

"Leading With Integrity"



What's all the hype about cybersecurity?

Business Data Confidentiality, Integrity, and Availability

– The value proposition



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- Manufacturing
- Transportation
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- Communications









Cybersecurity

Private Equity





Category 5 breach compromises

145.5M

consumers' data





Social Security Numbers



Credit Card Numbers

\$20.4B Total M&A Volume \$5.1B Total VC Investments















acquirers







THALES bid tops bid for **gemalto**2nd largest cyber transaction in history

Barracuda goes private again after 12 quarters as a public company

Cyber Crime Focus

#1



Blockchain will find uses outside of cryptocurrencies but cybercriminals will focus on coins and exchanges #2



Cybercriminals will use AI and machine learning to conduct attacks

#3



Supply chain attacks will become mainstream #4



File-less and file-light malware will explode

Organisations will still struggle with SaaS security

CYBERSECURITY PREDICTIONS 2018



#6



More breaches due to error, compromise and design #7



Financial trojans will still account for more losses than ransomware #8



Expensive home devices will be held to ransom #9



IoT devices will be hijacked and used in DDoS attacks against us #10



IoT devices will provide persistent access to home networks

Jim Bates

ArcticCon

2018

CONFIDENTIAL

12/3/2018

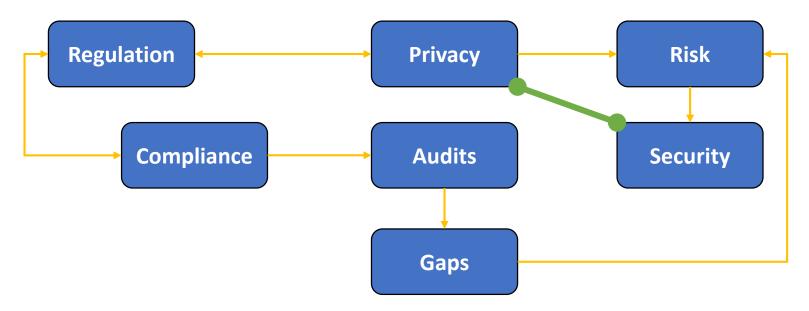
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Events close to home





Regulation & compliance



Often organizations focus on being "compliant" in silos that have expertise for a specific regulation. Being compliant often means taking measures to avoid specific monetary penalties – a check-in-the-box approach.

What About Our Data / Information?



Privacy & Security

 Security and Privacy are intertwined. An organization cannot protect the **privacy** of confidential or personal information in its possession unless it maintains the security of the information.

 Organizations must protect confidential or personal information against both intentional disclosure in violation of an entity's privacy rights and inadvertent disclosure because of an attacker's unauthorized access to confidential or personal information.



A Hierarchy Of Data **Categories**

- Level 1
- Level 2
- Level 3
- Level 4



Living Room







Safe

Cyber Compliance

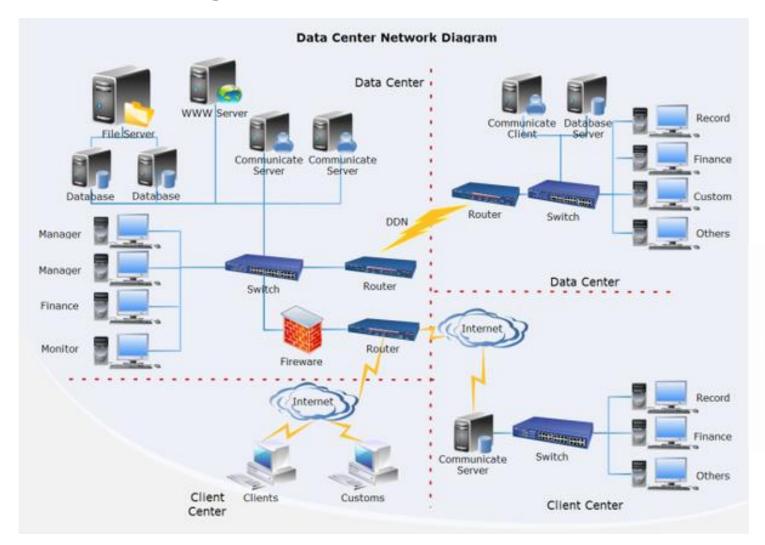
Comply with what? How fast is it changing?

- Financial Services Modernization Act, a.k.a., the Gramm Leach Bliley Act ("GLBA")
- Health Insurance Portability and Accountability Act ("HIPAA")
- Defense Federal Acquisition Regulation Supplement ("DFARS" NIST 800-171)
- Payment Card Industry Data Security Standard, Version 3.1 ("PCI-DSS")
- The Sarbanes-Oxley Act (Sarbanes-Oxley or "SOX")
- HHS 45 CFR 46 Protection of Human Subjects Subparts A-E
- Alaska Personal Information Protection Act § 45.48

Cybersecurity with Data Classifications

DATA:

- Level 1
- Level 2
- Level 3
- Level 4







Minimum Standards & Data Classifications

DATA:

- Level 1
- Level 2
- Level 3
- Level 4

What are the Minimum Standards For:

- How we Store Data based on Classification
- How we Retrieve Data
- How we send Data
- Who can Access Data
- How we Respond to Incidents / Breaches
- How, When, and Where we Report





A Better Approach

A more excellent approach is one that looks at the organization holistically and includes an <u>ethical</u> platform.

Often, the focus is on one set of regulation and commonalities are not leveraged. If "personally identifiable information" (PII) or "confidential information" is compromised, it is not only a question of compliance, but brand, reputation, and trust of the individuals and communities you serve.

An <u>ethical responsibility</u> to protect private/confidential information, regardless of regulation, emerges that surpasses regulatory compliance. This requires a robust cybersecurity strategy <u>that balances</u> with business requirements, investment, and risk management.

Ecosystems

A complex network of interconnected systems



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There is a Yup'ik term:

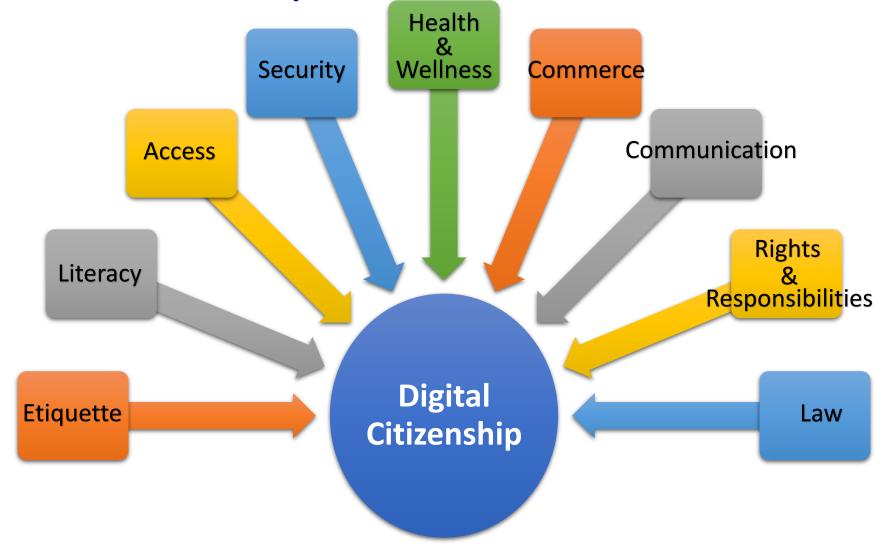
"upterrlainarluta"

Which Means:

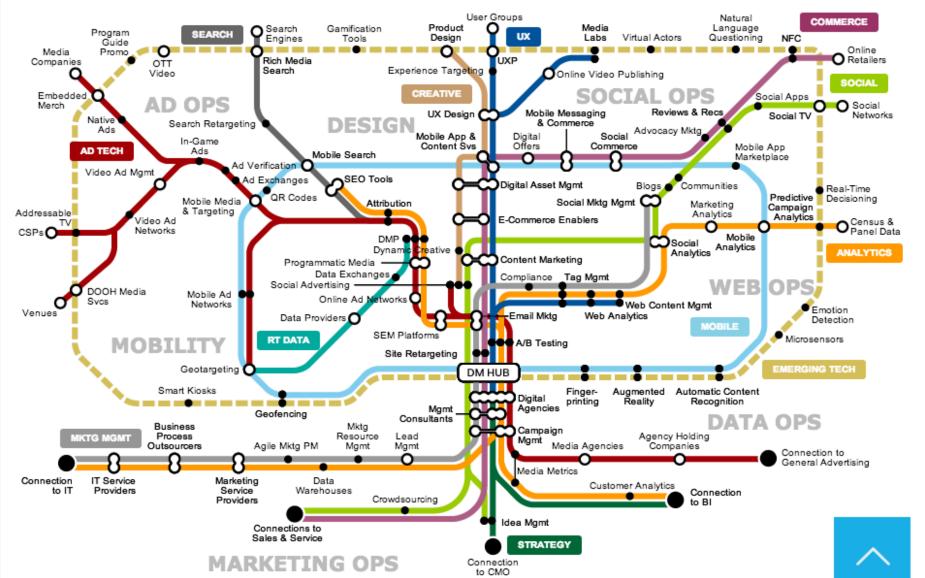


"always getting ready"

Digital Citizenship



The Complexity of Emerging Digital Ecosystems







What Guides Us? What Do We Stand For?



BBNC Statement:

"It's not an accident that our forward-looking corporate **strategy** leads to the **greater good** of our shareholders. It's our **commitment**."





Comparisons To The "Safety Culture"



Comparisons To The "Safety Culture"

INFORMED CULTURE

Those who manage and operate the system have current knowledge about the human, technical, organizational, and environmental factors that determine the safety of the system as a whole.

REPORTING CULTURE

An organizational climate in which people are prepared to report their errors and near-misses – or things out of place.



JUST CULTURE

An atmosphere of trust in which people are encouraged (even rewarded) for providing essential safety-related information, but in which they are also clear about where the line must be drawn between acceptable and unacceptable behavior.

FLEXIBLE CULTURE

A culture in which an organization is able to reconfigure themselves in the face of high tempo operations or certain kinds of danger – often shifting from conventional hierarchal mode to a latter mode.

LEARNING CULTURE

An organization must possess the willingness and the competence to draw the right conclusions from its safety information system and the will to implement major reforms when warranted.

How much safety is enough? How do we decide? Is there a minimum standard for safety?

SAFETY SHOES MUST BE WORN



24

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What Are Our Response & Reporting Requirements for Safety?



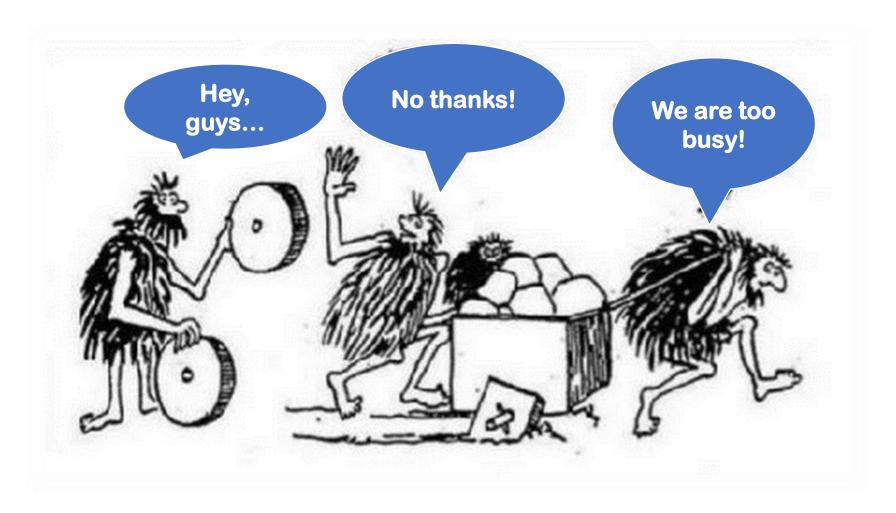
A Cyber Community – United We Stand





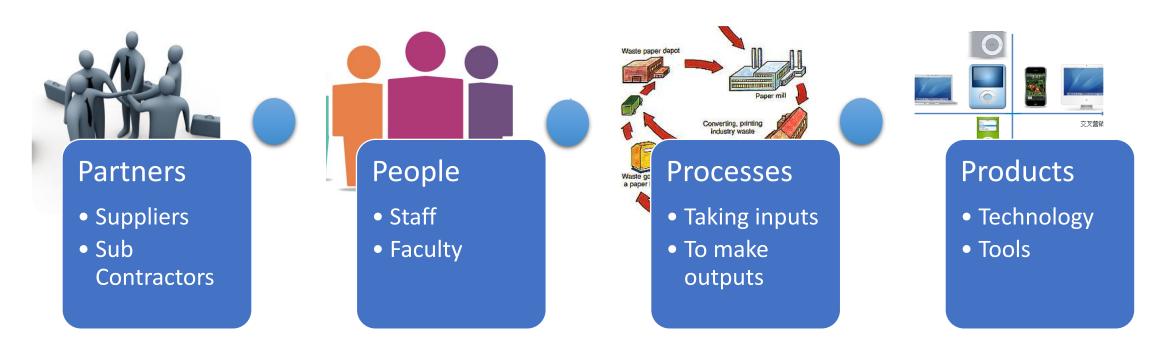
A Place That's Always Been ™

What About Improvement?



How Do We Create Value?

Your **People** depend on **Partners**, **Processes**, and **Products** to create **Outcomes** for your consumers. All 4 Ps must be looked at as potential areas for improvement in the value stream.



Service and Service Management

- Services: Delivering outcomes that Customers value without them having ownership of cost and risk
 - Utility
 - Warranty
 - Asset/Resources
- Service Management: A set of specialized organizational capabilities for providing value to customers in the form of services

Service Value Creation – Other Factors

 'People do not want quarter-inch drills, they want quarter-inch holes'

Professor Emeritus Theodore Levitt Harvard Business School

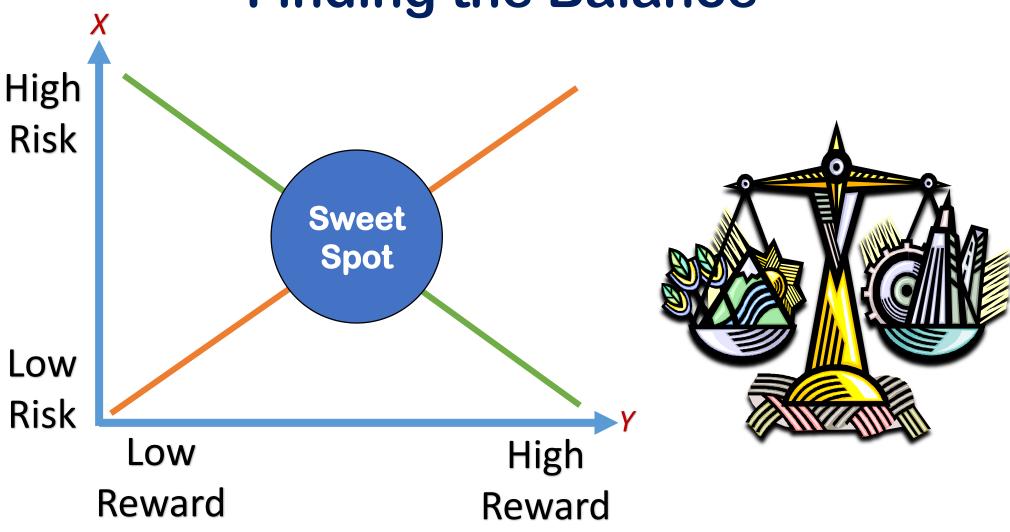
 'The essence of strategy is choosing what not to do'

Michael E. Porter

What About This "Risk" Management Thing?

- What does Risk Management mean to you?
- To your boss, shareholders, and/or customers?
- What is your organization's risk appetite?
- How good has IT been at understanding this?
- Why do you think this exists?
- What can we do about it?

Finding the Balance



The Importance of the Risk Management Dialogue

- Corporate boards can no longer be content in solely hearing about metrics, resources, and compliance when evaluating corporate success.
- They must also consider what an organization is doing to protect the business' **existence**, including its information assets, the risk to those assets and their criticality to ongoing business operations.

Every Business Has Risk

- What is the company's risk appetite?
- Have threat and vulnerability assessments been conducted to evaluate company risk?
- Does the organization have the expertise and resources needed to reduce risk?
- Have mitigations (controls) and countermeasures been adequately deployed?
- What risk has the organization mitigated, removed, transferred, or accepted?

Takeaways

- Get engaged in your business purpose
- You're in a relationship communicate effectively and work together to build a cyber safe culture – united we stand.
- Measure the right things those that align to the business purpose
- It's more that just compliance Remember 'SAFETY'
- Understand risk holistically communicate honestly

12/3/2018 35

