# My Time in SPAWAR 5.0: The Navy's Cyber "Awakening" & How Industry Can Assist

15 July 2014

Presented to:

AFCEA West

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Distribution Statement A: Approved for public release, distribution is unlimited (9 July 2014)

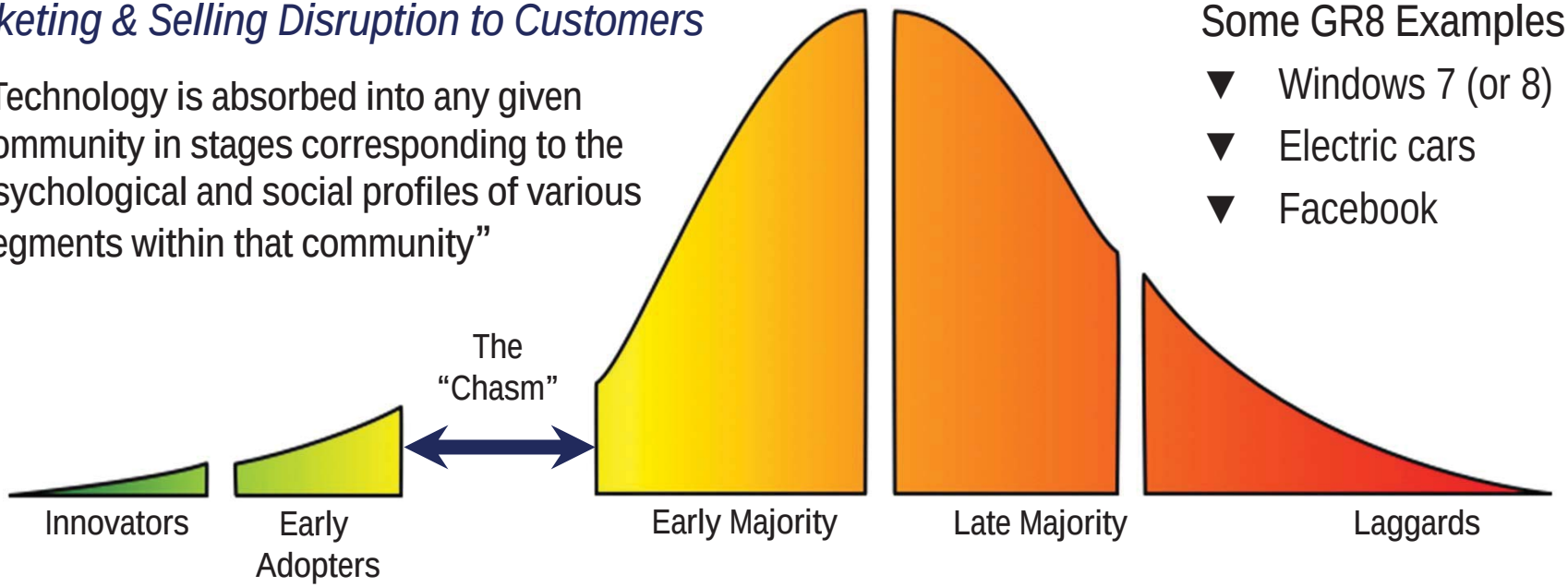
# Getting the Seniors to Think Differently

*Crossing the Chasm by Geoffrey Moore:*
*Marketing & Selling Disruption to Customers*

"Technology is absorbed into any given community in stages corresponding to the psychological and social profiles of various segments within that community"

Some GR8 Examples!

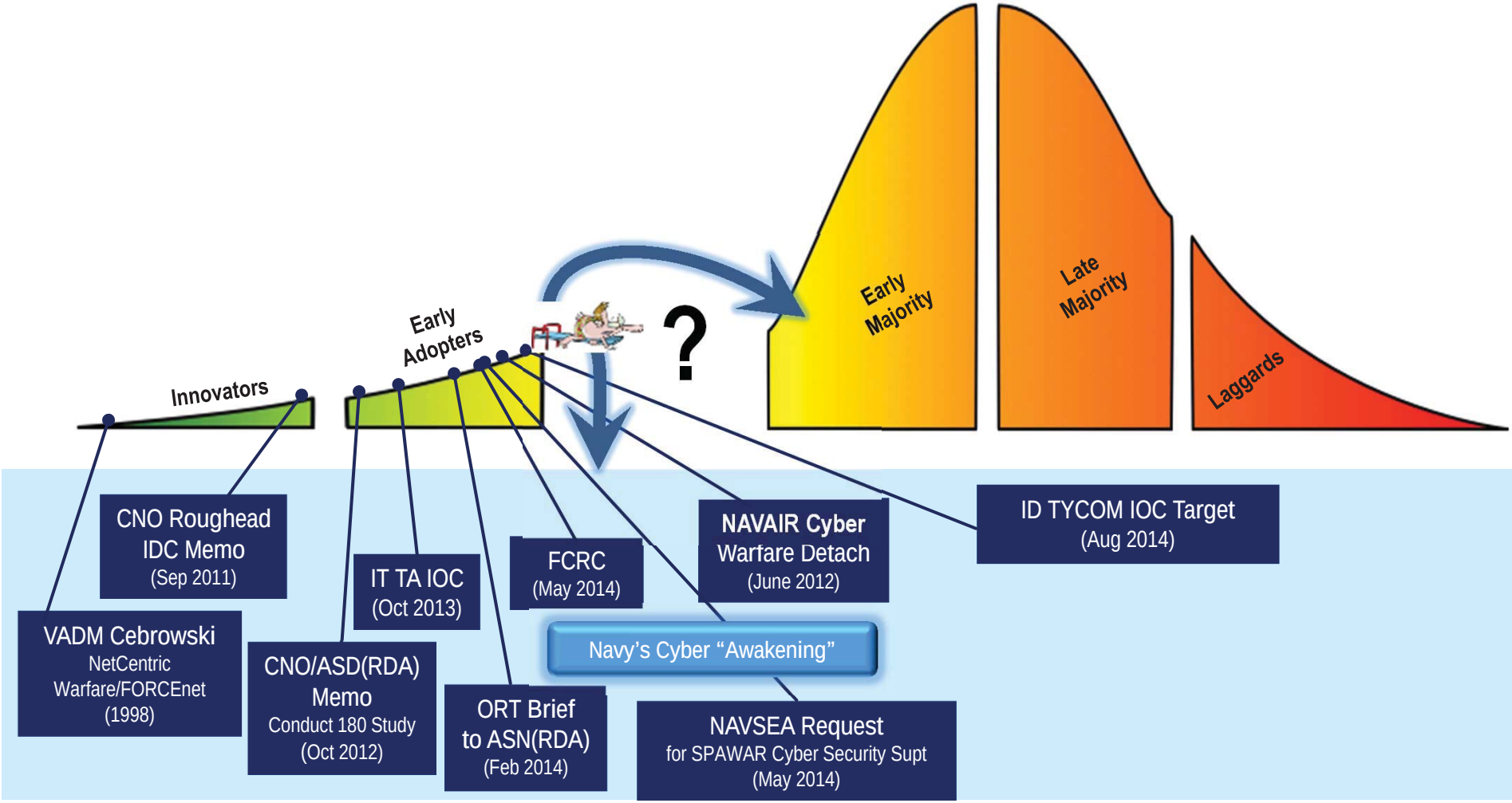
- Windows 7 (or 8)
- Electric cars
- Facebook




Four primary strategies for "crossing the chasm" of adoption discontinuity:

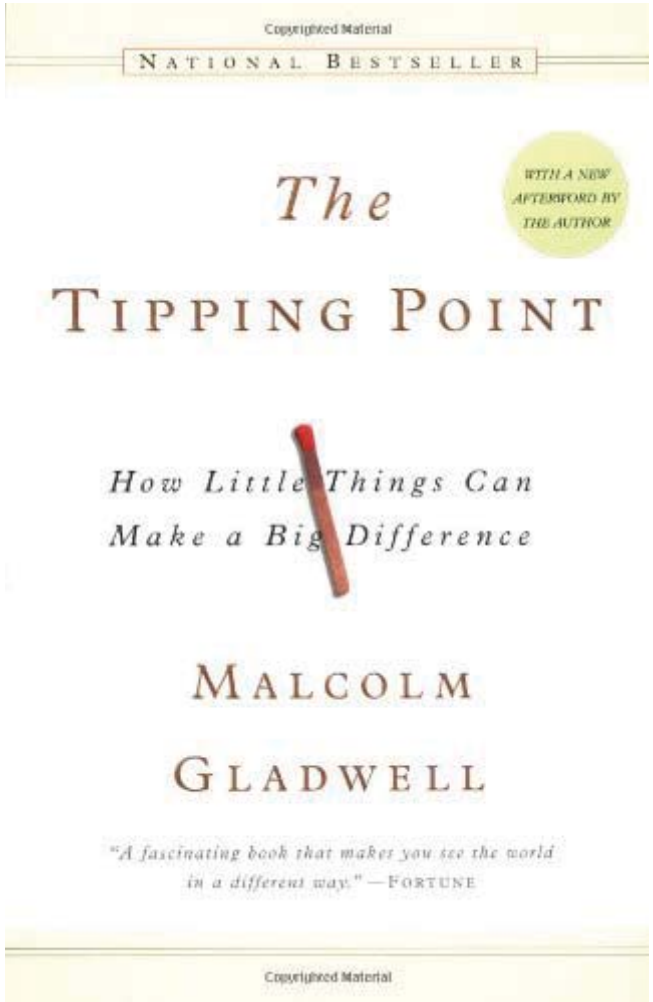
- Target the Point of Attack
- Assemble the Invasion Force
- Define the Battle
- Launch the Invasion

# The Navy's Journey … Still in Progress




**Can We Cross the Chasm to Cyber as a Mainstream Warfighting Discipline?**

# And What Did Malcom Gladwell Say?




*"The tipping point is that magic moment when an idea, trend, or social behavior crosses a threshold, tips, and spreads like wildfire"*

What do you need to achieve a tipping point?

- Leverage the law of the few (use the 80/20 rule via connectors, mavens, and salesmen)
- Have a sticky message

  *And*
- Put it in the right context

# Moore & Gladwell Together
# One Dynamic Duo for Navy Cyber Progress

## *The Moore Vector*

- Target the Point of Attack
  - "It's Complicated!"
  - Lots of interfaces = lots of potential problems
  - Enterprise = Networks + Apps
- Assemble the Invasion Force
  - SPAWAR + NAVSEA + NAVAIR + NAVFAC + NAVSUP + OPNAV + ASN (RD&A)
- Define the Battle—Our Response to the Threat:
  - Prevent
  - Monitor/Contain
  - Remove
- Launch the Invasion
  - We can tackle this problem together
  - Deep dive & expand from there
  - Redefine how we design, test, certify & operate the Navy's cyber systems

## *The Gladwell Vector*

- Leverage the law of the few
  - Connectors - RADM Brady, Mr. Sullivan, Mr. Spencer, Mr. Barron & lately ADMs Gortney & Harris!
  - Mavens – Mr. Marsh, Mr. McNally, Ms. Huffstetler
  - Salesmen – Dr. Zangardi, Mr. Andress, Mr. Swartz, yours truly
- Have a sticky message
  - "Cyber is a Warfighting Problem"
- Put it in the right context
  - CYBERSAFE = SUBSAFE (same principles)
  - Cyber is a Readiness Kill Chain

# Our Cyber Reality

- A series of stovepipes wired together & not organized or aligned for effective cyber defense-in-depth
  - Little-to-no focus on System-of-Systems or Enterprise-level engineering
  - Integration & Interoperability an afterthought

- Resulting in an IT infrastructure that is:
  - Too large
  - Too old
  - Too varied & expensive
  - Too hard to manage & operate!

**We Can't Live Like this Anymore in a Dirty & Contested Cyber World**

# Our Cyber Future (if We Cross the Chasm)

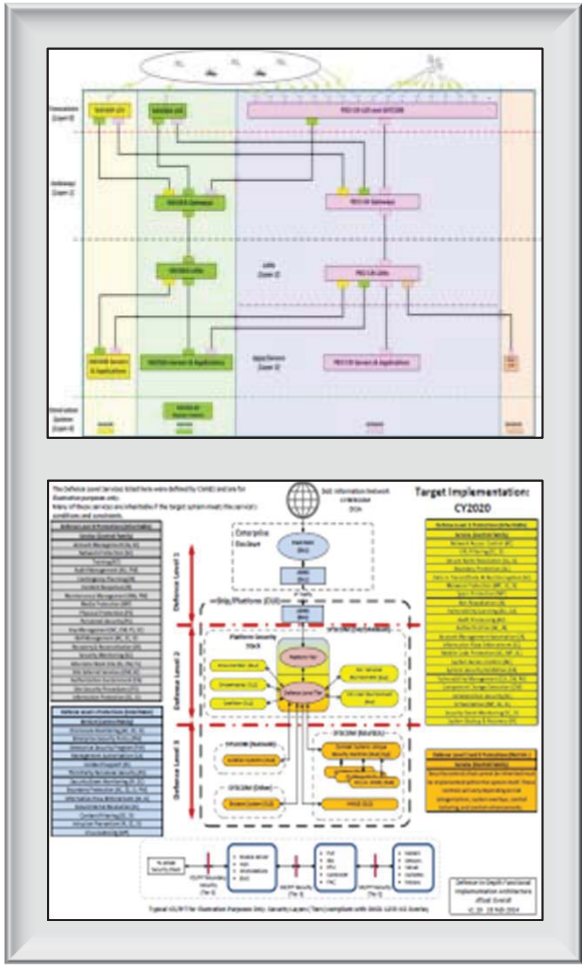
- Cyber is an integral warfighting discipline on par with Surface, Subsurface & Air Warfare
  - All IT systems (Defense Business, National Security, Platform IT) architected, designed, tested, certified & operated with cyber in mind
  - SPAWAR Technical Authority leads SYSCOM efforts in reshaping Navy's cyber future in partnership with other SYSCOMs
- Navy's cyber posture & investment based on enterprise (not system) risk

Risk = f (Threat x Vulnerability x Consequence)

Dynamic, Continuous

Assessments from System to Platform to Enterprise

Navy's Mission Accomplishment




**Our Sticky Message has Stuck for Good:**
**Fully Embrace Cyber as a Warfighting Capability**

# "The Future's So Bright, You Gotta Wear Shades"

## How can industry assist

1. Align with Standards
   - Standard products; no unique solutions
   - Open architectures & government purpose rights
   - Define & tailor standards for specific warfighting missions
2. Minimize Variants
   - Minimize points of presence
   - Minimize interfaces
3. Build for Cyber Agility
   - Adapt to changing threat
   - Latest thinking on cyber offense & defense-in-depth

**We Need Your Help in Defining This New Cyber Future for the Fleet**