

# Cyber Security and Inside Threats: Turning Policies into Practices

Presented by

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Ingrid Fredeen and Pamela Passman

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NAVEX Global



**Pamela Passman**

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CREATe Compliance

# Agenda

- **The rise of cyber risks:** The threat landscape
- **Elements of an effective enterprise-wide cyber security program:** Address people, process and technology
- **Addressing insider threats:** Mitigating risks from employees, contractors and third parties
- **Emerging trends:** Assessing enterprise cyber security; training your workforce
- Cyber Compliance Training and Measurable Impact
- Q&A

# CREATe Overview

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The Center for Responsible Enterprise and Trade (CREATe.org), and its wholly-owned subsidiary, CREATe Compliance Inc: two entities with a mission to promote leading practices to protect IP and trade secrets, advance cyber security and prevent corruption.



Works with leading experts and organizations to develop best practice approaches, resources and tools

Focus: to effectively address corruption prevention, cyber security, trade secret and IP protection



Enabling enterprises to assess, build and strengthen programs via CREATe Leading Practices services:

- CREATe Leading Practices for Cybersecurity
- CREATe Leading Practices for Anti-Corruption
- CREATe Leading Practices for Intellectual Property Protection
- CREATe Leading Practices for Trade Secret Protection

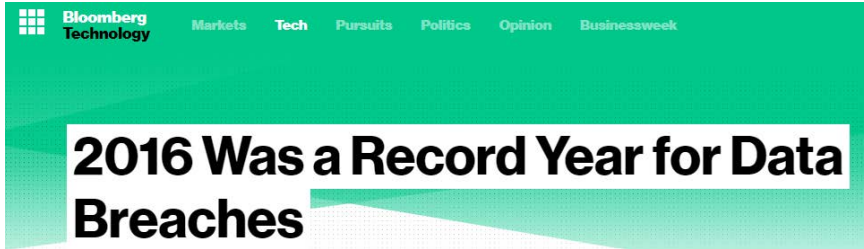


# Cyber Security: The Threat Landscape

# Who at your organization is the primary owner of cyber risk?

- IT
- Human Resources
- Ethics and Compliance
- Legal Department
- CRO/Enterprise Risk Management Owner
- Multiple Groups Own It
- No One Really Owns It
- Other





“Data breaches in 2016 exposed everything from social security numbers to user account log-in names and passwords.

Attacks known as phishing, in which an employee is tricked into clicking an e-mailed link to give hackers access to a corporate network, accounted for about 56 percent of all breaches last year, according to the center. That’s up from 38 percent in 2015.”

***--Identity Theft Resource Center Data Breach Report (2016)***

- Employees remain the most cited source of compromise
  - Current Employees: 34%
  - Former Employees: 29%
- Incidents attributed to business partners climbed to 22% (from 18%)

*--PwC 2016 State of Information Security Survey*

Threat Actor	Objectives	Methods	Vulnerabilities
<b>Nation States</b>	Military technology, help national companies	Blunt force hacking Social Engineering	Processes People Technology
<b>Malicious Insiders</b>	Competitive advantage, financial gain, national goals	Trojan Horse Spear phishing	
<b>Competitors</b>	Competitive advantage	Watering Hole Exploits Malware	
<b>Transnati'l Organized Crime</b>	Financial gain	Co-opted Credentials	
<b>Hacktivists</b>	Political/social goals	Physical/Non-technical	

Source: CREATE.org – PwC Report: Economic Impact of Trade Secret Theft: A framework for companies to safeguard trade secrets and mitigate potential thefts, February 2014

**Government contracts** now regularly require:

- Particular cyber security controls
- Compliance with particular standards
- Risk assessment and risk management
- Reporting and remediation of breaches

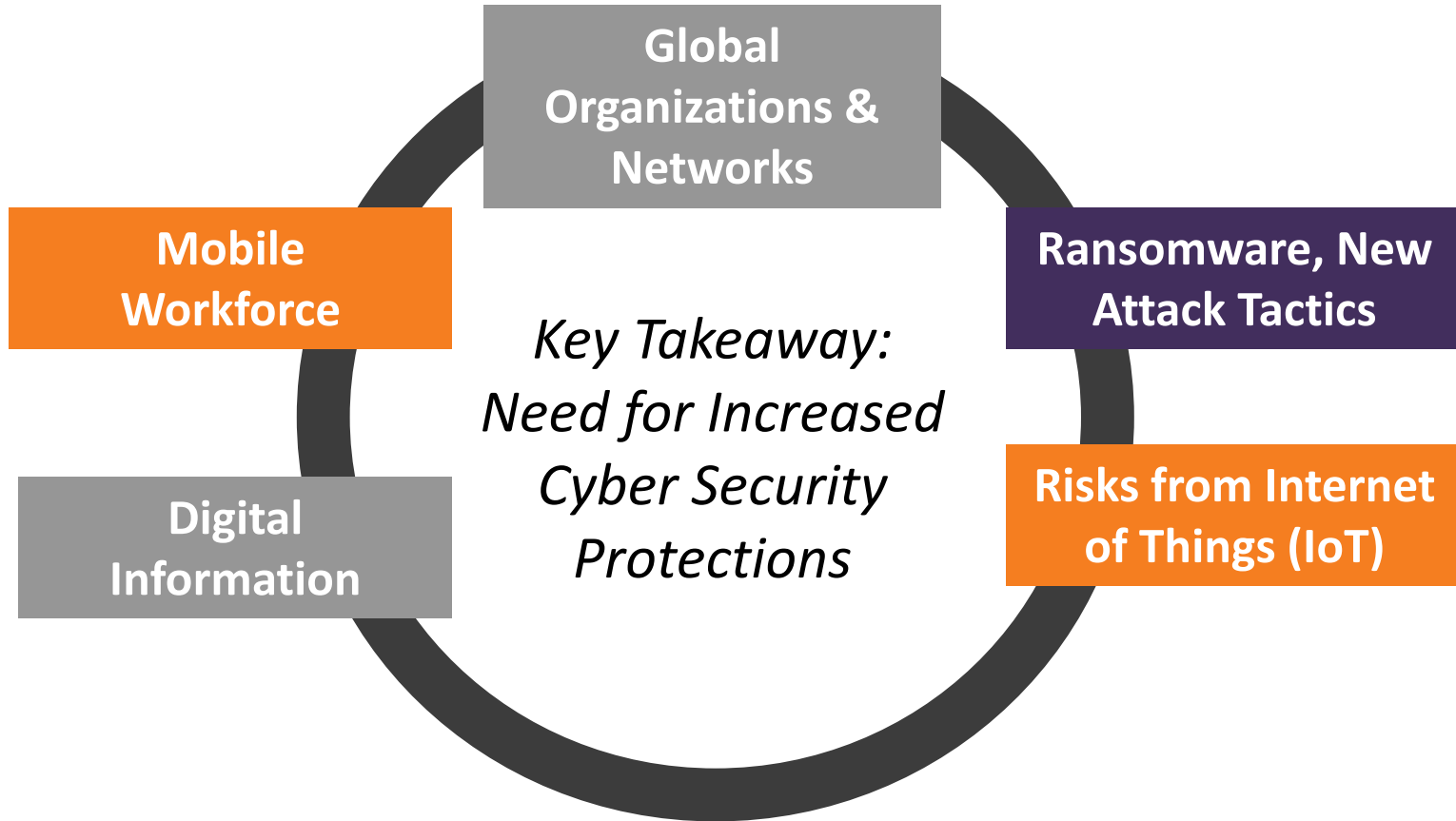
**Commercial contract requirements** are also on the increase: financial services, healthcare, defense, ICT, etc.





# Managing Cyber Risks

AN ENTERPRISE-WISE APPROACH TO CYBER SECURITY



## Enterprise Risk Management

- Managing potential financial, operational and reputational risks

## Regulatory - Compliance

- Meeting rising regulatory and compliance requirements

## Information Technology

- Defending the perimeter; bolstering technical defenses

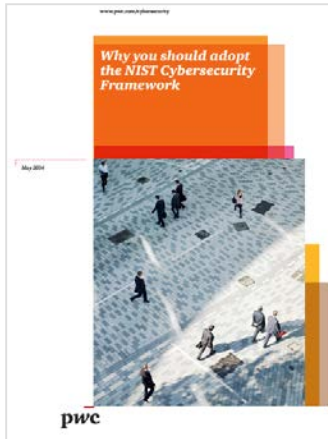
## Trend: Momentum for the NIST Cyber Security Framework

- Voluntary, risk-management approach; way to measure and assess gaps
- Increasingly a reference for contracts and compliance
- Cross-references leading standards and guidelines



*“By 2020, more than 50% of organizations will use the NIST Cybersecurity Framework, up from 30% in 2015.”*

*Gartner: Best Practices in Implementing the NIST Cybersecurity Framework, January, 21, 2016*



*“The Framework creates a common language for the discussion of cybersecurity issues that can facilitate internal and external collaboration.”*

*“Organizations that adopt the Framework at the highest possible risk-tolerance level may be better positioned to comply with future cybersecurity and privacy regulations.”*

## OVERVIEW OF NIST CYBER SECURITY FRAMEWORK

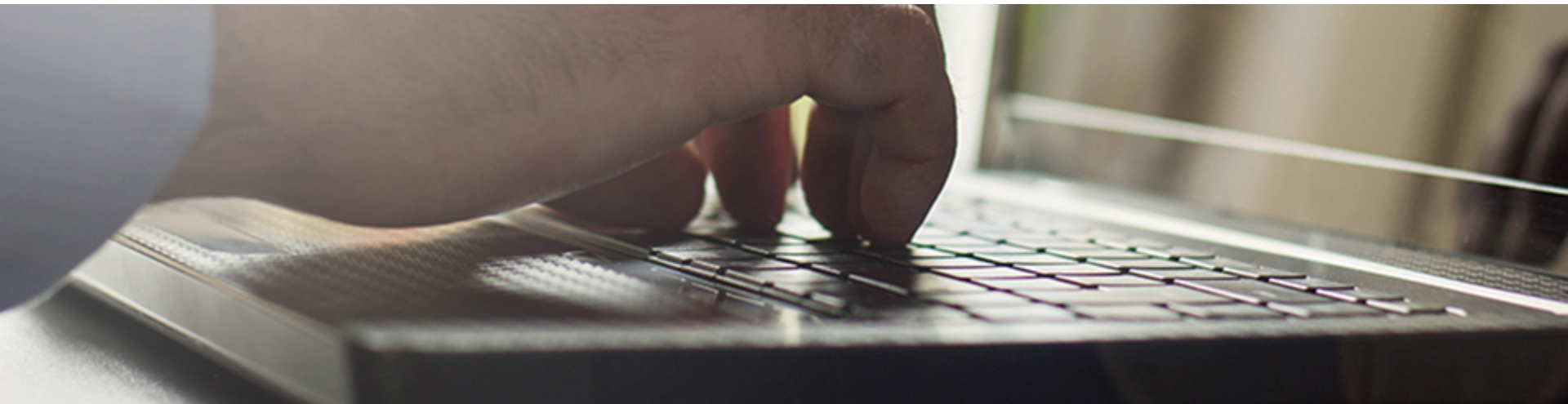
<b>IDENTIFY (ID)</b>	Asset Management
	Business Environment
	Governance
	Risk Assessment
	Risk Management Strategy
<b>PROTECT (PR)</b>	Access Control
	Awareness and Training
	Data Security
	Information Protection Processes and Procedures
	Maintenance
<b>DETECT (DE)</b>	Protective Technology
	Anomalies and Events
	Security Continuous Monitoring
<b>RESPOND (RS)</b>	Detection Processes
	Response Planning
	Communications
	Analysis
	Mitigation
<b>RECOVER (RC)</b>	Improvements
	Recovery Planning
	Communications

## Strengths

- Common framework
- Shared terminology
- Target profiles

## Challenges to Users

- Defining scope of assessment
- Calibration of results – benchmarking maturity
- Methods of verification
- Operationalizing results
- Scalability to use with third parties



# Training Your Employees and Other Insiders

# Which statement best describes your organization's approach to cyber security training?

- We train on both information security and personal behavior related to reducing cyber risks
- Our training focuses on information security practices only
- We don't currently provide cyber security training in our organization
- I don't know
- Other



# How often is your organization training employees on cyber security? [Select All That Apply]

- ☐ During onboarding
- ☐ Once a year
- ☐ Multiple times a year
- ☐ I don't know
- ☐ Other [Please Chat]



# Not All Training is Created Equal

- If you want to:
  - Drive a culture of cyber-awareness, understanding and security best practices
  - Inspire ethical employee behavior and reduce cynicism
  - Protect and defend against carelessness, malicious activity, and poor practices

Your training must be engaging and focus on the employee behaviors that can change your risk profile



# Cyber Security Training Tools Will Help Accelerate Culture Shift

## CYBER SECURITY: PROTECT AND PREVENT & MANAGE AND LEAD



# Cyber Security Expertise

- We start with a focus on the human component of cyber risk & most pressing risk areas
- We create engaging content in close collaboration with leading industry experts
- We make the content relevant and engaging with professional actors and scriptwriters
- We produce unique and compelling video scenarios and interactivities



# Cyber Security Expertise

## We've created a solution that:

- Engages your learners
- Raises awareness
- Drives behavior changes
- Helps build a culture of security and resilience
- Help prevent future mistakes
- Creates a more cyber-secure environment





# Measuring and Improving Your Cyber Security Approach

## Aligns with the NIST Cyber Security Framework

An efficient way to assess cybersecurity at headquarters, business units, by location or function – or with key third parties

Robust reporting capabilities enabling teams to present the ‘state of cybersecurity’ to stakeholders

### 1 Robust Assessment

Online Q&A:

Measures maturity of systems against the NIST Framework’s 98 sub-categories of controls

Rates maturity on a scale from 1 to 5

### 2 Independent Verification

CREATe expert evaluation:

Questions to evaluate the program

Reviews documents

Generates verified score

### 3 Improvement Plan

Based on rating:

Improvement steps to move to next level

Benchmarking report

## OVERVIEW OF NIST CYBER SECURITY FRAMEWORK

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- Five Functions; 22 Categories and 98 Subcategories/Outcomes
  - One sentence control
  - Overlap on outcomes
- Covers “People, Process and Technology” but not in the manner that reporting is done by leaders in risk management and compliance
- Does not sufficiently address third party risk management
- 1 to 4 level of tiers not aligned to specific maturity levels

# CREATE's Approach to Operationalizing the NIST Cybersecurity Framework

## People & Process

### Cyber Security Management Systems:

- Policies, Procedures & Records
- Cyber Protection Team
- Risk
- Third Party Management
- Training
- Monitoring
- Corrective Actions
- Communication

## Technology

### Cyber Security Capability Performance:

- Vulnerability Management
- Cyber Resiliency
- Threat Management
- Identity & Access Management
- Event Management
- Incident Management
- Configuration Management
- Perimeter/Network Defense
- Data Security

▶ ID.GV.1: Organizational information security policy is established.

## ANSWERS: Select an Answer

- ☐ We have established an information security policy for most of our organization.
- ☐ We have established an information security policy for some parts of our organization.
- ☐ We have established an information security policy for our entire organization.
- ☐ We have begun the process of establishing an information security policy.
- ☐ We have not established an information security policy.

1. **Comprehensive assessment** with answers that map to a 1-5 scale of maturity
2. **Independent verification** of answers and further examination of evidence of controls and business processes

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# Resources From NAVEX Global and CREATe.org

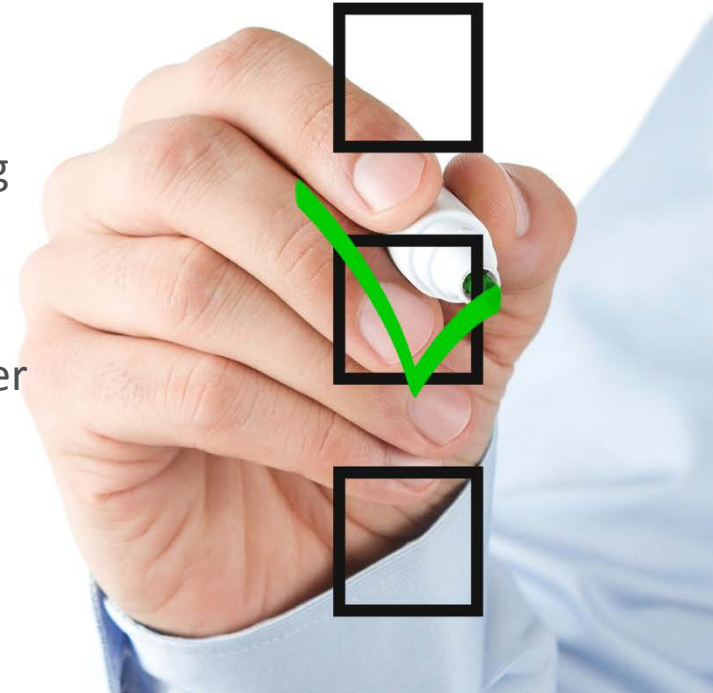
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- Report: [2016 Ethics & Compliance Training Benchmark Report](#)
- Toolkit: [Cyber Security Awareness Kit](#)
- Article: [Compliance Role in Mitigating Cyber Mayhem](#)
- CREATe Resources – Free Downloads Available at [www.CREATe.org](http://www.CREATe.org) like:
  - Cyber Risk: Navigating the Rising Tide of Cyber Security Regulation
  - CREATe-PwC Report: Economic Impact of Trade Secret Theft: A Framework for Companies to Safeguard Trade Secrets and Mitigate Potential Threats
  - Protecting Intellectual Property through Enterprise Risk Management
  - Addressing Corruption Risk through Enterprise Risk Management (ERM)

# [Optional] I'd Like to Speak to NAVEX Global Expert About...

[Select All That Apply]

- Schedule a guided tour of our Cyber Security training course
- Discuss our full online training library
- Speak to a CREATE Compliance expert about assessing and aligning your cyber security approach to the NIST framework, leading practices for cyber security or leading practices for protecting trade secrets and other confidential information
- No thanks



# Questions?

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# Thank You

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