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Assess and Mature your Cybersecurity Program Today

October 10, 2023

Today's Speakers

IT Risk, Process, Cybersecurity and Digital Transformation Expertise

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Carl Grifka

Managing Director, CISSP, CISM, CISA, PMP, CDPSE

Managing Director of SL Business Informatics

Prior experience includes Top 10 CPA firm Risk Consulting Director, Private and Public sector IT auditor; Global enterprise CFO

Frequent speaker and nonprofit board member

SLBI Practice areas - IT Risk, Internal Audit, Cybersecurity, SOC Reporting, BC/DR Planning, Project Management

Eric Rockwell

Lead Cybersecurity Advisor, CISSP, vCISO

Former in-house IT executive roles: CEO and CISO

Frequent speaker (Cybersecurity risk management)

Author of American Bar Association Information Security Policy Handbook

Contributor to the Center for Internet Security (CIS) Controls v8.0

Leads Cybersecurity and risk assessments, Information security programs, monitoring and oversight

Learning Objectives

- What a Cybersecurity “program” is – and how Management is involved
- How the cybersecurity program can be used to assess, identify and manage material risks from Cybersecurity threats
- How management can oversee risks from Cybersecurity threats.
- How material incidents may need to be disclosed by the participant’s company and the required timing.

Reviewed in the context of the new SEC Cybersecurity disclosure rules published on July 26, 2023

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Polling Question #1

What function do you represent within your company?

A. Audit
B. Cybersecurity
C. Risk Management
D. IT
E. Finance
F. Other

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Cybersecurity is a continuous living process of maturity and risk management

- You have to start somewhere
- You should assess and measure your progress
- It involves on-going assessment of your Cybersecurity maturity and capabilities – and remediating, designing and improving your posture
- If you already are deploying or managing a cybersecurity program, GREAT! But - do you objectively measure your program and improve it on an ongoing basis?

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A Cybersecurity Program

What is a Cybersecurity Program?

The formal, auditable, measurable activities undertaken to manage Cybersecurity risks and threats.

Who is responsible for a Cybersecurity Program?

Cybersecurity management is an element of IT Governance - which is a **management responsibility** (read: not only IT).

What is IT Governance?

IT governance is defined as the processes that ensure the effective and efficient use of IT in enabling an organization to achieve its goals. IT demand governance (or "ITDG" - what IT should work on) is the process by which organizations ensure the effective evaluation, selection, prioritization, and funding of competing IT investments; oversee their implementation; and extract (measurable) business benefits. ITDG is a business investment decision-making and oversight process, and it is ultimately a business management responsibility. *(Gartner)*

SL emphasis: Cybersecurity is one – of many things – that IT "works on"

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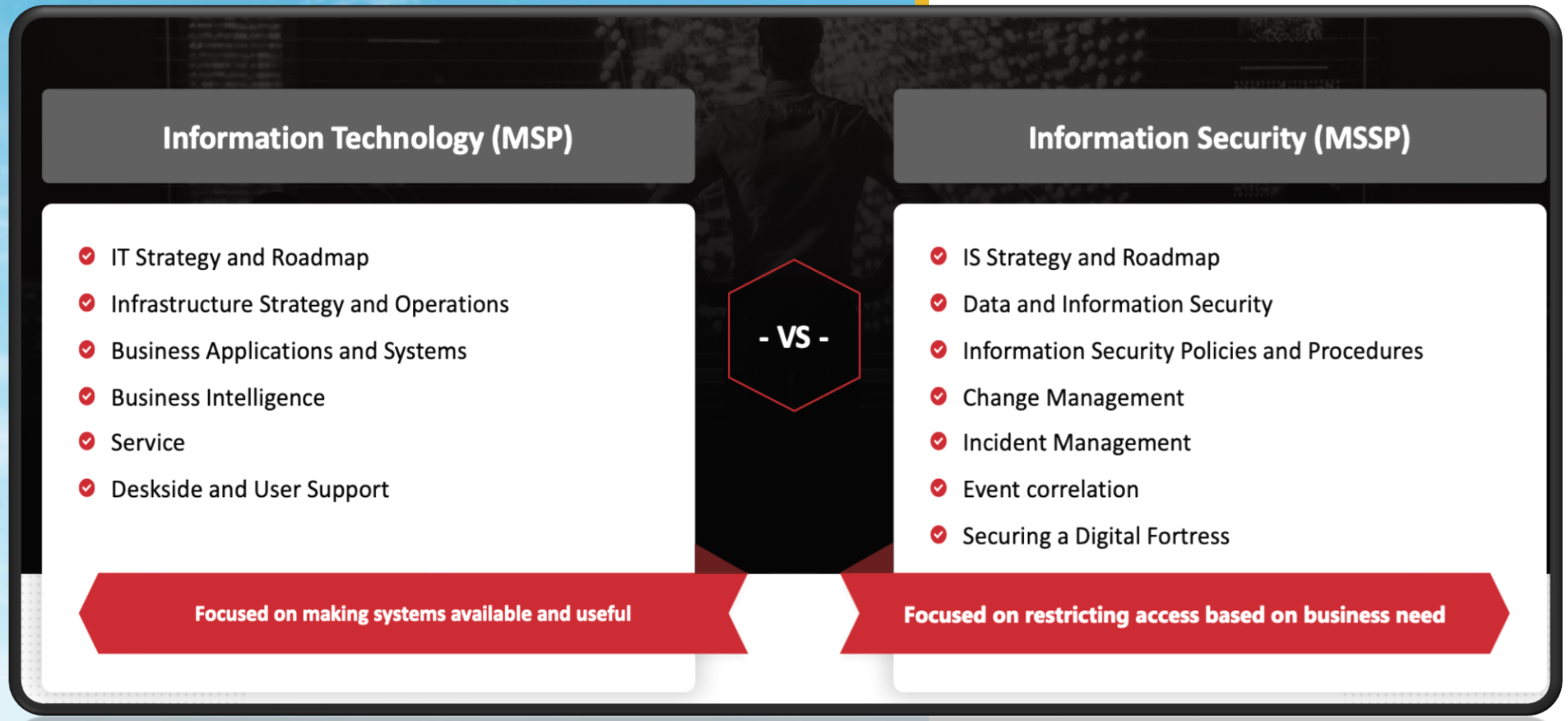
Information Technology goals differ from Information Security goals

There is a need to manage these conflicting viewpoints internally



Reflect…

The 3 definitions aggregate several vital themes to the deployment of Cybersecurity:

- ✓ “People”
- ✓ Origination: Outside and Inside
- ✓ Purpose of Cybersecurity: “ensure availability, integrity, authentication, confidentiality, and nonrepudiation” of your digital information

The term: “Practice”…

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Cybersecurity Programs…

Are all Cybersecurity Programs the same?

- ❑ No
- ❑ Why?
- ❑ How they differ
- ❑ Illustrations

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Security Maturity Levels: *How does your organization stack up?*

Polling Question #2

Based on your knowledge, what maturity level is your company's cybersecurity Program at today?

A. 1 - Initial
B. 2 - Developing
C. 3 - Defined
D. 4 - Managed
E. 5 - Optimized
F. I'm not sure

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A path to manage Cybersecurity:

We recommend a 12-step Managed Information Security Program

01 Conduct a Security Maturity Level Assessment (SMLA)

02 Form Information Security Committee

03 Write and Approve Information Security Policies and Procedures

04 Undertake Security Policy and Employee Awareness Training

05 Implement, Automate, and Report on the Critical Security Controls from the Security Policies

06 Compliance Portal Goes Live

07 24/7/365 Security Operations Center (SOC) (ongoing alert monitoring, investigation and escalation)

08 Ongoing Vulnerability Management and Remediation

09 Intrusion Detection and Data Loss Prevention Software Implemented

10 Create Incident Response Plan

11 Review and Approve Cyber Liability Insurance Policy

12 Penetration Testing

Today we will focus on the periodic security maturity level assessment (SMLA) – Step 1

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Elements of Cybersecurity:
NIST Cybersecurity Framework (CSF)

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Security Maturity Level Assessment (SMLA) Approach

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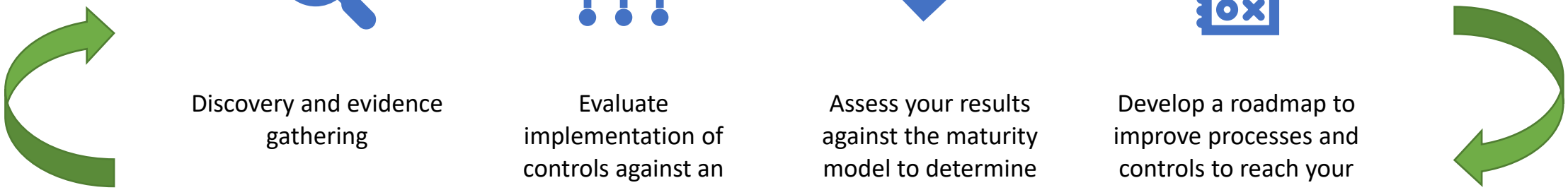
We recommend that organizations perform a Security Maturity Level Assessment (SMLA),which is a periodic evaluation of the progression and capability of their cybersecurity program, with a view to creating effective, repeatable security processes to be improved continuously. The security maturity level of an organization is represented by an indicative score, which can be improved through recommended actions.



Discovery and evidence gathering

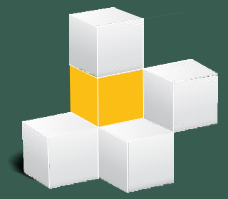
Evaluate implementation of controls against an established framework (e.g., CIS, NIST CSF)

Assess your results against the maturity model to determine your security posture

Develop a roadmap to improve processes and controls to reach your desired maturity level

Continuous reperformance and evaluation to improve maturity levels over time

SMLA Controls Framework Recommendation



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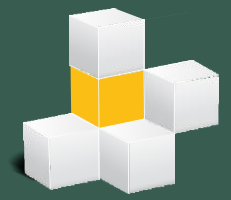
We recommend the use of the Center for Internet Security (CIS) framework within a SMLA assessment. Simply put, the CIS framework is a holistic set of standard security controls that you can use to measure and enhance your IT environment over time. CIS is the approved implementation plan for the NIST CSF, the standard source for insurance questionnaires, and is mapped to major cybersecurity frameworks. Leveraging the CIS framework is a solid starting point and is in our opinion the best overall source of cybersecurity controls to measure and improve your security program.

CIS Control Domains

CIS Control 1: Inventory and Control of Enterprise Assets
CIS Control 2: Inventory and Control of Software Assets
CIS Control 3: Data Protection
CIS Control 4: Secure Configuration of Enterprise Assets and Software
CIS Control 5: Account Management
CIS Control 6: Access Control Management
CIS Control 7: Continuous Vulnerability Management
CIS Control 8: Audit Log Management
CIS Control 9: Email and Web Browser Protections
CIS Control 10: Malware Defenses
CIS Control 11: Data Recovery
CIS Control 12: Network Infrastructure Management
CIS Control 13: Network Monitoring and Defense
CIS Control 14: Security Awareness and Skills Training
CIS Control 15: Service Provider Management
CIS Control 16: Application Software Security
CIS Control 17: Incident Response Management
CIS Control 18: Penetration Testing

SMLA Key Deliverables



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Executive Summary

Document to review findings, remediation recommendations and roadmap, and respond to questions.

Security Maturity Level Report

Based on the findings, your organization should develop a security maturity report based on the CIS Controls and NIST CSF Mapping.
The organization should determine its maturity score between 0 – 5.

IT Security Roadmap and Budget

The organization should develop a roadmap to achieve a phased remediation path and allocate budget to achieve the target security maturity level. These typically run between 3 – 12 months.

Polling Question #3

Does your company conduct a regular periodic cybersecurity maturity level assessment (e.g., SMLA type of exercise)?

A. Yes, every year
B. Yes, every couple of years
C. No, we do not do this regularly
D. I'm not sure

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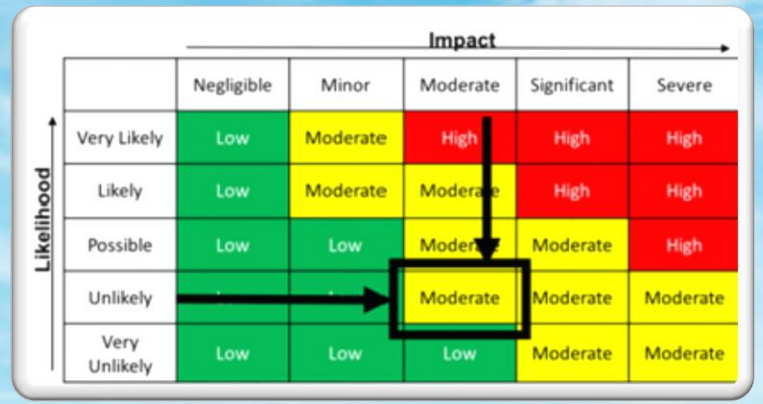
Contemplation:
Assessing your Cybersecurity Risks



- Is information security *risk management* important to your business?
- What is being done, presently, to manage this risk? How much is being spent on it?
- Who is managing it, and who are they accountable to?
- Do you trust that it's being managed competently?
- Risk Assessment "101" -
  - *What are the risks and threats to your digital assets?*

  Then for each risk/threat, assess:
  - *What is the impact should any of the risks and threats occur?*
  - *What is likelihood of occurrence?*

Polling Question #4

Does your company conduct a regular periodic cybersecurity risk assessment?

A. Yes, every year
B. Yes, every couple of years
C. No, we do not do this regularly
D. I'm not sure

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New SEC Cybersecurity Disclosure Rules

The Securities and Exchange Commission (SEC) adopted new rules to standardize disclosures related to cybersecurity for public company registrants in late July 2023.

These new disclosures cover cybersecurity program strategy, risk management, governance, and incident response.

What's at stake? In short – it's time to disclose how your organization governs and manages material cybersecurity risks, threats and incidents – as well as disclosure of material cybersecurity incidents.

How soon? For many filers, these rules apply as early as fiscal years ending after 12/15/23.

SEC Focus Areas

Cyber incident reporting

Cyber risk management

Cyber governance

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SEC Disclosure Requirements

Cyber incident reporting: material incidents need to be disclosed *(typically)* within 4 business days; specifically, the nature, timing, and material impact or reasonably likely material impact on the organization. *(Disclosed on Form 8-K)*

Cyber risk management: how you assess, identify and manage material risks from Cybersecurity threats – and determine how possible and previous incidents can impact your organization. *(Disclosed on form 10-K for domestic registrants, Regulation S-K)*

Cyber governance: your *board's oversight* of risks from Cybersecurity threats – and *your management's role and expertise* in addressing material risks from Cybersecurity threats. *(Disclosed on Form 10-K for domestic registrants, Regulation S-K)*

A Path to Meet SEC Requirements

To prepare for these complex SEC disclosure requirements, we recommend that public company registrants perform the following actions:

1. Evaluate the readiness of your cybersecurity program for SEC disclosure compliance.
   - We recommend completing a SMLA with an added focus on incident response and recovery to understand the risks/threats that may impact your business and to assess your IT security processes and controls.

2. Develop a SEC Cybersecurity compliance roadmap for remediation of policies, controls, governance and behavior.
   - Implement critical items ASAP for compliance and other roadmap improvements over time.

3. Ensure that your management team and your Board understand their oversight responsibility in the management of Cybersecurity risks and threats.
   - Consider education and training to remediate any gaps in knowledge.

Skillsets needed

Subject Matter Professionals

Role 1
Hands-on, skilled Cyber and SEC accounting technical support to establish processes designed to help build your capability to comply with these rules.

Role 2
Seasoned, skilled Cyber and SEC accounting eyes to assess your compliance posture.

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Polling Question #5

What is the primary challenge to implement or maintain a cybersecurity program at your organization?

A. Conflicts of goals between IT operations and cybersecurity
B. Budget or cost constraints
C. Lack of Management buy-in based on their understanding of the risk
D. Lack of time or staff expertise needed to support the program
E. We do not have any challenges maintaining a cybersecurity program
F. I'm not sure

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Reflect…

Practical Challenges of Cybersecurity

- ✓ Cyber solved by IT or Behavior?
- ✓ Tone at the top
- ✓ Formality of controls, policies, enforcement, consequences
- ✓ Balancing morale, efficiencies, security, protection
- ✓ Use of AI and machine learning
- ✓ Dangers of Cyber being seen as a one-time exercise
- ✓ Continuously changing regulatory environment

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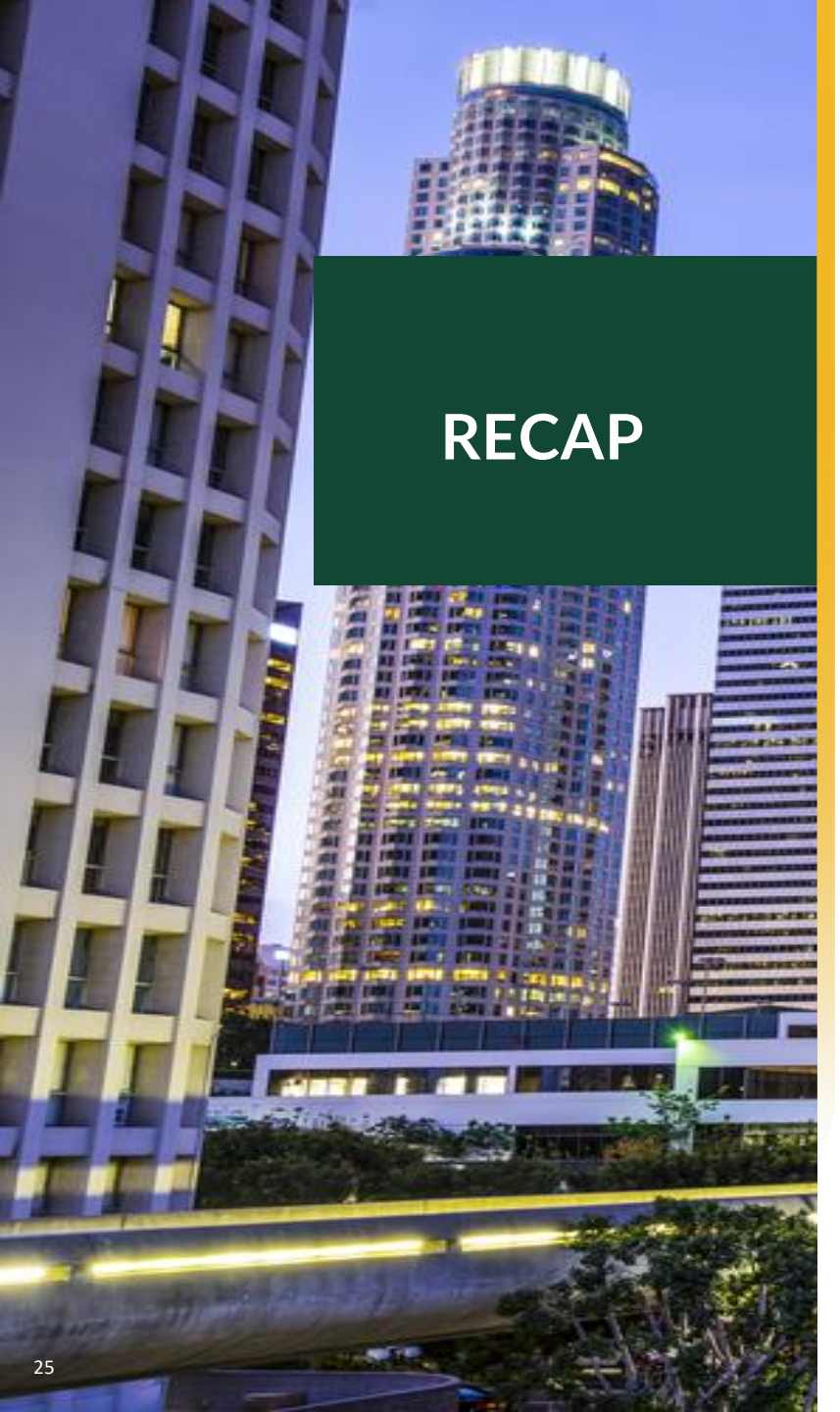

RECAP

- You may be in a governance, IT or risk management position
- Risks vary among all businesses; impactful and likely risks require attention – particularly those to your sensitive digital assets
- Your role is to govern the implementation of a *Cybersecurity Program* to manage the risks you deem worthy of mitigating
- This *Program* is an on-going series of maturation activities whose effectiveness is measured over time (e.g., with a SMLA)
- Cyber protection is very much about both your IT organization and your company's Management team – without them you can't protect your data

We are here to help

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Thank You!

If you have questions or want to follow up – let us know – we're here to help.

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