

HARVARD
UNIVERSITY



Information Technology

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

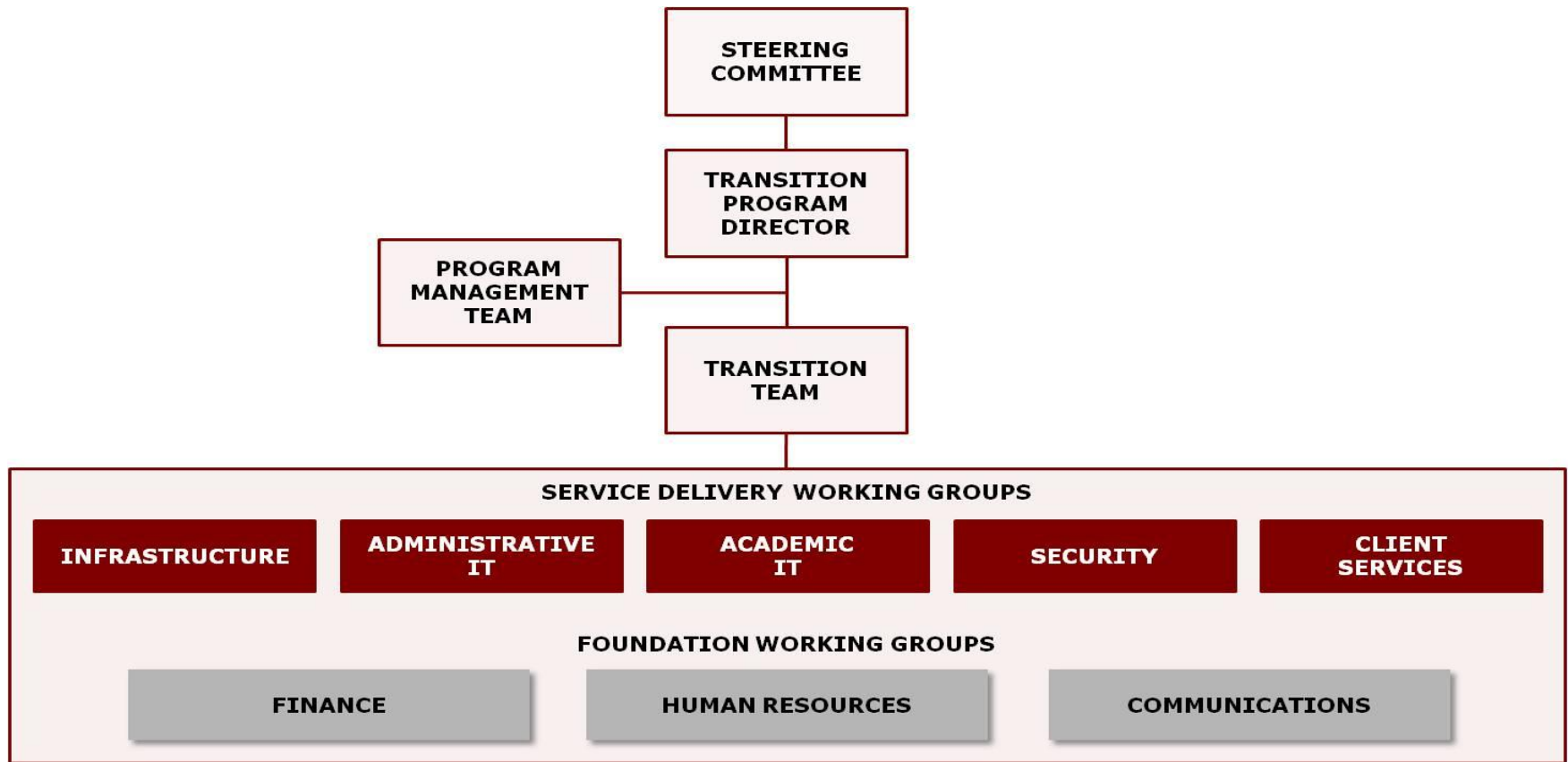
- **Absence of a one-stop shop**

- 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



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**

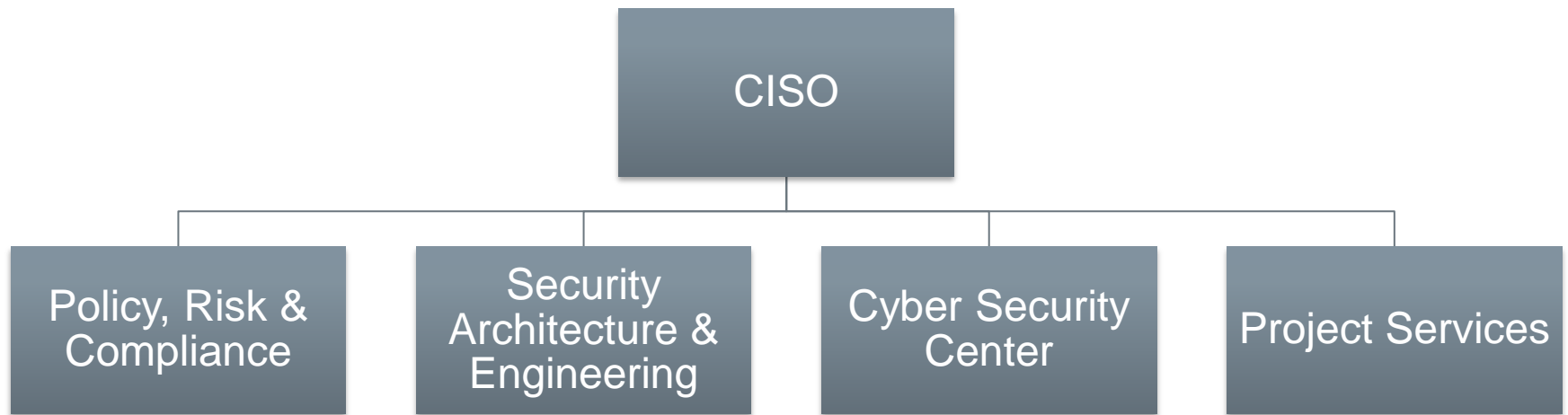
- **Post Meeting Materials; Agenda, Minutes, Work Products**

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



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