Information Security Leadership Development: Surviving as a Security Leader Seminar Agenda

Start Time	Title	Presenter
8:30 AM	Introduction	
8:35 AM	Maturity Lifecycle of a Security Program	John latonna
9:10 AM	Building Your Team	Justin Peavey
9:40 AM	Role of the CISO: Influence & Decision Support	Derek Brink
10:15 AM	Break	
10:30 AM	Are You Fighting the Wrong Battles?	Bob Rudis
11:00 AM	CISO Roundtable: Security Intelligence Gathering for Leaders	Evan Wheeler (Moderator) Derek Brink James Burrell John latonna Dave Notch Bob Rudis
11:30 AM	Seminar Adjourns	

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OBSERVE and ABSORB: The State of the Bid(7)-Union

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- ASSES YOUR SILCEN quantifying success? What are your metrics?

 *Communicate your success * there's no shame in a little self promution.

 *Voluntary compliance is the Holy Graff but sometimes just a regular mug works too.





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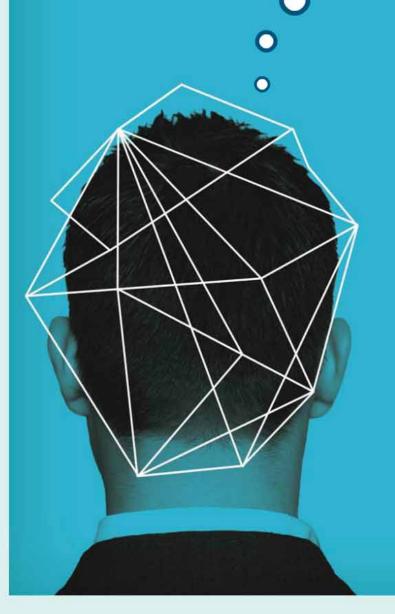
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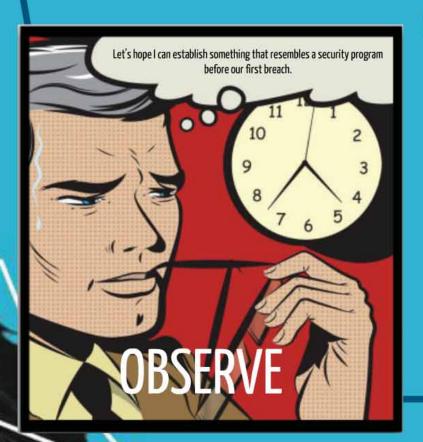
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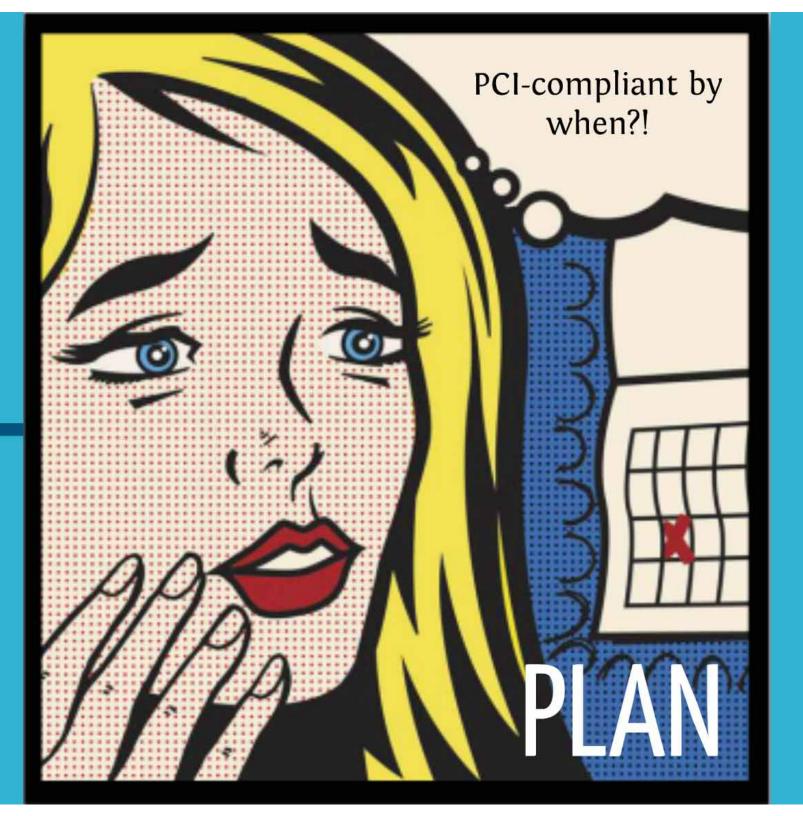
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OBSERVE and ABSORB: The State of the Dis(?)-Union

- Take stock of your assets executive support? budget situation? staffed properly? technology readiness?
- Assess the organizational landscape new leadership? solid financial footing? Risk appetite?
- Identify and learn your corporate culture
- Foster your key relationships (Legal, HR, GMs)
- Learn the power structure where do the tough decisions get made? who has the political clout to get things done?



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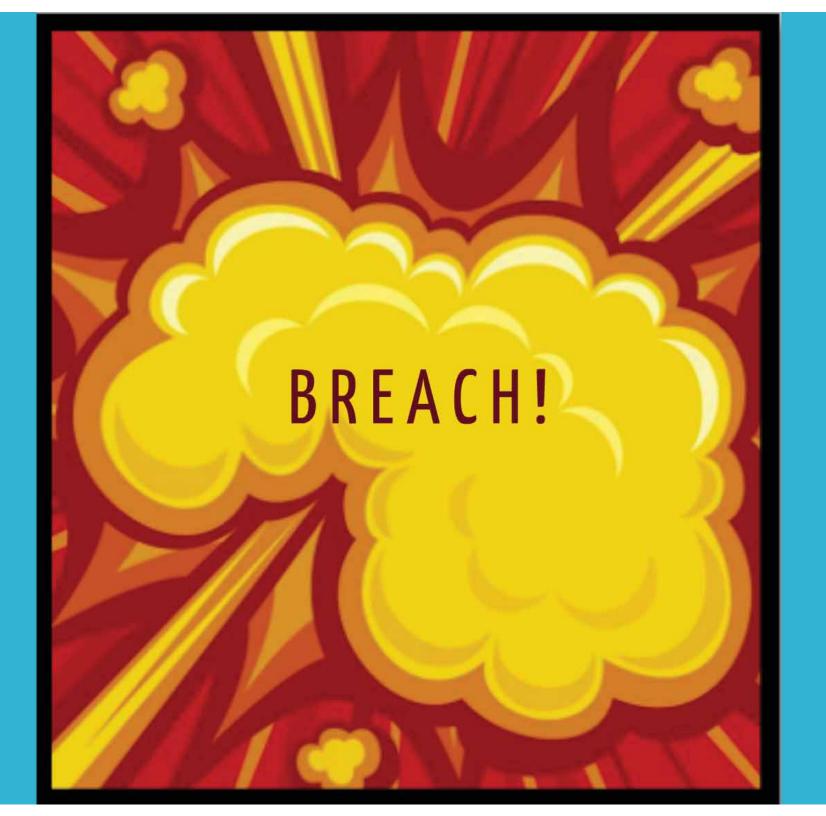


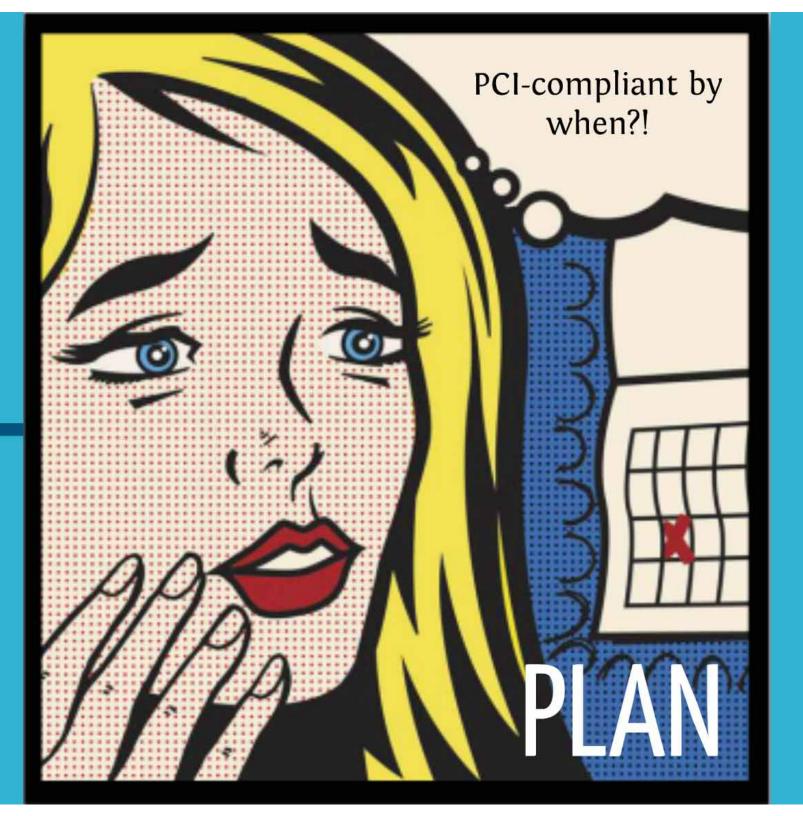
BEST LAID PLANS: Define the objective

• What are you trying to accomplish - HIPAA certification, ISO alignment, keep-your-job accreditation?

YOUR PRIMARY QUESTIONS

- a. what information resides on your network?
- b. where does is sit?
- c. who has access to it?
- d. who wants your data and how will they come after it?
- e. what is the value of the data (and the cost if it's lost)?





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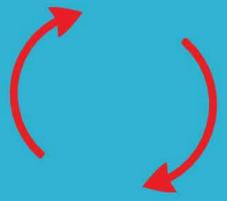
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COMMUNICATE, COMMUNICATE then communicate again

- The credibility gap demonstrate a clear and accurate relationship between risk and compensating control
- Speak the same language how does your company 'talk', connect on the issues that are important to your audience (business managers think \$, CMOs think socially, etc.)
- The medium is the message. HINT: Millenials aren't reading your emails.









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BEST LATE PLAM's Softing the objective + Whith are you by noth accomplish + IPAA ran Titlestine, No alignment, were your fee accomplish.

- VOID FORMAT (ULSTON)

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 e what is, the wake of the data (and the cost of o'r lens)?







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- ASSESS YOUR SUCCESS

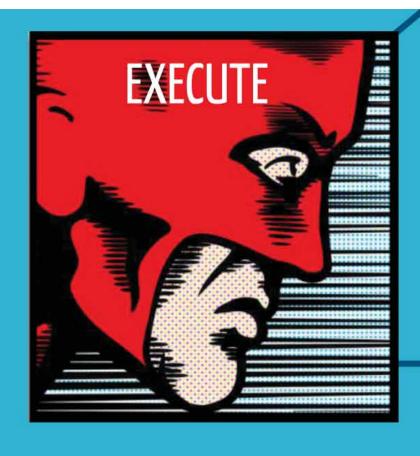
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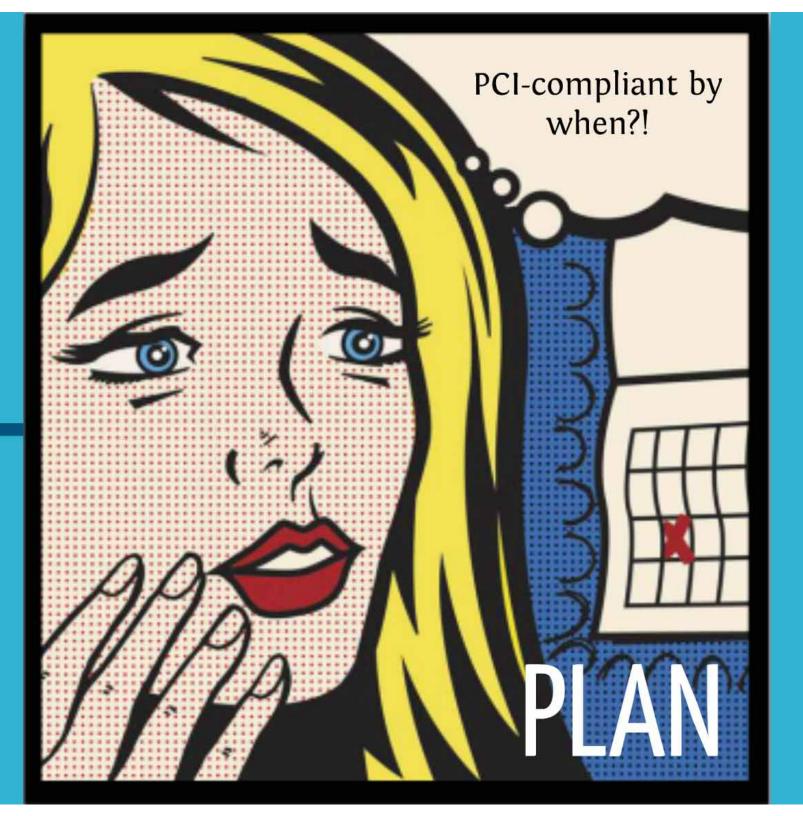




EXECUTE WITH INFLUENCE

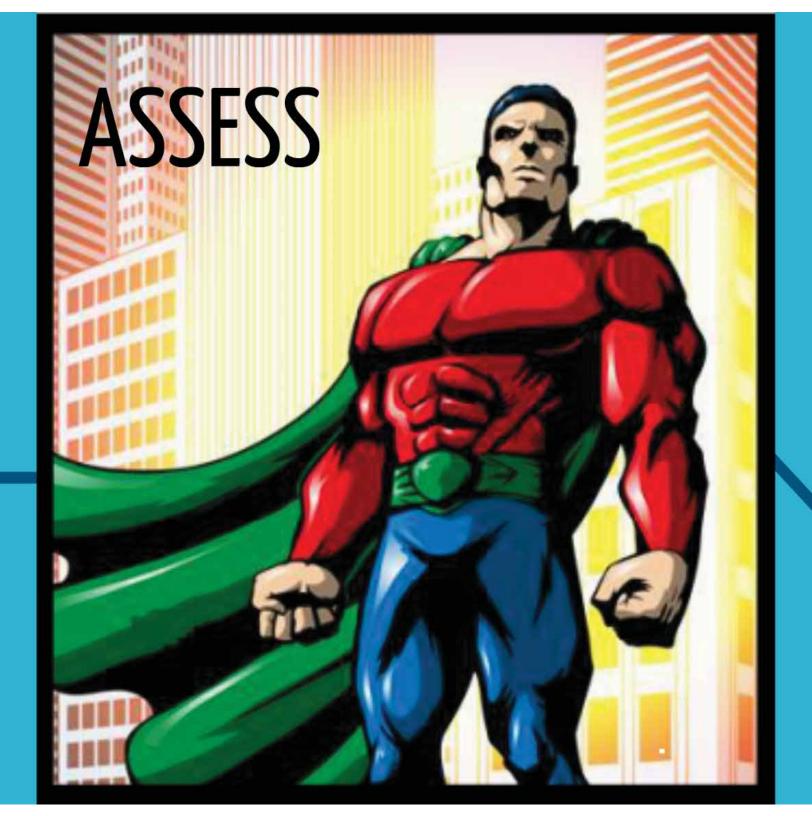
- Timing. Is. Everything.
 - 1) Have you adequately prepared the organization for your program and / or this specific initiative? Is it ready for it?
 - 2) Once you've committed, deliver. On time.
- Understand and leverage your partnerships. You NEED support from the server team. You NEED Level 1 to be your ears and eyes.
- Execution in a mature security organization will be process based - organized and repeatable.

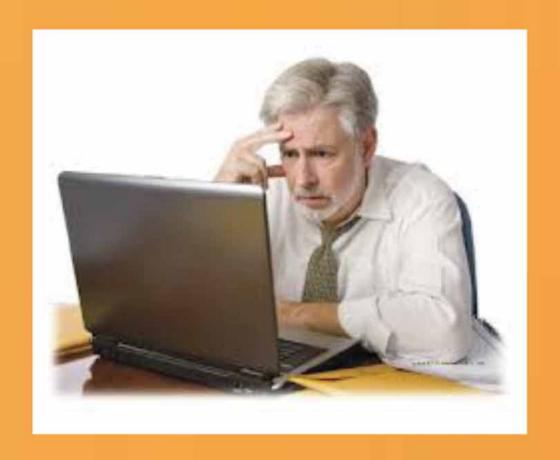




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or, more accurately ...



ASSESS YOUR SUCCESS

- How are you quantifying success? What are your metrics?
- Communicate your success there's no shame in a little self promotion
- Voluntary compliance is the Holy Grail but sometimes just a regular mug works too.

staffing influence flexibility environment systems benefit nondisclosure operation met operationmetrics on alize risk-control practical privacy risk-management critical-infrastructure resources interrelationships operational-controls cost-benefit-analysis
effective communicati perspective business-continuity confidential balanced cybersecurity access changes expertise cycles

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- Take stack of your access—executive support? Indiget situation? staffed properly? Inchmisgy readiness?

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- VOLFERNARY QUISTONS

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- MCHI WITH IMPURENCE
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Building Your Team
Five lessons from the trenches

Justin Peavey

Session ID: SEM-003 Session Classification:

Lesson 1:

► In security, it's always an away game

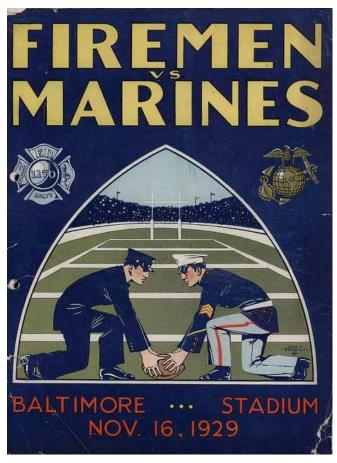


Image © Marine Corps Archives & Special Collections (CC BY 2.0)

Lesson 2:

Some skills you can teach, some you can't (or maybe shouldn't)

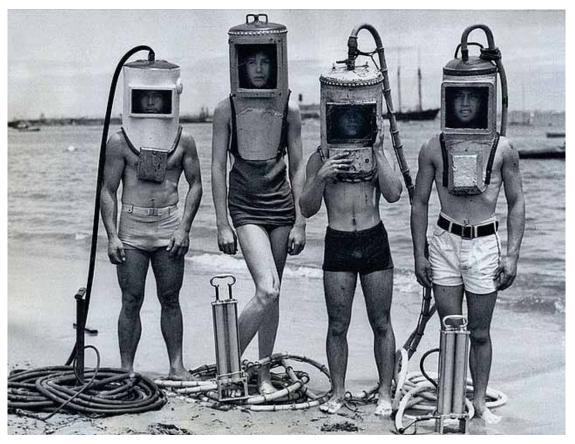


Image ©x-ray delta 1 (Flickr) . CC BY-SA 2.0

Lesson 3:

Everybody has their issues



Image © Heather Rose. CC BY-ND 2.0

Lesson 4:

Size does matter, at least to your CFO



Image ©Peter Taylor (CC BY 2.0)

Lesson 5:

► In business, it's becoming nearly always an away game.



Image ©woodleywonderworks (Flickr) (CC BY 2.0)



Security in knowledge

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Role of the CISO: Influence and Decision Support

Derek E. Brink, CISSP

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Security in knowledge

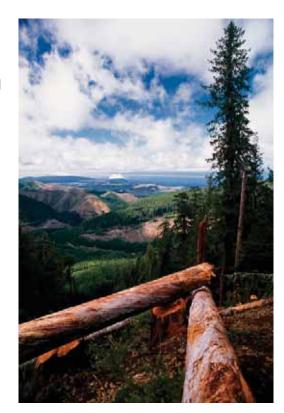


Session ID: SEM-003

Does Security Speak Make a Sound?

If what's being transmitted isn't heard, then it isn't making a sound

- "The 2012 CyLab Governance survey results indicate a serious lack of attention at the top."
 - Jody R. Westby, <u>Carnegie Mellon CyLab</u>, third bi-annual survey on how Boards of Directors and senior executives from the <u>Forbes Global</u> <u>2000</u> are governing security and privacy for their corporate information assets – at RSA <u>Conference 2012</u>



http://blogs.aberdeen.com/it-security/does-it-security-and-compliance-make-a-sound/ (6 March 2012)



The CISO is an Apologist for Security

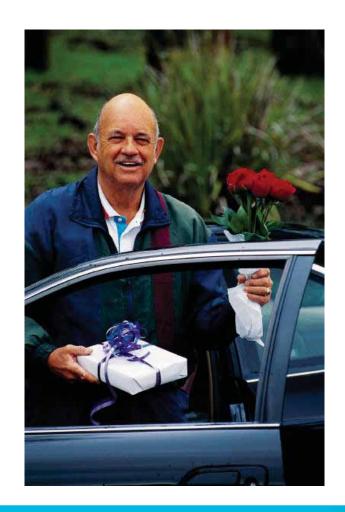




The CISO is an Apologist for Security

No, not in the sense of saying "I'm sorry" ...

 ... although there were plenty of public disclosures of Security to be sorry about since the last RSA Conference ...





And the Beat Goes On ...

- <u>LinkedIn, eHarmony</u>
- Yahoo
- Certificates signed with MD5
- Barnes & Noble
- United Technologies (Onity)
- South CarolinaDepartment of Revenue
- Saudi Aramco
- Java vulnerabilities
 - NY Times, Wall Street Journal
 - ► Twitter, Facebook
- The Works Bakery Café
- ...





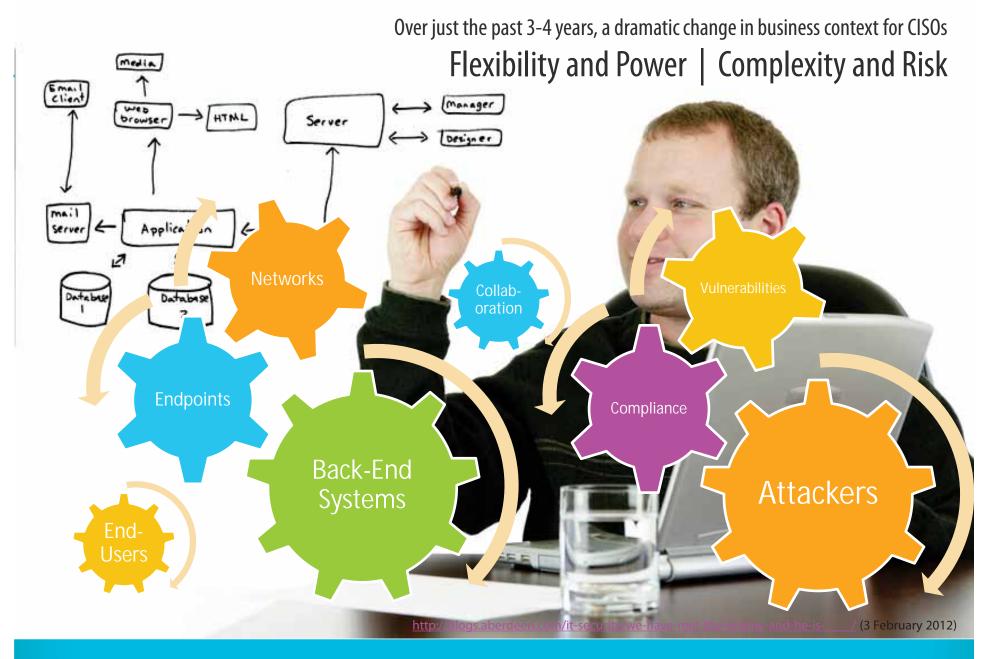
TD Bank (drilldown)



- What bothers me most is the smarmy, disingenuous language that a Chief Privacy Officer at TD Bank uses in communicating about this incident to its customers:
 - At TD Bank, we realize the importance of keeping you informed when it comes to your banking." But we still waited six months.
 - "That's why we're committed to notifying you about events that might affect your accounts." Not just your accounts with us, of course, but your entire digital identity.
 - "Today, we're writing to let you know about an incident involving your personal information." We still haven't figured out what happened ... and we're silent on whether or not we've taken any steps to prevent it from happening again.
 - "At TD Bank, protecting our Customers' personal information is a top priority and something we take very seriously." Except we didn't implement the basic best practice of encrypting our backup tapes, and we don't have controls in place to understand what happened to them even after an investigation of more than six months.
- But perhaps the most painfully ironic is this: "We sincerely regret any concern or inconvenience this may cause you." Written on letterhead with the tagline "America's Most Convenient Bank."

http://blogs.aberdeen.com/it-security/td-fumbles-tapes-not-encrypted-customers-lose/ (19 October 2012)





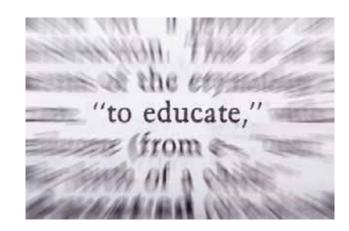


- An apologist, as in "a person who makes a case, in speech or in writing, for a belief or idea"
- The other side of the coin for evangelist, as in "an enthusiastic advocate"
 - Usually these terms are used in an ecclesiastical context ...
 - ... and in fact I often find many ecclesiastical parallels and inspiration for my own work ...





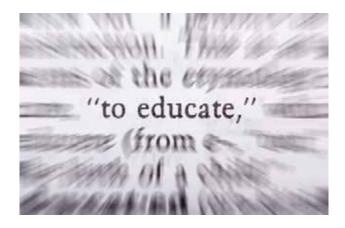
- The Devil's Dictionary also known as The Cynic's Word Book by Ambrose Bierce was first published over 100 years ago
- Examples of his cynical, satirical "definitions" include:



- ► **Absurdity** a statement of belief manifestly inconsistent with one's own opinion
- Accident an inevitable occurrence resulting from the action of immutable natural laws
- Congratulations the civility of envy

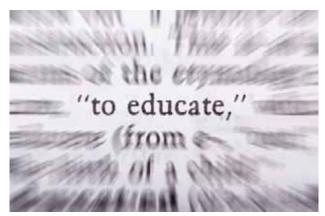


Advanced Persistent Threat (APT) – an undocumented guest user, accessing valuable enterprise resources. See Illegal Immigrant.





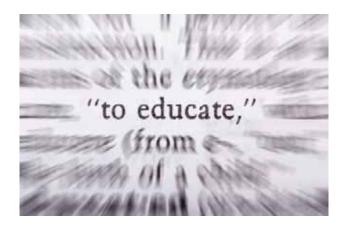
Consumerization – an excuse frequently offered by enterprise IT and Security staffs for their lack of leadership, and their increasing risk of irrelevance



http://blogs.aberdeen.com/it-security/moron-consumer-file-sharing/ (27 April 2012) http://blogs.aberdeen.com/it-infrastructure/the-devils-dictionary-for-it-and-it-security-eleven-initial-entries/ (27 November 2012)



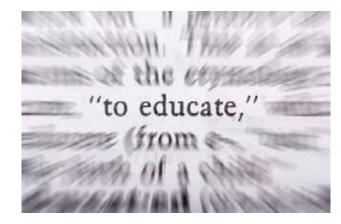
Deny by default – the traditional enterprise security policy of denying everything except that which is specifically permitted, as opposed to proactively identifying and enabling the capabilities that support the rapidly changing needs of the business (see also Consumerization and Dr. No)





Security Breach Notification – an opportunity for management to try to shift the blame for a security breach to someone else, and to position the company as the actual victim; an opportunity for management to remind its valued customers, whose information it has just allowed to be compromised,

that the company takes the security of its customers' information very seriously





▶ **Risk-based decisions** – the process by which enterprises with world-class brands fail to implement the most basic best practices and protections for user identities and data; the indifference, incompetence or calculation by which industry in general appears to be incapable of self-regulation in matters of security and continues to invite stronger regulatory mandates





Where is the Invisible Hand, or at least the Visible Hand of Management? Where is the Influence of the CISO?

- Are companies capable of selfregulation on security matters?
- Or will corporate profit motives / ignorance / indifference / incompetence continue to result in similar security breaches ... and invite stronger regulatory mandates?





The Very Visible Hand of Regulation

Isn't the answer right in front of us?

 Each of the complex matrix of regulatory requirements was put in place because neither the invisible hand of the market, nor the visible hand of management, was deemed to be adequate ...





The Larger Question

- The question is magnified when it gets applied to critical infrastructure – i.e.,
 - Power plants
 - Utilities
 - Pipelines
 - Transportation networks
 - Telecommunications networks
 - Hospitals
 - Financial systems
 - Other systems that people and businesses rely on for the essentials of daily life





ClOs Who Responded to Sen. Rockefeller's Letter (September 2012 – about 300 of 500 companies responded)

- Senator Rockefeller's staff published a <u>6-page memo</u> on 28 Jan 2013 with their summary of industry feedback, along with <u>13 pages of verbatims</u> from the written responses. Staff conclusions include:
 - "Many companies supported a voluntary program to protect critical infrastructure, so long as it would not become mandatory."
 - "Concerns related to the proposed voluntary program were primarily related to the potential development of an inflexible, "one-size-fits-all" set of best practices."
 - "Other common concerns included the need to adequately protect the confidentiality of information shared with the federal government during cyber threat assessments."
 - "The responses showed that you should continue working to advance cybersecurity legislation in the 113th Congress."
- Confirmation bias among the Senator's staff? Worth your own read!



President Obama's Executive Order

(February 2013) The national and economic security of the United States depends on the reliable functioning of the Nation's critical infrastructure

- to enhance the security and resilience of the Nation's critical infrastructure
- to maintain a cyber environment that encourages efficiency, innovation, and economic prosperity
- while promoting safety, security, business confidentiality, privacy, and civil liberties
- through a partnership with the owners and operators of critical infrastructure to
 - improve cyber security information-sharing
 - and collaboratively develop and implement risk-based standards

Devil in the Details:

Agreement on "critical"

Conditions on information-sharing

Yet another framework

Voluntary adoption

– at first

Again, I recommend that you read the <u>verbatims</u>

http://www.whitehouse.gov/the-press-office/2013/02/12/executive-order-improving-critical-infrastructure-cybersecurity (12 February 2013)



Evidence of Progress: Management's Discussion of Risk

Analysis of Dow Jones Industrial Average (30 companies) SEC 10-K Filings

• Four years ago, I wrote that discussion of IT-related risks were **not even showing up** in the SEC 10-K filings for leading US high-tech firms ... my review of the 2012 filings of the DJIA shows some interesting new patterns

Company	Walt Disney	Johnson & Johnson	Microsoft	United Technologies	Bank of America	General Electric	Pfizer	Procter & Gamble	Coca-Cola	Travelers Companies	UnitedHealth	3M	AT&T	Exxon Mobil	Hewlett-Packard	JPMorgan Chase	Merck	Verizon	Wal-Mart	Intel	McDonald's	Boeing	Caterpillar	Home Depot	IBM	Alcoa	American Express	Du Pont	Chevron	Cisco Systems
Compromise of confidential information	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ	Χ	Χ	Χ					
Compromise of intellectual property	Х	Х	Х	Χ																Χ	Х					Χ	Χ	Х		
Disruption from reliance on IT infrastructure	Х	Х	Χ	Χ	Χ	Χ	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ										Х	Х
Disruption from reliance on third-party i/s	Х				Χ	Χ	Х	Х	Χ	Χ	Χ																			

- 25 out of 30 identify the risk of compromise of confidential company / partner / customer information ... but just 9 out of 30 explicitly discuss risks to their intellectual property and trade secrets
- ≥ 21 out of 30 identify the risks of disruptions in their IT infrastructure ... but just 8 out of 30 explicitly discuss risks from their reliance on third-party infrastructure (e.g., managed services, cloud service providers)



Speaking the Language(s) of Risk

Review of the SEC 10-K language shows that companies are starting to bridge the gap in their discussions of risk



Types of Risk	Unrewarded	Rewarded
Risk Management Objectives	Protect valueDefend assetsMinimize downside	Create valueEnable assetsMaximize upside
Example Areas of Focus	 Security vulnerabilities and threats Regulatory compliance 	 Innovation and growth initiatives Operational efficiencies
Associated Assets	 Identities and access Applications and data IT infrastructure Physical infrastructure Personnel safety 	 Revenue streams Distribution channels Products and services Operations and supply chain Reputation and brand



Insane IT

Keep doing what you've always done, keep getting what you've always got

- "Insanity is doing the same thing over and over again but expecting different results."
 - Commonly attributed to Albert Einstein (Germany, 1879)
- "Good judgment comes from experience, and often experience comes from bad judgment."
 - ► Rita Mae Brown (US, 1944)





Insane IT — Examples? (1 of 2)

- Relying solely on traditional signature-based approaches
 - ► E.g., network security only traditional firewalls; endpoint security only anti-virus
- Applying traditional, centralized endpoint management approaches to smart phones and tablets
 - E.g., a focus on devices, as opposed to a focus on applications and data
- Scanning and testing as a primary strategy for application security
 - I.e., not necessarily fixing, or not developing applications with fewer vulnerabilities in the first place



Insane IT — Examples? (2 of 2)

- Leveraging the "big data" and "analytics" of security and compliance primarily for understanding "what happened"
 - ▶ I.e., as opposed to identifying, containing and responding to "what's abnormal" more quickly
- Communicating the value of IT Security solely in terms of prevention, avoidance, or "insurance"
- Enforcing policies to prevent end-users from using consumeroriented tools, e.g., file-sharing
 - As opposed to providing them with supported, enterprise-class alternatives
- Investing millions in security technologies, but not investing in security awareness and education for end-users



Service to the Organization (Past ... and Present)

Committed, faithful, honorable . . . unrecognized, and underappreciated

We live in a world that has walls, and those walls have to be guarded ... Who's gonna do it? You? ... I have a greater responsibility than you can possibly fathom ... My existence, while grotesque and incomprehensible to you, saves lives ... deep down in places you don't talk about at cocktail parties, you want me on that wall, you need me on that wall ... I have neither the time nor the inclination to explain myself to a man who rises and sleeps under the blanket of the very freedom that I provide, and then questions the manner in which I provide it. I would rather you just said thank you, and went on your way.



"You can't handle the truth!"

http://blogs.aberdeen.com/it-security/the-information-security-servant-leader-3/ (5 October 2012)



Service to the Organization (Present and Future)

CISOs as Servant-Leaders — a fundamentally different approach

Servant-Leaders are characterized as excellent:

- **Communicators**, with the ability to:
 - Listen
 - Empathize
 - Heal
 - Persuade / build consensus
- Strategists, with strengths in:
 - Awareness
 - Conceptualization
 - Forward-thinking
- **Builders**, with a commitment to:
 - Stewardship
 - Growth of people
 - Growth of community

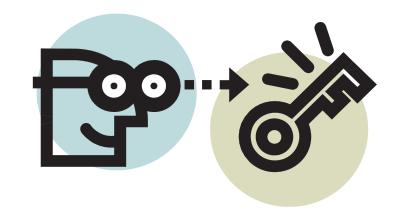


Source: <u>Character and Servant-Leadership: Ten Characteristics of Effective, Carding Leaders</u>, Larry C. Spears



Influence and Decision Support = Servant-Leadership

- Understand the business to support the business
 - Security and compliance objectives support strategic objectives ...
 - Collaboration
 - Agility and productivity
 - Efficiency, innovation and growth
 - by managing its risks and playing within the rules
 - Connect to concepts and projects that are understood and accepted
 - Compromised data or IP is compromised, regardless of how
 - Disrupted operations are disrupted, regardless of how





Influence and Decision Support = Servant-Leadership

Build influence by building relationships

- Finance, Audit, Legal, HR, Marketing, Lines of Business, Risk, Privacy, Business Continuity ...
- Solve their problems; establish your credibility; gain their trust, e.g.,
 - ► Finance and SEC filings
 - Audit and compliance deficiencies
 - Legal and IP protection
 - HR and onboarding
 - Marketing and data / privacy protections
 - ► Lines of Business and secure file sharing
- End-users (employees)?
- End-users (business partners, customers)?





Influence and Decision Support = *Servant-Leadership*

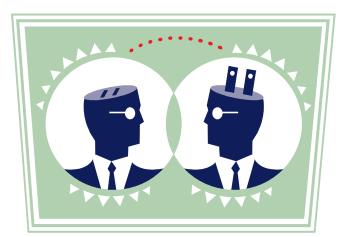
- Listen, empathize, heal, persuade
- Inform, educate, coach, connect
 - Public disclosures are opportunities
 - Awareness and training is ongoing
 - Decisions will increasingly be affected, both directly and indirectly





Influence and Decision Support = *Servant-Leadership*

- Communicate, in the right language for the target audience
- Bridge the gaps
 - Between technology and business
 - Between the two types of risk
 - Between policies (management's intent) and administration
- "Act as if"
 - CISO as a business leadership role, not a technology support role





Role of the CISO: Influence and Decision Support

Some situations cry out for change ...

Not everyone will necessarily like it



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For More Information

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http://aberdeen.com/_aberdeen/itsecurity/ITSA/practice.aspx

Blogs:

http://blogs.aberdeen.com/category/it-security/

On-demand webcasts:

https://www.brighttalk.com/channel/290



INFORMATION SECURITY LEADERSHIP DEVELOPMENT SURVIVING AS A SECURITY LEADER

ARE YOU FIGHTING THE WRONG BATTLES?

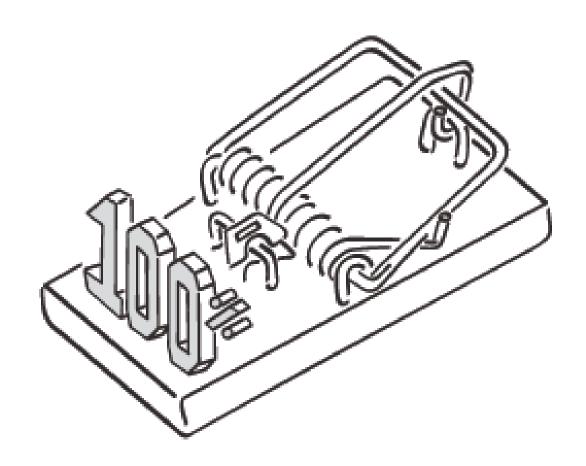
Bob Rudis

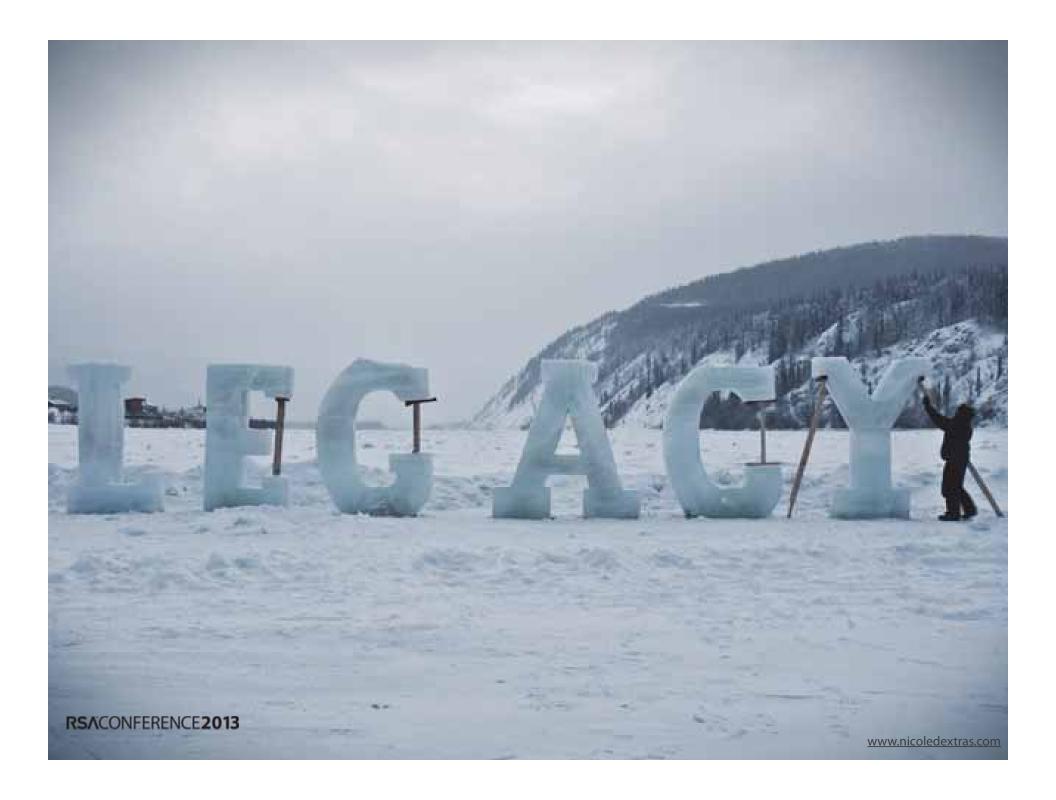
Liberty Mutual Insurance

Session ID: SEM-001

Session Classification: Seminars

IT'S A TRAP!!!





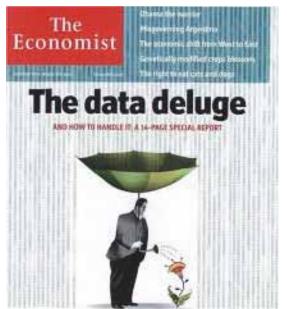
[SCAN | PATCH | PEN TEST | LOG | RISK ASSESS | CONFIG CHECK | BLOCK | ...]



SECULATION OF WILLS

- Steer clear of CBTs
- Do not use stock photography
- Tailor messages to specific audience
- Integrate training into daily workflow
- Create opportunities for live demos
- Think like Facebook/Twitter/Pinterest
- Use incentives (carrots vs sticks)
- Make messages personal













INFORMATION SECURITY POLICY

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If in doubt, Peregrin
Took, always follow
[your users |
the business]!









WHAT HAVE YOU DONE FOR ME LATELY?

- Empowered your users
- Enabled the business to do more/new
- Addressed emerging risks
- Made systems & processes more resilient
- Decreased application issues
- Deployed foundational security capabilities
- Created security allies in other areas





Security in knowledge

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CISO ROUNDTABLE: SECURITY INTELLIGENCE GATHERING FOR LEADERS

MODERATOR:

Evan Wheeler

Omgeo

PANELISTS:

John latonna

Edelman

Derek Brink

Aberdeen Group

Bob Rudis

Liberty Mutual Insurance

James Burrell

Federal Bureau of Investigation

Dave Notch

Intensity Analytics

Discussion Topics





