

The Need: Thwarting the adversary by analyzing Cyber behaviors



Why Cyber is Integral?

President's Comprehensive National Cybersecurity Initiative

- Develop and implement a government-wide cyber counterintelligence (CI) plan

ONCIX CI Strategy: Detect and Counter FISS Cyber

- Unifying Intelligence Strategy for Cyber, 11 Mar 2013
 - Cyber Intelligence must be presented in a holistic fashion (threat, vulnerability and value)
 - All-Source

Defense Science Board

- Defense only is a failed strategy
- Threat, Vulnerability and Consequence cannot be managed in isolation
 - Threat is broken into two categories: adversaries in Gen Alexander

“In this [Cyber] threat environment, the importance and urgency of intelligence integration cannot be overstated.”

“The theft of intellectual property is the biggest transfer of wealth in history, from this nation to others.”

(U) Cyber Espionage

Communication

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Email
Social Networking
Online Phone Calls
Blog and Vlog
Online Forums

Collection

Targeted Cyber
Attack
Network Attack
Social Engineering

Cyber
Espionag
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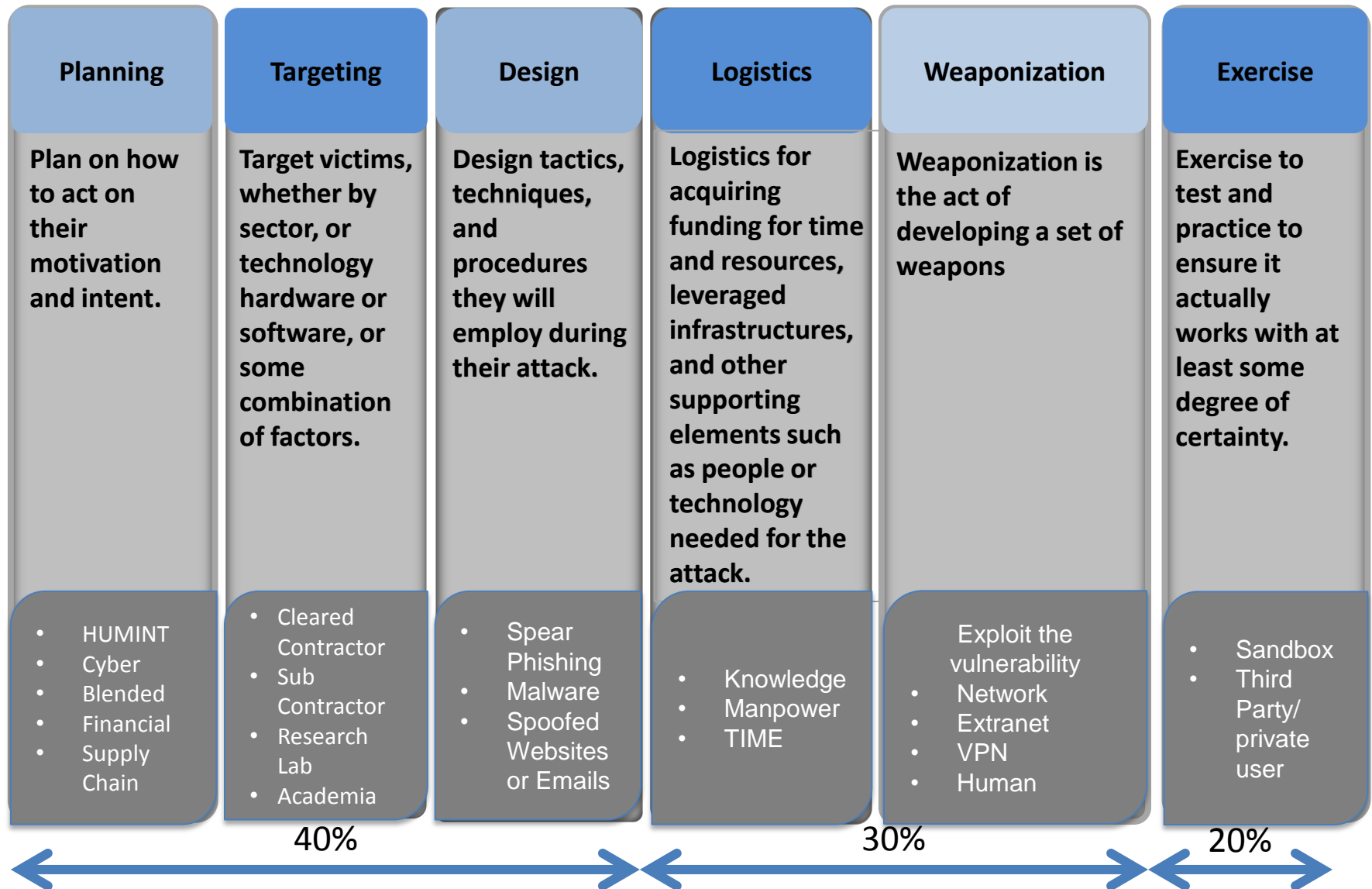
Techniques Used

Spear Phishing
Malware
Spoofed Websites or Emails

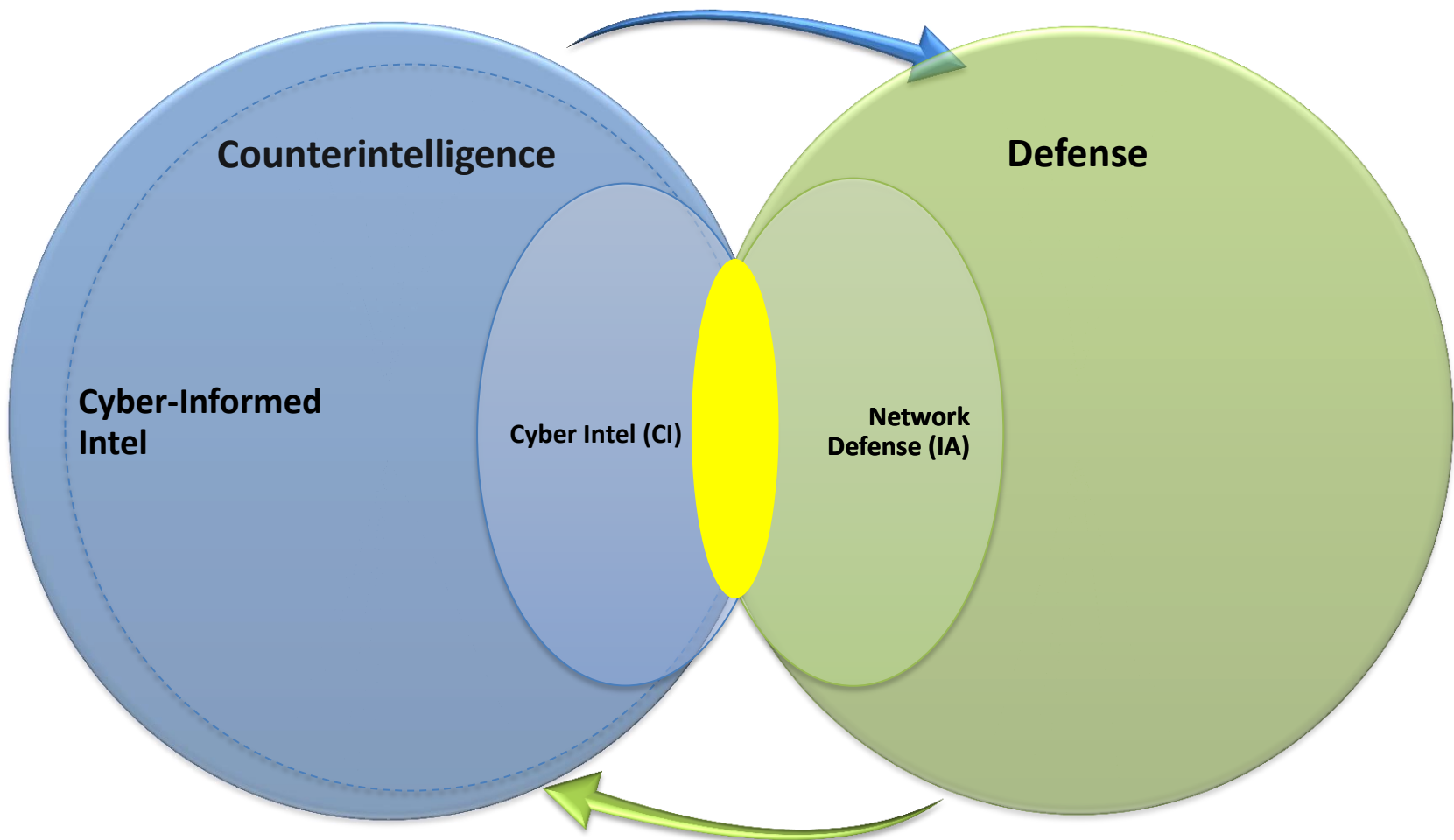
Motivation

Saves Money in R&D
Technology Advancement
Profit
Power

Anatomy of the Acquisition Cycle



Mutually Supportive Missions



(U) Using Cyber to our Advantage

- **(U) Landscape:**
 - (U) Network defense is one part of the strategy
 - (U) Threats begin and end with a human
 - (U) Cyber intelligence must be presented in a holistic fashion (threat, vulnerability and value)
 - (U) 70% of all counterintelligence case referrals by DSS involve cyber activity
- **(U) Anticipatory Analysis:**
 - (U) Left of the cyber “boom;” get ahead of the threat
 - (U) The infectious spread? The “spider web” in cyberspace interconnected
 - (U) Indicators begin with: cyber incident and/or consequence/value
 - (U) Many Sensors/Many data elements

Questions?

**“When you change the way
you look at things, the things
you look at change.”**



– Max Planck (Nobel Physicist)

Questions