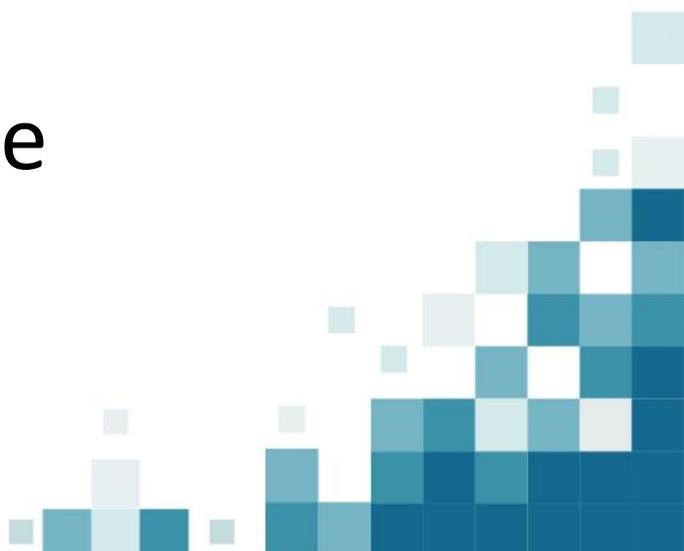


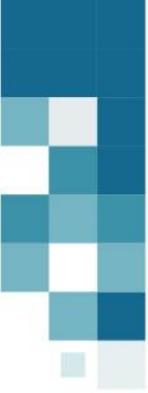


# CYBER SECURITY SUMMIT 2017

## Collaboration and Capabilities as Necessary Steps for Increasing Cyber Resilience

Matt Loeb, CGEIT, CAE, FASAE  
Chief Executive Officer





# IT's a risk-based world: The 10 most critical uncertainties companies face

**1** Economic conditions may restrict growth

**2** Regulatory changes and scrutiny may increase affecting products and services

**3** Organizations are insufficiently prepared for cyber threats

**4** Rapid speed of disruptive innovations and new technologies may outpace organizations' ability to compete or manage risk

**5** Privacy, identify and information security risks are not being addressed with sufficient resources

**6** Succession challenges and ability to attract top talent may limit ability to achieve operational targets

**7** Anticipated volatility in global financial markets/currencies may create significant challenges

**8** Org. culture may not sufficiently encourage identification and escalation of risk issues

**9** Resistance to change could restrict orgs from making necessary adjustments to business model and core operations.

**10** Sustaining customer loyalty and retention may be increasingly difficult as customer demographics and needs change.

Source: NACD 2017 Public Company Governance Survey

Highlighted Text is information and technology governance-related



# 52%

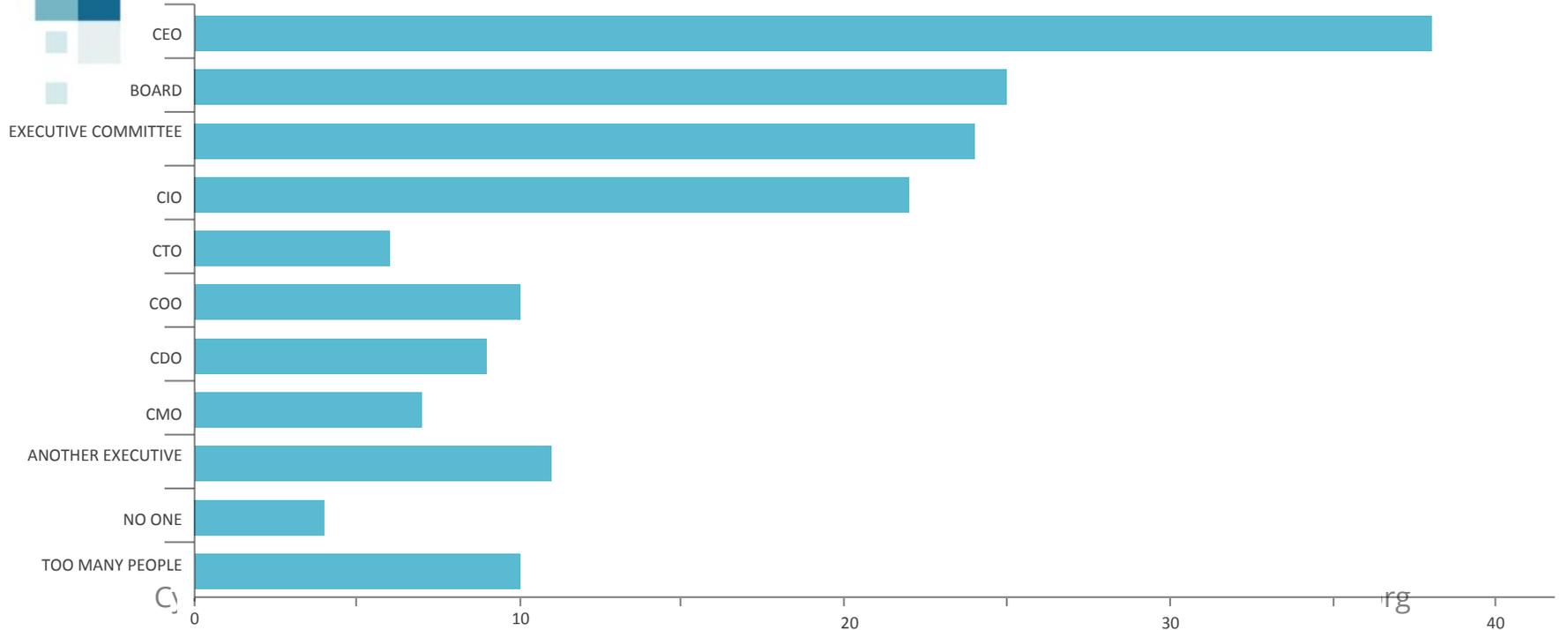
of C-suite executives think their **boards are not fully knowledgeable about the risks** the organization is taking and the measures that are in place.

Source: EY's [19th Global Information Security Survey 2016-17](#)



# Who is leading digital transformation?

## Snapshot Results of MIT/ISACA Survey, 2017





**“In a digital economy, the whole company is responsible for generating value from digital investments. We see three key components:”**



### **DEFENSIVE**

(e.g. cyber, privacy, regulation etc.)



### **OVERSIGHT**

(making sure the major investments and organizational change are on track)

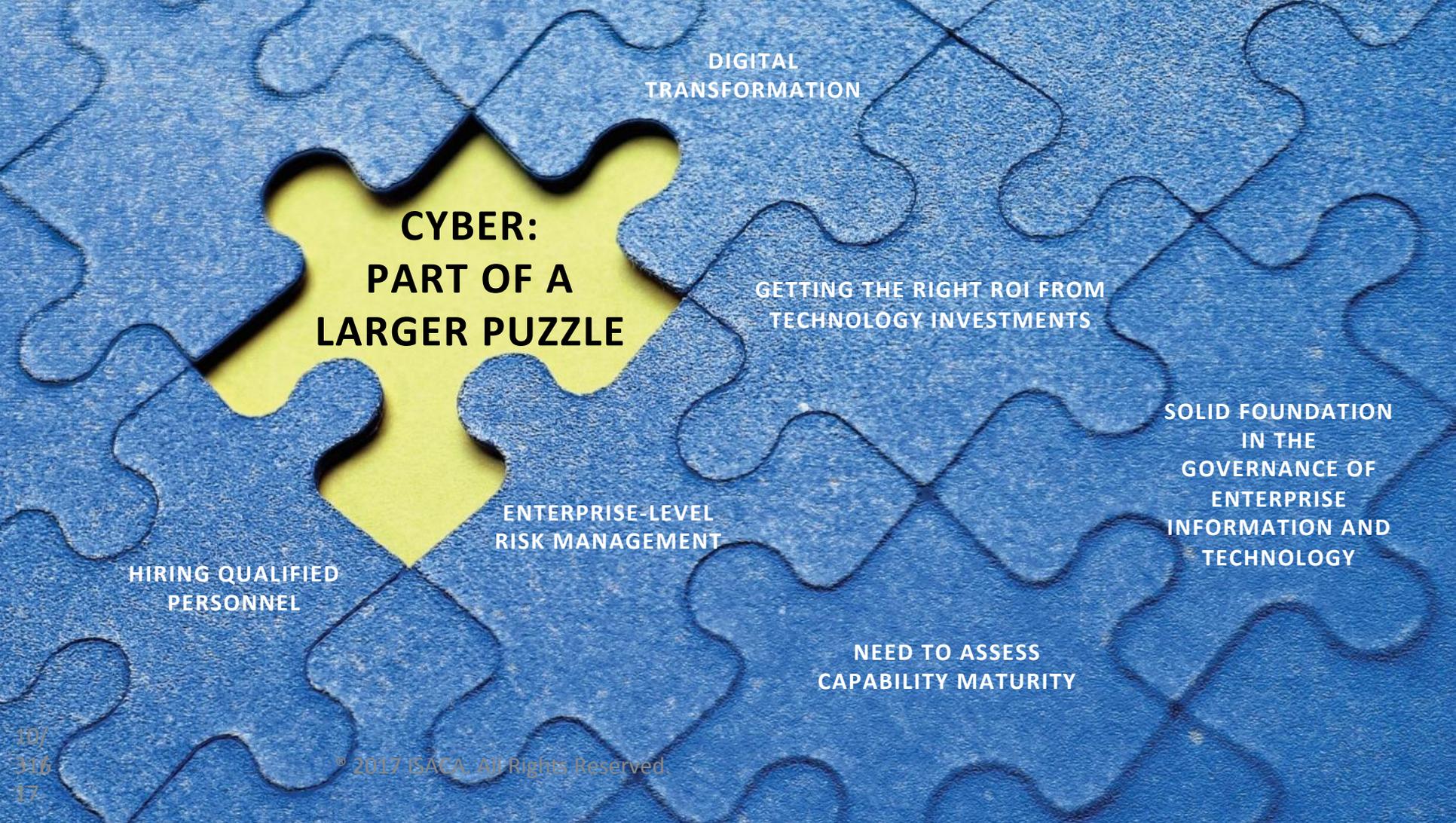


### **STRATEGIC**

(e.g. how will we operate in the future e.g. business models, ecosystems, partnerships).

**“How good you are at each of these will predict your likely success in the digital economy.”**

Dr. Peter Weill  
*Director*, MIT Center for  
Information Research



**CYBER:  
PART OF A  
LARGER PUZZLE**

**DIGITAL  
TRANSFORMATION**

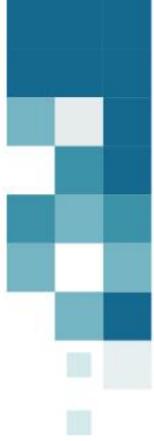
**GETTING THE RIGHT ROI FROM  
TECHNOLOGY INVESTMENTS**

**SOLID FOUNDATION  
IN THE  
GOVERNANCE OF  
ENTERPRISE  
INFORMATION AND  
TECHNOLOGY**

**ENTERPRISE-LEVEL  
RISK MANAGEMENT**

**NEED TO ASSESS  
CAPABILITY MATURITY**

**HIRING QUALIFIED  
PERSONNEL**



# 87%

of board members and C-level executives have said they **lack confidence in their organization's level of cybersecurity**

Source: EY's [19th Global Information Security Survey 2016-17](#)





# 57%

of enterprises have had a **recent significant cybersecurity incident**, which shows that there is still more work to do to strengthen the corporate shield.

Source: EY's [19th Global Information Security Survey 2016-17](#)



# BOARDS/C-SUITE WANT ANSWERS and ASSURANCE



## ELEVATING

CYBERSECURITY RISK TO ENTERPRISE RISK



## CREATING

SITUATIONAL AWARENESS



## DEFINING

CRITICAL CAPABILITIES AND  
MATURING



## ESTABLISHING

COMMITMENT

# Cyber security capability assessment

## Benefits and impact



Defines maturity for people, process and technology; includes hygiene; enables industry benchmarking

Defines company's risk profile and sets maturity targets

Provides risk-based prioritization of gaps in maturity to support roadmap development

Provides views into compliance with ISO27001, NIST CSF, CMMI Threat Kill Chain, ASD, etc.

WE PRESENT OUR RESULTS IN

## BUSINESS TERMS

SIMPLE GRAPHICS TO SUPPORT BOARD COMMUNICATION

OUR

## COMPREHENSIVE SCOPE

LEVERAGES LEADING FRAMEWORKS, STANDARDS AND CONTROLS

A person wearing a grey suit jacket and a blue shirt is seated at a wooden table. They are holding a white document with their left hand and gesturing with their right hand, palm up. The background is a plain, light-colored wall.

**Is our organization  
hiring the right people?**



# Hiring the Best

## So...who's the better choice?

[REDACTED]  
**Cyber Security Specialist** - [REDACTED]

Chula Vista, CA - Email me on Indeed: [REDACTED]

#### WORK EXPERIENCE

##### **Cyber Security Specialist**

[REDACTED] - San Diego, CA - October 2014 to Present

Conducted ACAS vulnerability scanning, application administration, and vulnerability analysis.

- Responsible for developing and modifying scan policies in Security Center
- Responsible for monitoring enterprise vulnerability status, vulnerability identification and analysis, patching and vulnerability mitigation, incident detection, compliance reporting.
- Ensure information assurance by transmitting secure data between classified systems; perform ethical hacking, malware reverse engineering, penetration testing, and Certification and Accreditation (C&A) within Security Operations Center (SOC) environment.
- Composed technical manuals, installation documents, installation progress updates, and incident response plans to enhance system security documentation.

[REDACTED]  
**Cyber Information Assurance Analyst** [REDACTED]

Suffolk, VA - Email me on Indeed: [REDACTED]

Authorized to work in the US for any employer

#### WORK EXPERIENCE

##### **Cyber Information Assurance Analyst**

[REDACTED] - January 2015 to Present

CompTIA Security + Professional  
Current Secret Security Clearance  
Pursuing Certified Information System Security professional (CISSP)

Recruited to establish enterprise-wide information-security program; oversee [REDACTED] efforts to identify and evaluate all critical systems. Information Assurance Analyst excellent at planning, implementing, upgrading and monitoring security measures for protecting computer networks and information. Ensure appropriate security controls are in place. Provide leadership and framework to appropriately analyze needs and respond to critical security issues. Capture, test and analyze data for all new functionality being introduced into software and tools controlling the weapon systems. Document corrective action, recommend remediation strategy, and collaborate with external developers to ensure change requests are implemented into new system builds.

# Time Is (Not Always) On Our Side

- In cybersecurity, 90 days is a lifetime...
- ...but 180 days is an eternity...
- **And both time frames are unacceptable**





# Fewer (Qualified) Applicants

- When we do get applicants, are they qualified to safeguard our enterprise?



**SAY FEWER THAN 1 IN 4**  
candidates are qualified

# 55%

**SAY PRACTICAL HANDS-ON EXPERIENCE** is the most important qualification for a cyber security candidate.



# Performance-Based Assessment?

- **Computer Science**

- *Create an algorithm derived from a mathematical analysis of the sound properties generated by a glockenspiel, theramin, oboe, and cowbell.*
- *Using only two smartphones, a refurbished TRS-80, and some string, migrate the finished algorithm to at least 50 computers wirelessly.*
- *Make sure all necessary controls are in place, and that all computers, when shutting down, emit a loud whistling noise that only dogs can hear.*
- *You will find either a glockenspiel or theramin under your seat to assist you.*
- *You have 20 minutes.*



# Safeguarding Your Enterprise

When choosing those who will  
defend your organization...  
choose wisely.









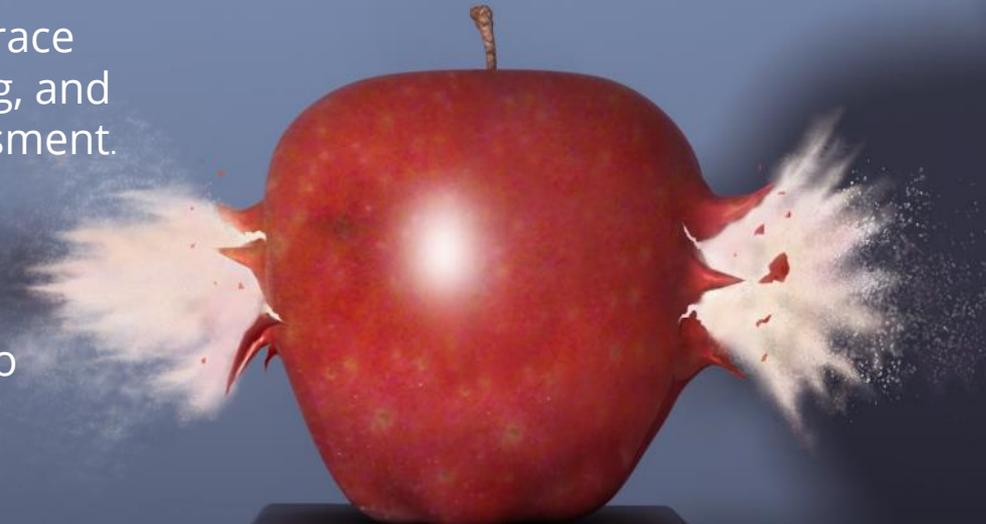


# The pace of change creates the pain

- Skills gap, near-term: embrace diversity, hands-on training, and performance-based assessment.



- Enterprises must be able to self-assess to effectively maintain cyber resilience.
- We can't "win" Cyber without good governance of enterprise information and technology
- Cyber is everybody's business; it's a matter of global and local economic security and public safety.





# THANK YOU

## Questions/Comments

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