Our Cyber Workforce

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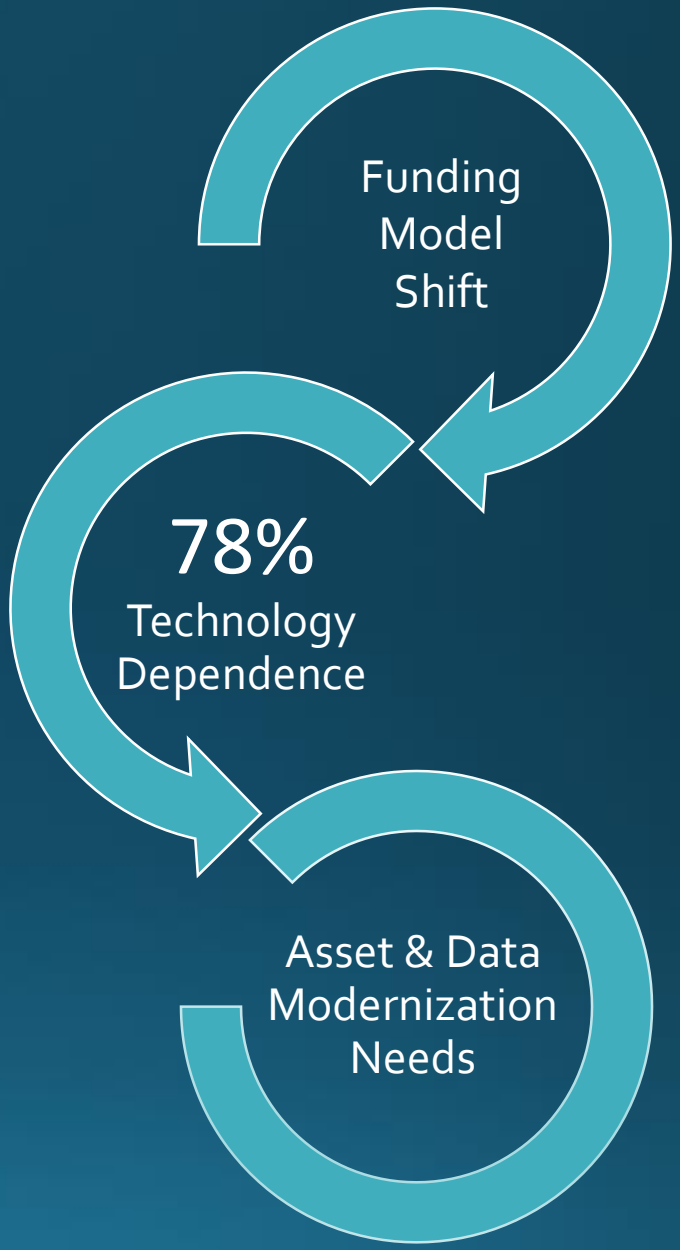
Securing The Commonwealth

"A chain is no stronger than its weakest link, and life is after all a chain."

William James 1842 – 1910

Environment Summary



Funding Stewardship

- Managing cost of services to the approved budget
- Industry trends for cloud tech & funding models

New Technology Dynamic

- Technology - not just a force multiplier any longer
- A critical part of every aspect of government service
- Tipping point reached!
  - THEN: Technology enabled
  - NOW: Technology dependent

Data, Data and more Data

- Data everywhere & transformation to information
- Demand for BI & analytics continues to grow
- Security & integrity of the data presents challenges

Sources:
http://www.gartner.com/webinar/2813518
IST Customer Service Survey 2015

Trending

CENTER FOR DIGITAL GOVERNMENT

Top 10 Technology Initiatives

1. Cyber Security
2. Hire and Retain Competent IT Personnel
3. Mobility / Mobile Applications
4. Open Government/ Transparency/ Open Data
5. Disaster Recovery/ Continuity of Operations
6. Budget and Cost Control
7. Virtualization: Server, Desktop, Storage, Applications
8. Shared Services
9. Portal/ E-government
10. Cloud Computing

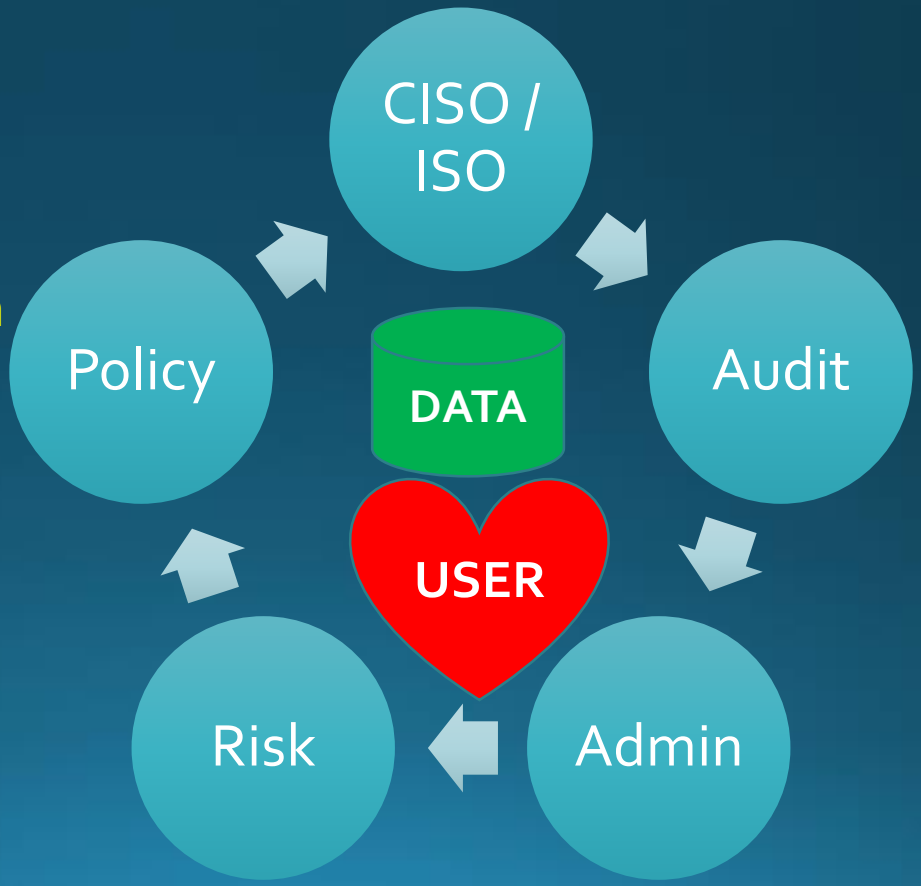
Source: Survey of counties by Center for Digital Government, partnering with NACo. July, 2015

Who Is Responsible?

- Every employee
- The "normal" approach
- YOU are the target
- Job Descriptions for all
- Who is the "Cyber Workforce"?

What percent of information security incidents involve human error?

95%



WANTED
BY THE FBI

Conspiracy to Participate in Racketeering Activity; Bank Fraud; Conspiracy to Violate the Computer Fraud and Abuse Act; Conspiracy to Violate the Identity Theft and Assumption Deterrence Act; Aggravated Identity Theft; Conspiracy; Computer Fraud; Wire Fraud; Money Laundering; Conspiracy to Commit Bank Fraud

EVGENIY MIKHAILOVICH BOGACHEV

Multimedia: Images

Aliases:
Yevgeniy Bogachev, Evgeniy Mikhaylovich Bogachev, "lucky12345", "slavik", "Pollingsoon"

DESCRIPTION

Date(s) of Birth Used:	October 28, 1983	**Hair:**	Brown (usually shaves his head)
Height:	Approximately 5'9"	**Eyes:**	Brown
Weight:	Approximately 180 pounds	**Sex:**	Male
NCIC:	W890989955	**Race:**	White
Occupation:	Bogachev works in the Information Technology field.		

- ✓ A Local Hero: "I'd pin a medal on the guy"
- ✓ Lives 400 meters from the police station.
- ✓ 1 Million Infections & $100 Million in Losses. Understated.
- ✓ $3M Reward Offered.
- ✓ Game Over Zeus Trojan – Botnets
- ✓ Vector: Drive-bys, downloads, phishing schemes.

The Interwebs is Everywhere!

78% of staff say they need technology to do their job. Some examples …

Vending Machines

Fleet Heavy Equipment

Propane School Buses

Body Worn Cameras

Lifesized Telehealth

Seen the Internet lately? It's EVERYWHERE

No Assumptions!

$ = Security?

"If you think technology can solve your security problems, then you don't understand the problems and you don't understand the technology."

– Bruce Schneier

Reinforce Basics

- Department Meetings
  - Employee Reviews
    - New Hire Orientation
    - Poster Campaigns
    - Newsletters
  - Training Plans
- Budget Briefings

Think about all the employee touchpoints.

Don't scare them, equip them.

Culture Change Requires Constant Reinforcement!!

Environment Matters

- Workforce is shrinking
- Less is the new more
- Cost to the organization
- Disengaged employees = InfoSec Mistakes
- Multiple Jobs = Multiple Security Roles
- Environment == InfoSec

Education is Critical

Investments here pay big dividends:

- Cost Effective
- Need effective delivery methods
- Training should be engaging
- Example: Securing the Human series
- Training should fit the employee
- Not a one and done approach
- Remedial Training – Use it

#1 Weapon!!

SANS SECURING THE HUMAN

Mandatory!

A People Business

.... mired in process & technology.

Hints:

- ✓Consider the customer viewpoint.
- ✓Develop your personality skills.
- ✓Market & Sell Infosec.
- ✓Don't lead with no.
- ✓Be nice.

"It's in the policy"

"Because I said so"

"We can't do that"

"NO"

"That's not now its done here"

"Audit makes us do it"

"Fries with that?"

"Rule #6 - Where you sit determines what you see"
Lt. General Jefferson "Beak" Howell

Security Professionals

- Know your customers & their business
- See Information Security as an investment
- Stay current. Technology changes rapidly!
- Get out of your office
- Be curious! Ask why!

You

"One of the secrets of life is to keep our intellectual curiosity acute."
- William Lyon Phelps

Summary

- ✓ Focus on the 95% solution
- ✓ Don't stereotype
- ✓ Don't make assumptions
- ✓ Reinforce the basics
- ✓ Improve the environment
- ✓ Educate, equip, enlighten. Repeat.
- ✓ It's A People Business! Be Nice!

Links:

Black Hat 2015 Conference:

http://www.securityweek.com/gameover-zeus-gang-leader-engaged-espionage-researchers

FBI Cyber Most Wanted:

https://www.fbi.gov/wanted/cyber/

A really good blog post about the weakest link:

https://www.govloop.com/community/blog/the-weakest-link-what-to-do-about-them/

My Blog:

http://cio-musings.blogspot.com/

This Presentation:

http://www.slideshare.net/bcondrey

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