Achieving Critical Mass

Security Camp @ Boston University
2011
Agenda

• What is Critical Mass?
• Security by Silo
• The Critical Path to Critical Mass
• Transition Program Structure
• Transition Working Group
• IT Security Service Catalog
• HUIT IT Security Organization
• Benefits
What is Critical Mass?

- The whole is more than the sum of its parts. *Aristotle*

- Synergy: a mutually advantageous conjunction or compatibility of distinct business participants or elements (as resources or efforts) *Merriam-Webster*

- Some of Harvard’s Parts
  - @ University Information Systems
    - Responsibility primarily distributed between University CIO Office (2), Server Operations Center (2) and Network Security and Incident Response Team (3)
    - Policy, Consulting, Monitoring, Vulnerability Scanning, Penetration Testing, Incident Response
  - @ FAS IT
    - Responsibility centralized to IT Security group (4)
    - Compliance, Consulting, Monitoring, Vulnerability Scanning, Incident Response
Security by Silo

• Absence of a one-stop shop
  – Workflows were convoluted, with tasks often requiring one or more hand-off from one team to another
  – Customers uncertain who to contact, how to engage
  – Independent strategies that benefited vendors, not Harvard
  – Redundancy, redundancy and more redundancy; staff, budget, training, tools, process
  – Inconsistency in solutions delivered
  – Unique interpretations of Policy, best practices
  – Inadvertent competition leading to guarded collaboration
The Critical Path to Critical Mass

- September, 2009 FAS CIO resigns
- October, 2009 University CIO resigns
- Decision made to combine UIS and FAS IT, under new UCIO
- September 2010, Anne Margulies appointed University CIO
- November 2010, IT Transition Program announced
- December 2010, IT Transition Team established
- January 2011, IT Transition Working Groups established
- June 2011, new Harvard University Information Technology (HUIT) organization launched
Transition Program Structure

SERVICE DELIVERY WORKING GROUPS
- INFRASTRUCTURE
- ADMINISTRATIVE IT
- ACADEMIC IT
- SECURITY
- CLIENT SERVICES

FOUNDATION WORKING GROUPS
- FINANCE
- HUMAN RESOURCES
- COMMUNICATIONS
Transition Working Group

• Security Working Group
  – Co-Chairs, one UIS and one FAS IT
  – Program Manager
  – Members - key staff from both organizations invited to join SWG
  – Executive Advisor
    – Kitchen Cabinet – key stakeholders invited to advise SWG

• Meet Weekly

• Post Meeting Materials; Agenda, Minutes, Work Products
IT Security Service Catalog

• Security Services
  – Vulnerability Assessment, Penetration Testing and Code Analysis
  – Digital Certificate Management
  – Computer Security Incident Response and Digital Forensic Investigation
  – Security Operations Center
  – Security Consulting
  – Security Education
HUIT IT Security Organization

- CISO
  - Policy, Risk & Compliance
  - Security Architecture & Engineering
  - Cyber Security Center
  - Project Services
Benefits

• **Achieved a Critical Mass by:**
  – Combined staff from both former organizations into a new dedicated, central IT Security group
  – Consolidated tools, identifying redundancies and gaps
  – Common processes ensure consistent results that can be repeated and that are sustainable
  – Organize teams by service and purpose
  – Enabling deep focus for high skill functions
  – Track activities, identify costs and budget more effectively
  – Leverage investment across University
Lessons Learned

• Be Careful What You Wish for
  – Boiling the ocean is a lot of work!
  – Bad feelings run deep – Heal old wounds
  – Never forget that you are creating new, not merging
  – Two ugly people CAN make a pretty baby
  – A Teepee can only stand when the poles lean inward
  – Rome wasn’t built in a day
  – TEAM = Together Everyone Achieves More