A Holistic Look at Cyber Security: Why it is needed

Current / Emerging Threats & Leadership Considerations
Bio Information

- New York / West Point
- 28 yr as Army SF Officer & Human Intelligence
- Pentagon – Military Assistant to SecDef Donald Rumsfeld
- Deputy Assistant Secretary of Defense for Homeland Defense
- IBM Corp – Cyber Security Evangelist (DHS, DNI)
- Associate Prof at LIU’s HLS Management Institute / Adjunct Professor at GMU
- Director of the Douglas & Sarah Allison Center for Nat’l Security & Foreign Policy Studies at The Heritage Foundation
- Advisor to the Prince of Wales/Prince Edward Fellows at MIT & Harvard
Agenda

- Why is this Relevant?
- The Threats We Face
- Cyber Specific Concerns
- A question of Leadership
- A Discussion

Cyber Expert? Listen and understand how to communicate with the rest of us!
Why is this Relevant To You, Industry SCRM Leaders?

- Cyber is not only a technical issue, but is an Int’l SCRM issue
- Cyber is a Leadership Concern! (military / business / government)
- Our entire system is Cyber-based; research, communication, transactions, & security
- If cyber is not one of the primary considerations in your leadership planning, you will get burned.
- This is NOT “merely an IT” problem any longer
The Environment: the sheer volume of cyber activity is masking more serious threats.

Incidents are now, ubiquitous, pervasive, and constitute the new “normal”.

These “day to day” threats are not existential, but if not addressed, will create noise and hinder proper addressing of the higher end threats.
Our economy, government and society rely on a digital infrastructure.

That reliance creates vulnerabilities to cyber threats.
The How – Three Threat Vectors

• **Remote / Proximate Threats** – Hacking: Most well known (medical devices at risk)

• **Insider Threats** – the Malicious & the Good but Dumb

• **Supply Chain Threats** – Concern for enterprises, big/small!
  - Requirements Development
  - Design
  - Assembly
  - Transit
  - Installation
  - Maintenance (NOT JUST DATA, but EVERYTHING)
Remote & Proximate Threats

Supply Chain Threats

- Supply chain threats are huge. Supply chain presents a long and inviting attack surface.
- May be the biggest!

Insider Threats

- Hardening systems & supply chains make the *insider threat* paramount

Hackers shift exploit strategies & techniques as defenses improve.

- Air Gap Hoppers

The What - Cyber Ecosystem
Other Issues

- Mobil Computing — Today’s biggest problem
- Cloud Computing — The way of the future
- Smart Grid — A professional issue (for now)
- SCRM – Bosses’ Concern!!
- Stuxnet / DuQu / Flame — elegant (deployed by SCRM attack?)
- Conficker — Who Knows?
- Shamoon — brute force “warning”
- U.S. Programs — Will they continue? Effect on Cyber Sec?
- Legislative solutions — open Issue
The Role of Leadership in a Holistic Solution

Cyber Personal Hygiene – Not sexy, but a true key

Awareness, Education, and Training – The forgotten foundation

YOU must enforce the rules, even on yourselves

Do not blow off SCRM!

You must have the best tech solutions - but w/o leadership: They will still fail!
Final Plea!

Our biggest strength / Our biggest Vulnerability

It is **YOUR** responsibility to know, and to act

“Insider” can be mitigated by training

“Remote / Proximate” takes tech, but also training

“Supply Chain” Requires Outside help
Discussion

Questions?

Dr. Steven Bucci, buccisp@gmail.com