

#### **CYBER & INFORMATION SECURITY**

#### WHAT EXECUTIVES NEED TO KNOW AND ASK



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## Information Security

The protection of information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide **<u>Confidentiality</u>**, **integrity**, **and availability**.



## Current State of Cyber Security

- Pandemic accelerators
- Dark web considerations
- Bitcoin They can get paid now
  - ► Exploit kits …help desk?
- Ransomware as a service
- Data breach privacy concerns
- ► IoT implications
- Operational continuity issues
- Legal and branding concerns



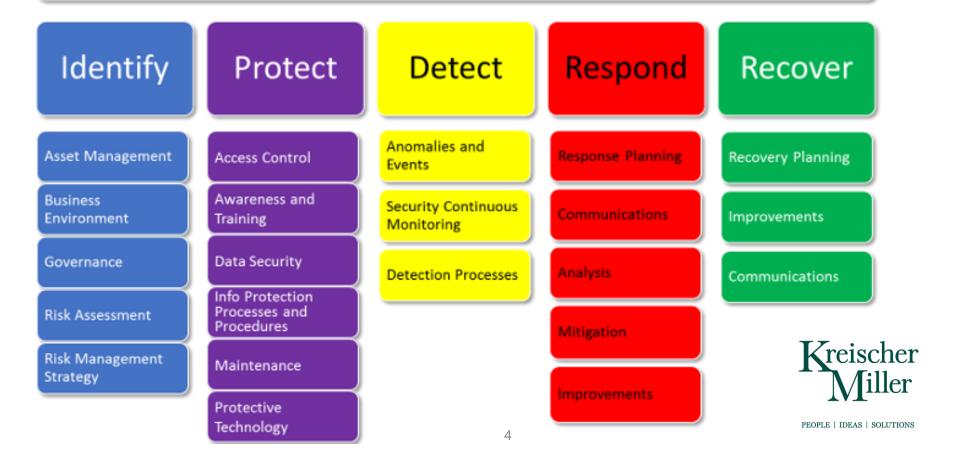
## Middle Market & Information Security

- Increased frequency of attacks
- Limited internal resources
- Increased regulatory pressures
- Confusion among management regarding roles, responsibilities and priorities
  - Assuming IT is addressing it all!
- Lots of noise/offering in the IT vendor community
- Need for a unified methodology and approach

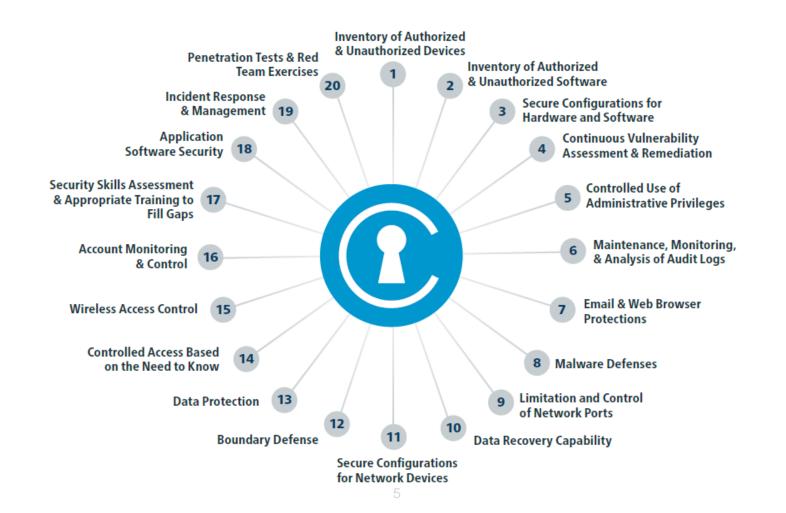


## Leveraging Frameworks

## NIST Cyber Security Framework

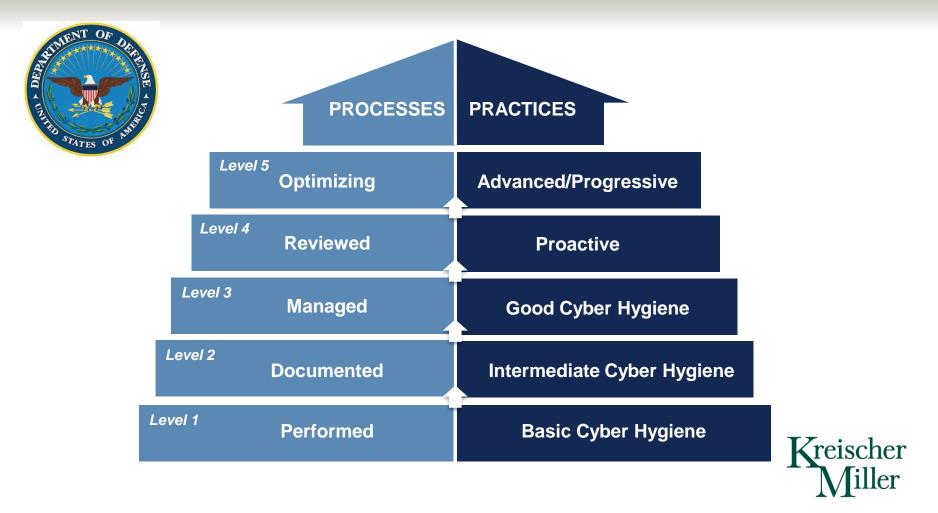


## CIS Top 20 for SMEs

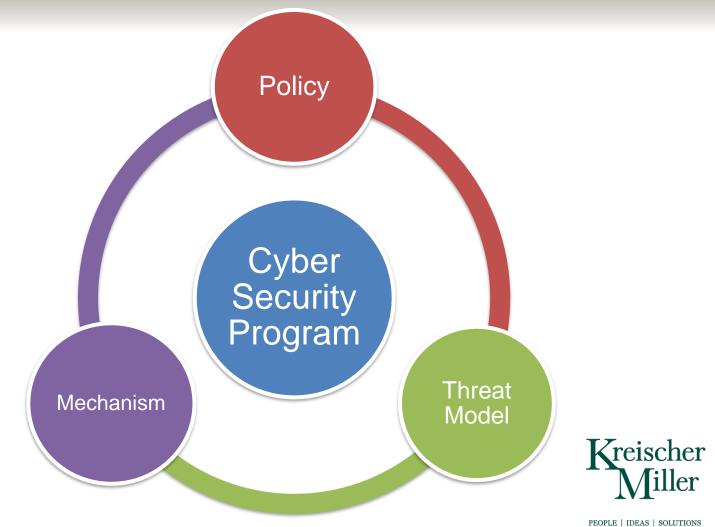


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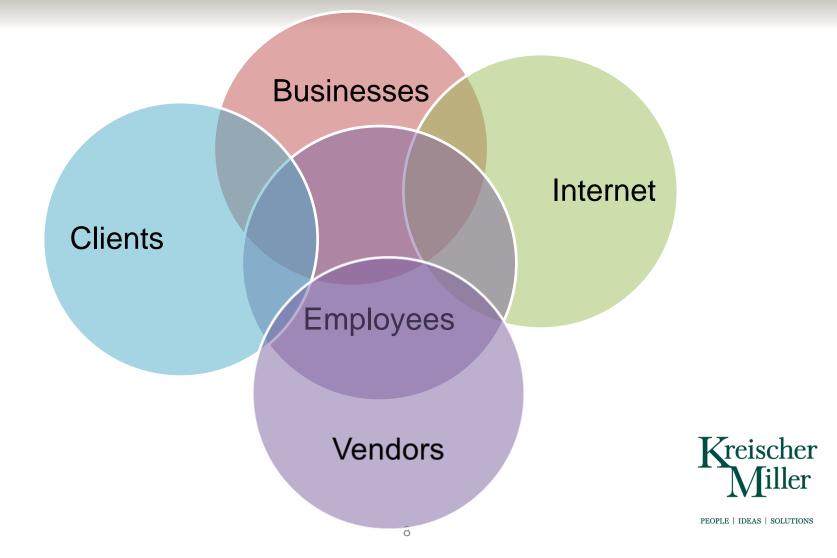
## Governmental Contracting DFARS/CMMC



## Cyber Security Program Triad



## Know Your Web of Trust





## **10 QUESTIONS TO ASK**



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## Do we have a cyber program?

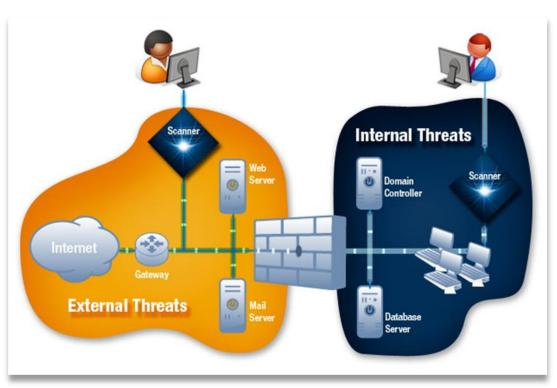
► Is it an active program? Cyber versus Privacy ► Is it well planned/budgeted? ► Is it based on a methodology? ► NIST ► CIS ► DFARS/CMMC ► ISO ► GDPR/HIPAA





#### Do we know our vulnerabilities?

- How often do we conduct a vulnerability scan?
  - New vulnerabilities are discovered daily
  - Internal vulnerability scans occur from within the network
  - External vulnerability scans simulate the effect of Internet users attempting to access a network





## Are we monitoring threats?

- Detecting potential intrusions?
- Review of user activities?
- Staying on top of latest threats out there?

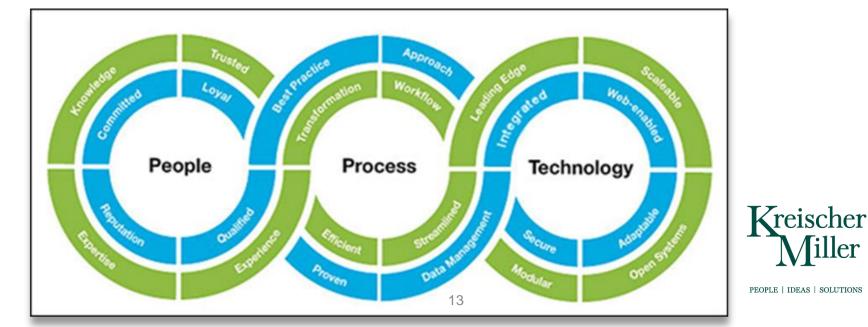


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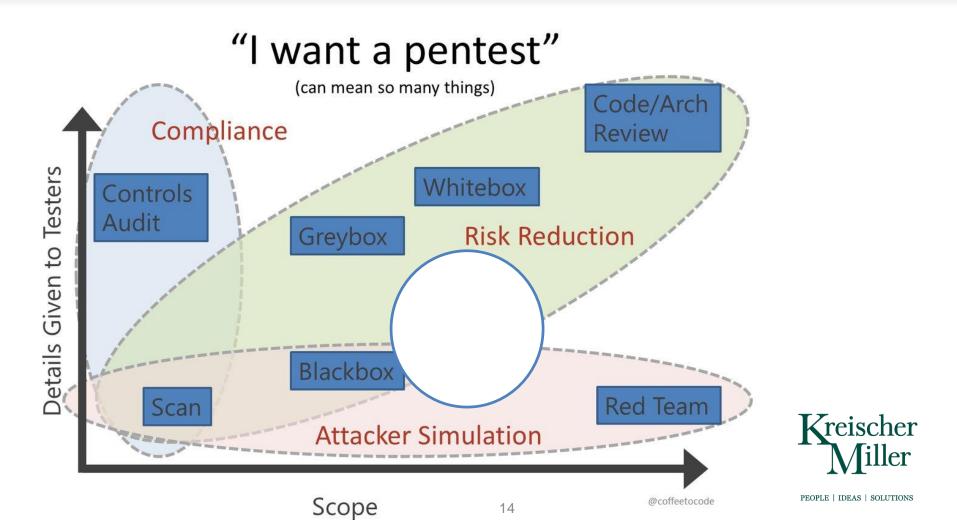


#### Do we have updated policies?

- Employee on boarding, acceptable use, termination?
- Customer data handling and privacy?
- ► IP and internal data confidentiality, access and protection?
- Vendor/contractor proper data handling and confidentiality?
- IT department/provider cyber policies & procedures?



## Have we paid someone to break in?



## Do we have a cyber training program?



Kreischer Miller

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## Are we validating user knowledge?





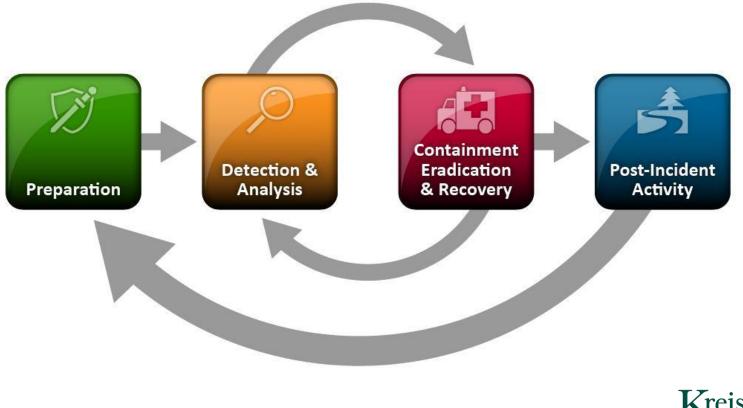
#### Users only access what they need?

- Principle of least privilege
  - a user, or a program, depending on the subject) must be able to access only the information and resources that are necessary for its legitimate purpose
- Review access levels and have proper change control procedures in place
- Apply this principle to all employees and third parties





### Do we have an incident response plan?



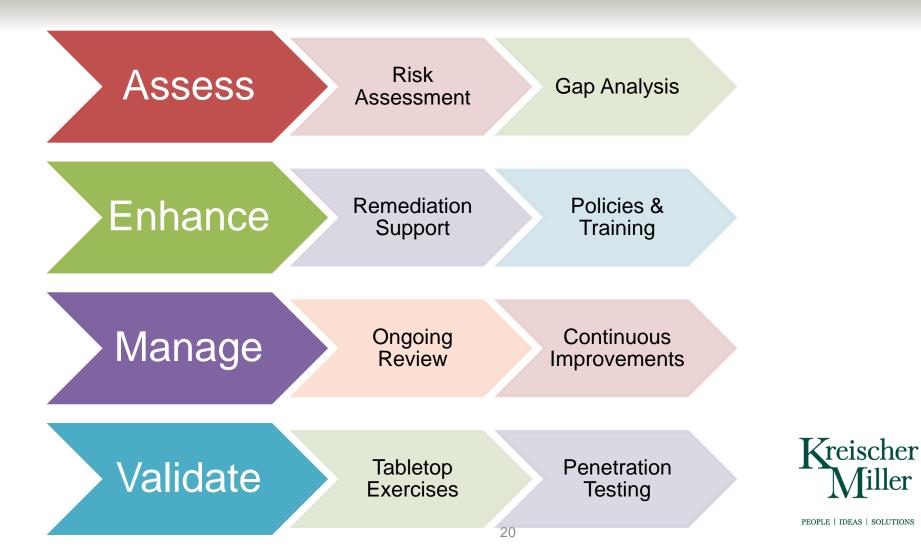


#### Do we have a recovery plan?

#### SOFTWARE STEM **STRATEG FUNCTIONS** POLICIES **PROTECTION** ISAST ER CRITICAL CONTINUITY DATA BACKUP **TECHNOLOGY** RY **BUSINESS** SURES MANAGEMENT **PROCEEDURES** CORRUPTED NATURAI **DISASTERS MAN MADE** REPLICATION HARDWARE



## KM 4 Phases of Information Security



## **Concluding Comments**

- Executives are ultimately responsible for their organizations cyber security and information security readiness.
- Executives and Board members need to stay highly engaged in the cyber and information security readiness efforts to lead their organization's culture towards a security aware and empowered one.
- Increasing cyber hygiene and information privacy is not a costly endeavor. It could be accomplished if addressed in a systematic program fashion to best protect ongoing digital transformation efforts and assets.



# **THANK YOU FOR ATTENDING!**

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