifiable information” (PII) about members and/or donors?
- Collect information on preferences and habits of donors, patrons or members?
- Conduct e-commerce using credit card information?

Nonprofit Specific Risks

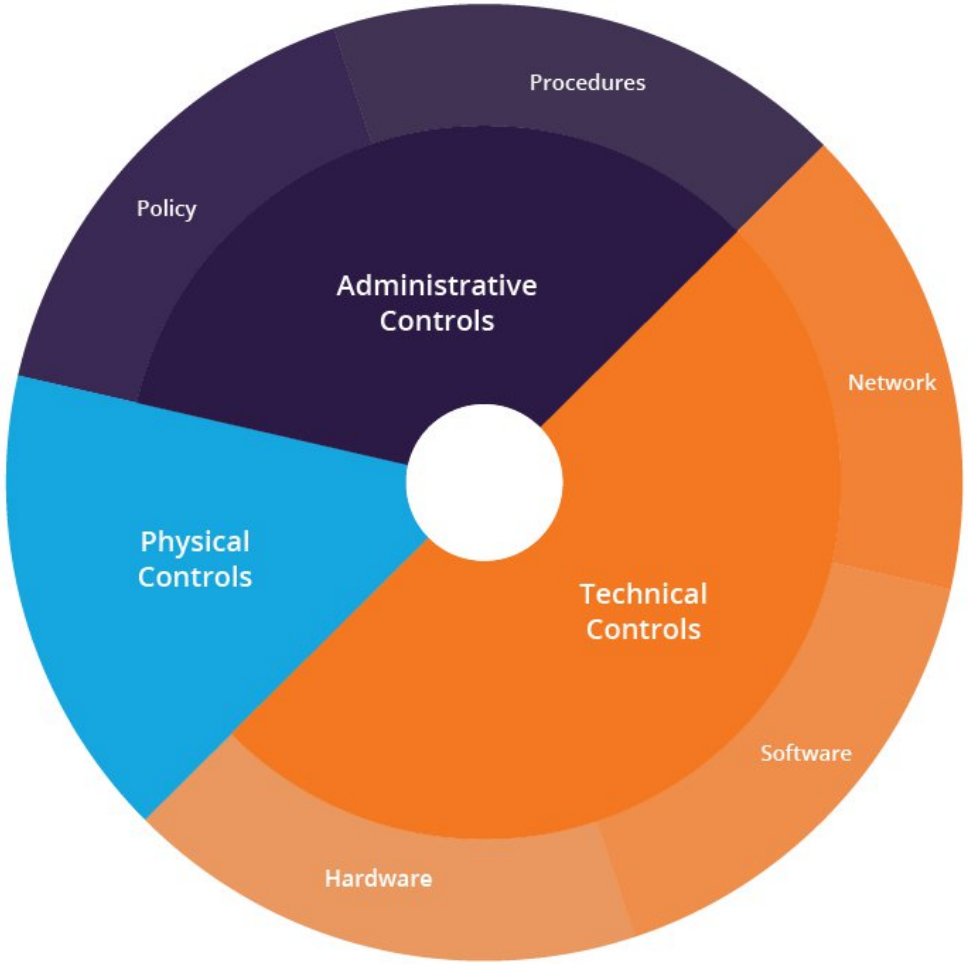
- Damage to reputation
- Loss of donor confidence ($$)
- Expensive to respond and recover
- Fiduciary duties of Board members

Fiduciary Duties

- Duty of Care
  - Diligent and informed in making decisions
  - Ensure proper control over assets
  - Oversight and reporting
- High bar for liability but the winds are changing
- Ignorance is no longer a defense

* I am not an attorney!!

What do we do?



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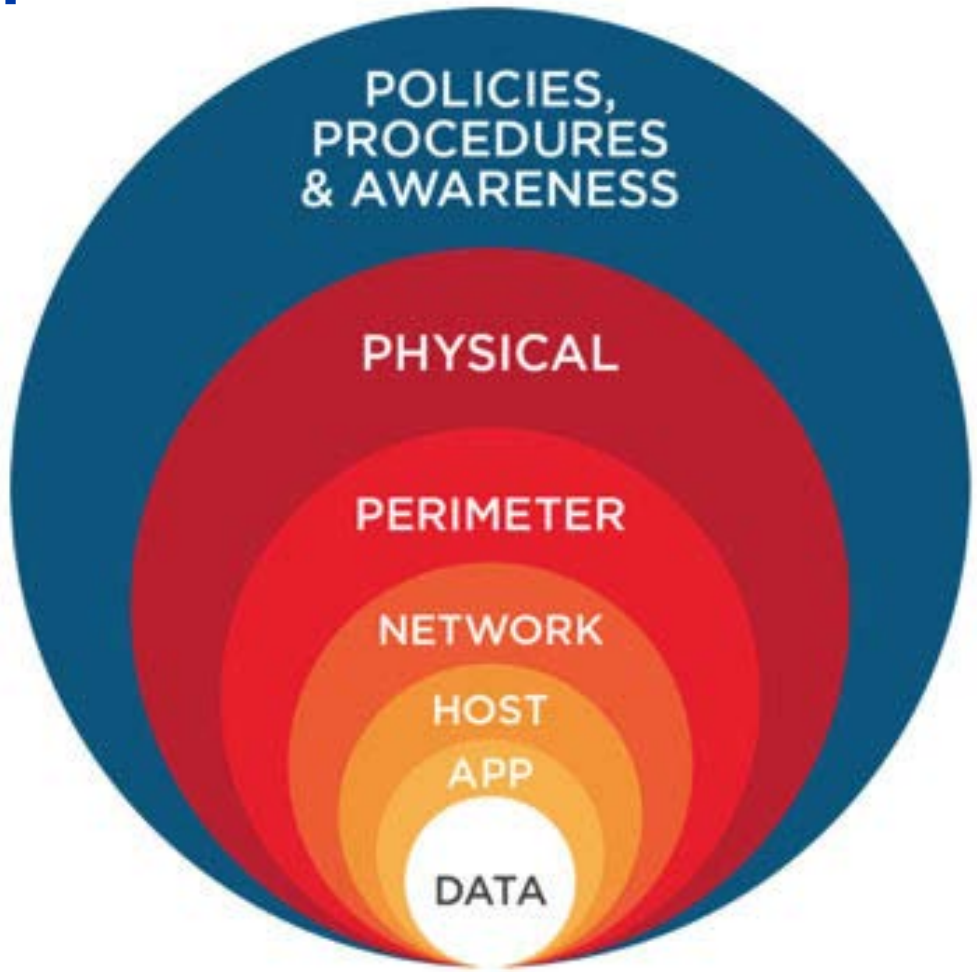
Information System Controls

Physical	Technical	Administrative
Locks Cameras Key cards Security guards	Firewall Passwords Web content filtering SPAM and Malware protection Data encryption Access control	Education Computer use policies BYOD policies Backups Patching Strong passwords Multi-factor authentication Network segmentation Breach response plan

Defense in Depth



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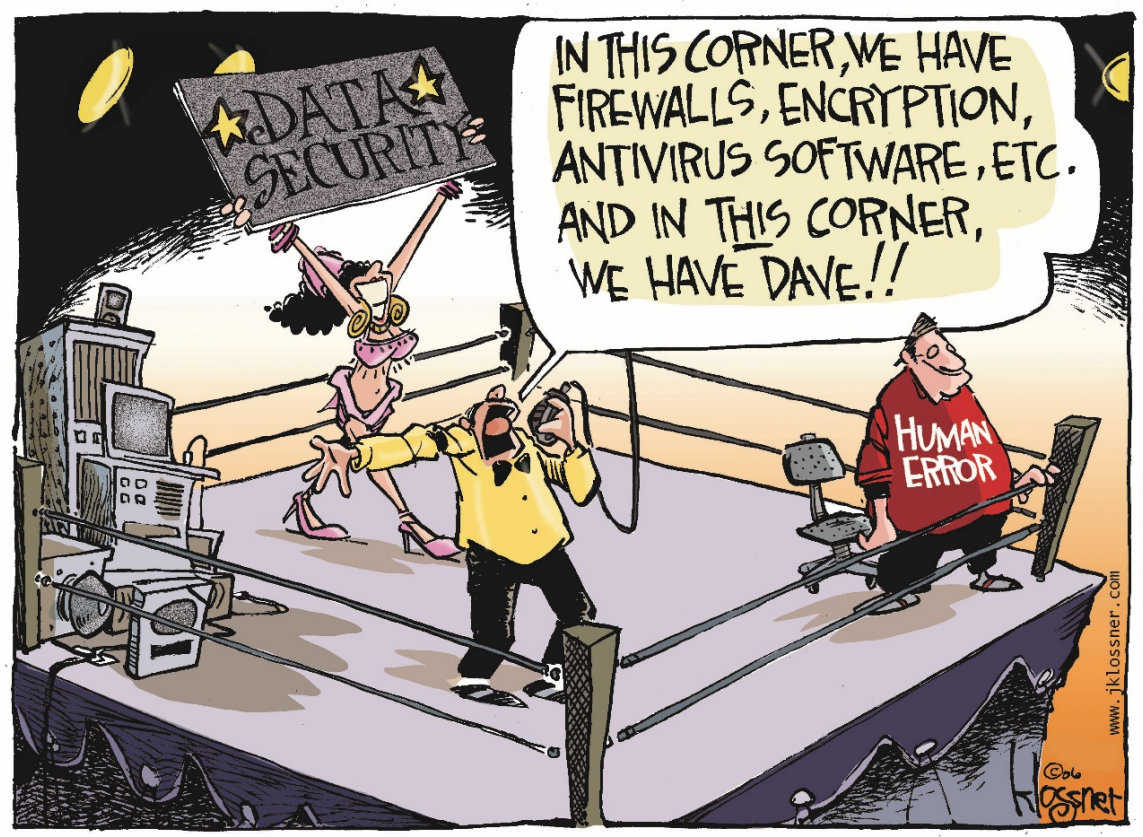
Importance of Awareness and Training



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Let’s break this down!

1. Managing risks
2. Protecting information (CIA)
3. Using a variety of controls and defense in depth.

Next steps

- Identify protected assets (data)
- Documentation of current systems and policies
- Risk assessment
- Incident Response Plan
- Outsource expertise
- Staff education now!

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Free Tools

- Security Toolbox https://gcatoolkit.org/smallbusiness/#tool-boxes
- IT Policies http://www.techproresearch.com/topic/it-policies/
- Cybersecurity Framework https://www.ftc.gov/system/files/attachments/understanding-nist-cybersecurity-framework/cybersecurity_sb_nist-cyber-framework.pdf
- Resources for SMBs
  - https://www.dhs.gov/publication/stopthinkconnect-small-business-resources
  - https://www.us-cert.gov/ccubedvp/smb
  - https://www.nist.gov/itl/smallbusinesscyber

In Summary…

- We defined cybersecurity
- Determined why it’s important
- Suggested strategies to get started
- Learned about some cool free stuff!

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Also in Summary

- Cybersecurity is not an IT problem. It's an organizational problem that can use IT to help solve it.

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