Topic: Toward Cybersecurity Leadership Framework

Date: 13 June 2018 Time: 11:00-11:40AM, PST

Location: https://caecommunity.zoom.us/my/caeforum (Login as “Guest” & enter your name. No password needed.)

Audience: All levels

Presenter(s): Dr. Simon Cleveland from City University of Seattle

Description: Cybersecurity is a critical issue for organization and executive leadership faces challenges that their predecessors escaped. If executive leadership and boards of directors are charged with setting policy and regulations regarding the company’s cybersecurity efforts, a greater understanding of the field and the threats needs to be communicated before leadership can be expected to make critical decisions in the face of cyberattacks. This presentation addresses what type of leadership should be applied in the various cybersecurity preparation and response stages, as proposed by the NIST Cybersecurity Framework, in order to educate cybersecurity leaders in developing a prescriptive approach to addressing future cyberattacks. A novel cybersecurity leadership framework is proposed,which recommends leadership styles against the functional areas of the cybersecurity preparation and response stages.

**Cybersecurity Vulnerabilities = Leadership Failure**

2016 ICS-CERT vulnerabilities report

* 2,300 vulnerabilities
* 185 advisories
* 17 alerts

2016-2017 hacks - Worst breaches

* Equifax – 145 million people
* Yahoo – 1 billion
* WannaCry – 150 countries
* Uber – 57 million countries (paid 100k dollars in ransom)

*May face jail-time for covering data breaches*

**NIST Cyber Security Framework –** aim to make business be resilient

* Identify
* Protect
* Detect
* Respond
* Recover

Theory Y Leader

* View of work – as a natural as rest and play
* Attitude toward responsibility – accept and seek it
* Attitude toward innovation – individuals capable of innovation
* Ability to Control – self direction, self-control

*Have level of competence. Believe people are honest.*

Transformational/Inspirational Leader

* Motivation – inspirational
* Stimulation – intellectual
* Influence – idealized
* Consideration – individualized

*These leaders can incentivize to create cyber security team*

*Does not micromanages*

*Ensures organization is a safe place*

*Leader is also competent*

Servant Leader

* Calling
* Self-awareness
* Listening
* Commitment to Growth
* Empathy
* Healing

*Understanding and being genuine.*

*Waits and listens for others on their needs*

*Puts people first*

*Advantage – altruism, simplicity and moral awareness*

*Reflective thinking*

Authentic Leader

* Building enduring relationships
* Consistent and self-disciplined
* Never compromise as principles
* Dedicated to developing themselves
* Lead with heart
* Lead with purpose, mission and values

*High moral standards and values*

Adaptive Leader

* Get on the balcony
* Think politically
* Orchestrate the conflict
* Give the work back
* Hold steady
* Manage your hungers
* Anchor yourself
* What’s on the line

*Should compel all stakeholders*

*Outcome should be positive change that is nonthreatening*

APPLICATION LEADERSHIP STYLES and NIST FUNCTIONAL AREAS

* [identify] Inspirational/Competence; adaptive, authentic, theory y, servant
* [protect] Authentic, inspirational/Transformational
* [detect] Transformational, adaptive, resilient
* [respond] Stacklberg equilibrium, inspirational, adaptive, authentic, resilient, mentorship
* [recover] Resilient, adaptive, authentic, servant, inspirational/mentorship, transitional

*Most applicable leadership is the authentic leadership.*

*With exhibited skills.*

*Can look at the big picture, guide employees*

*Leaders should be a mentor, not a blame game*

Clark

Question: what type of leader are most security leaders/managers?

Before the big data breaches? How about now?

*Inspirational and Transformational bleed across.*

*Should really invest on Inspirational and Transformational.*

*Skill plus demonstrate a vision, on how to be prepared.*

*How to carry the weight when there is the weight.*

Clark question:

Dangerous type of leader?

*Those that are not competent.*

*Deceptive in nature. Theory X leader. Constantly punishing employee.*

*You need a creative solution for the threats.*

*This is the anti-mentor. Stifling type of leader*