

Creating High Performance X-Enterprises

Applying X-Team Theory to Aerospace Programs

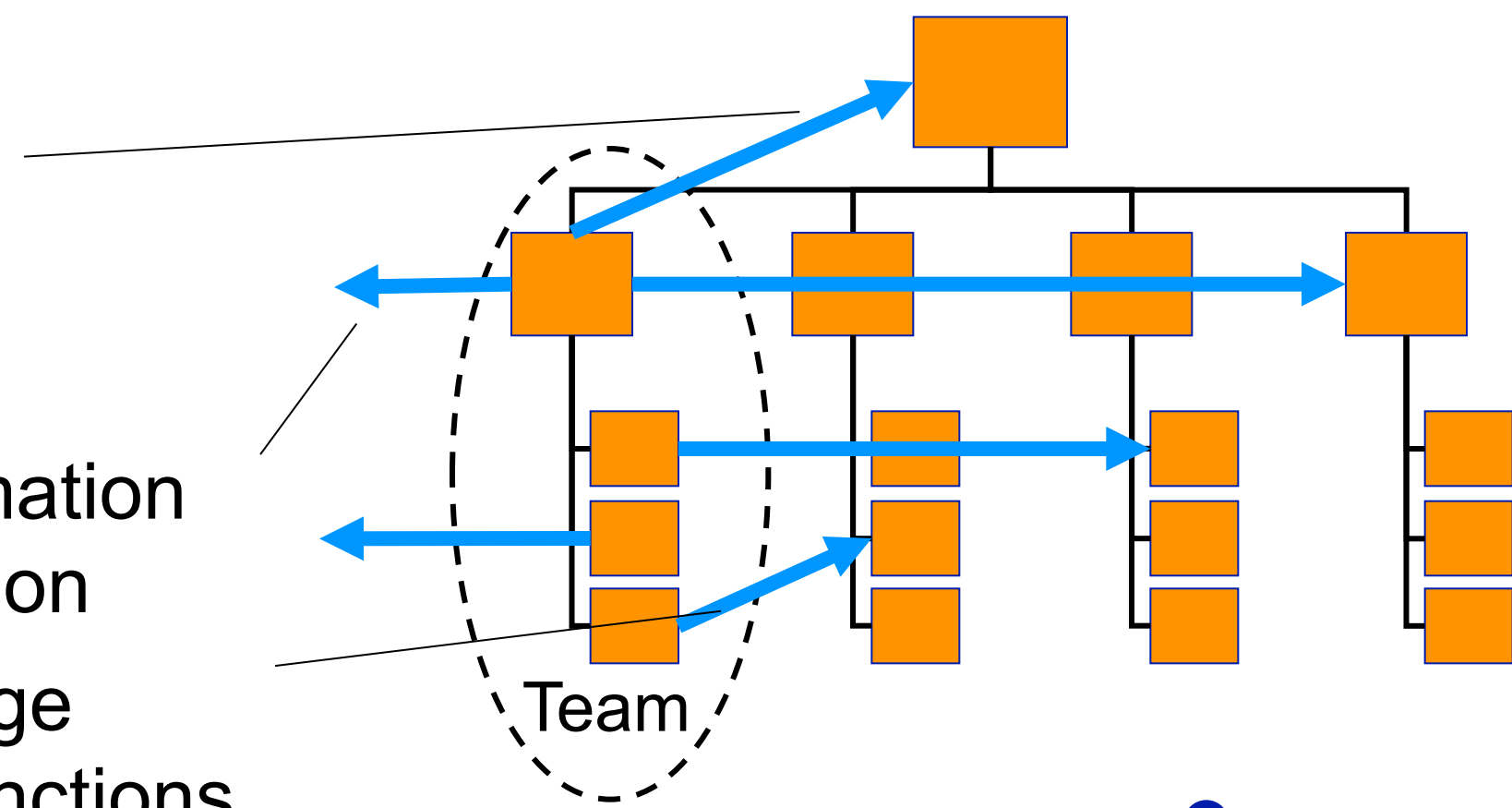
High Performance Teams Designed to Manage Across Boundaries are X-Teams

External Activity

Ambassadorial activity involves managing upward to market the team and lobby for resources

Scouting activity to gather information inside and outside the organization

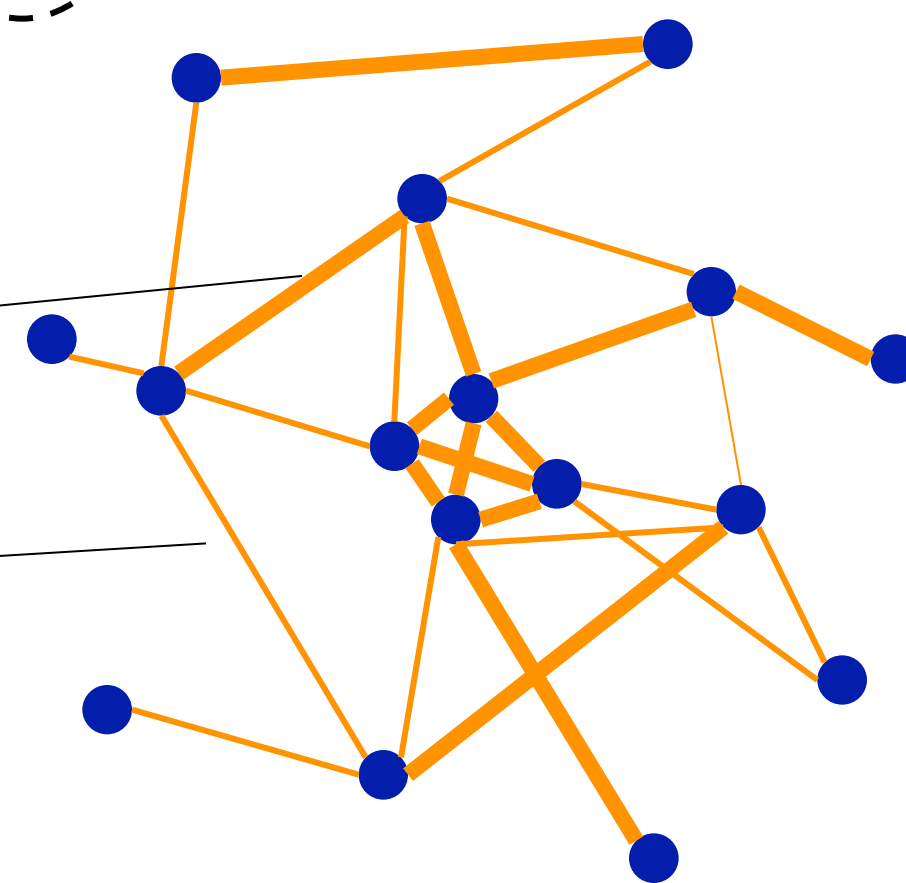
Task Coordination activity manage laterally with other teams and functions



Extensive Ties

Strong Ties facilitate coordination and transfer of complex knowledge

Weak Ties help identify sources of unique knowledge

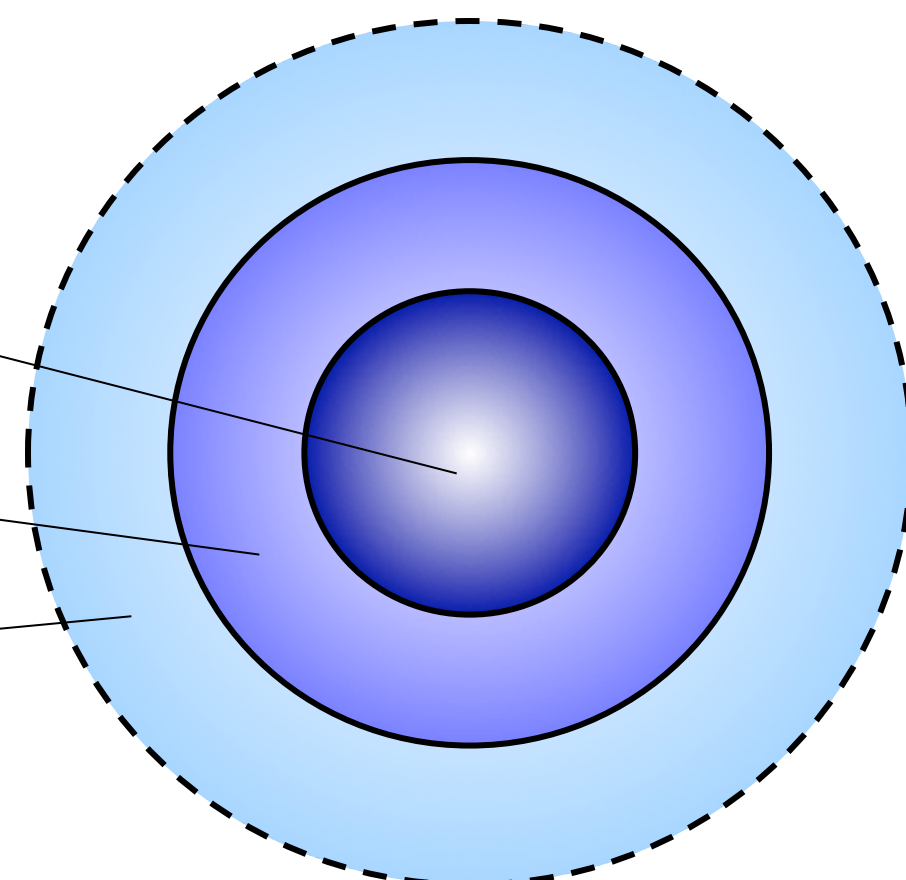


Expandable Structure

Core Tier maintains team history, strategy, and key decisions

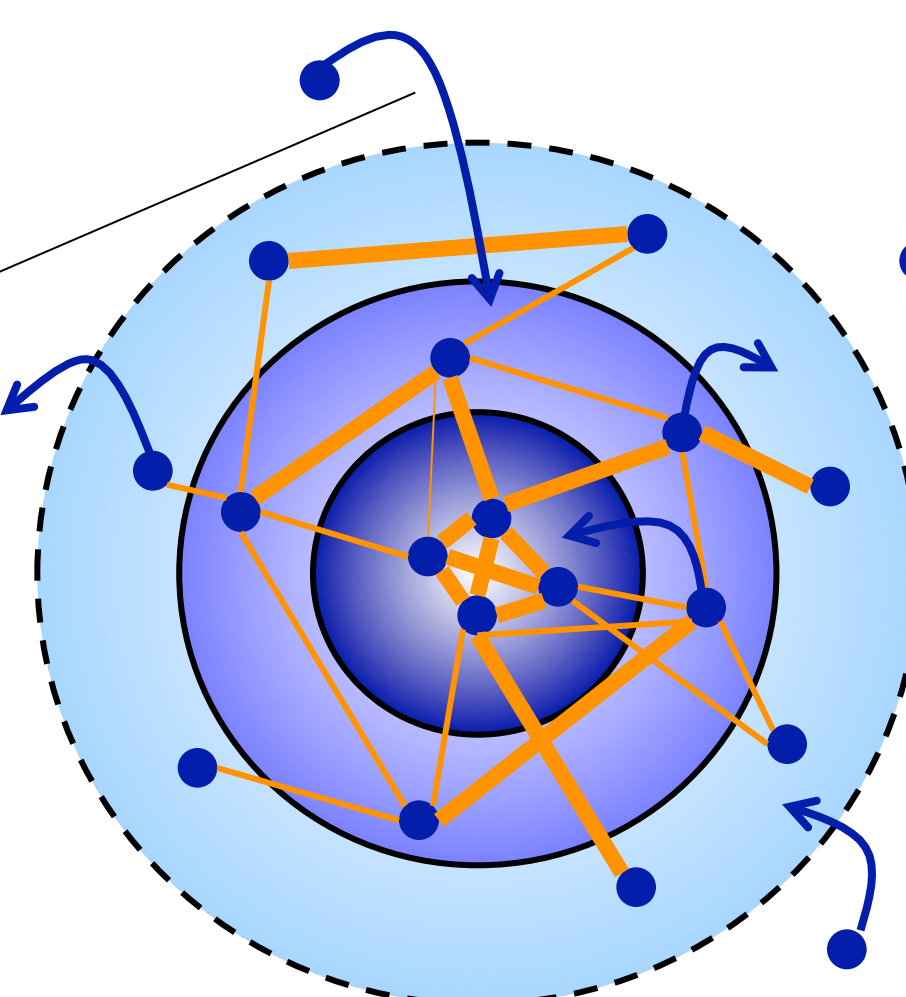
Operational Tier perform on-going work

Outer-net Tier contribute on an ad hoc basis to provide specialized expertise



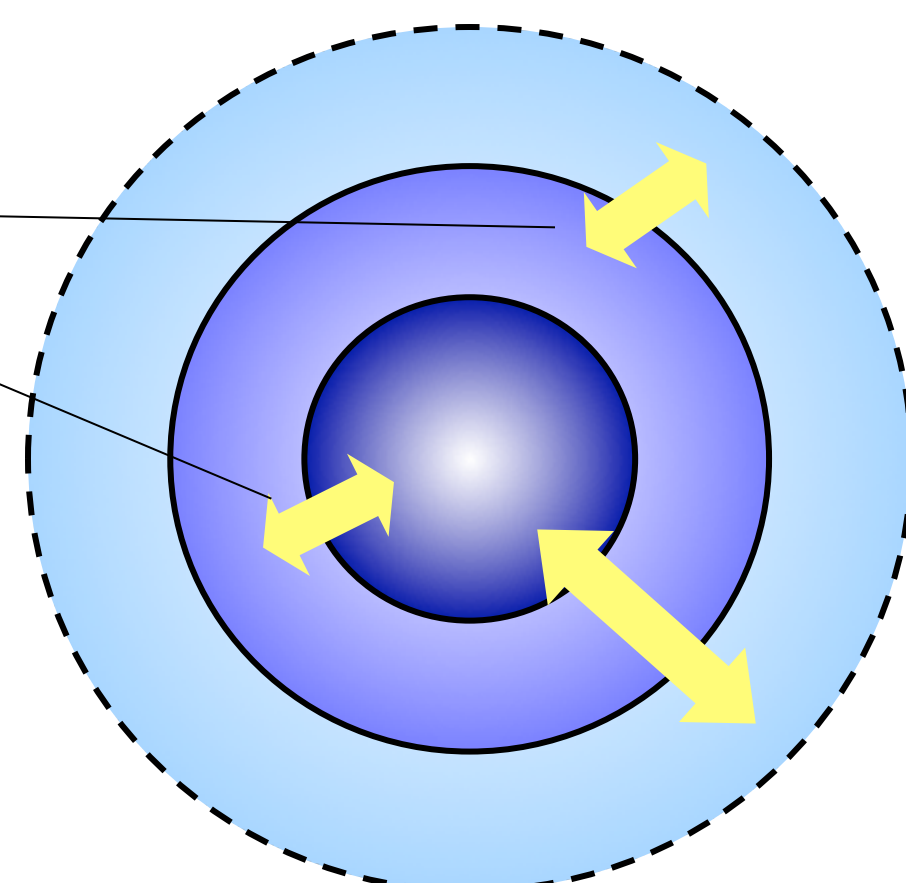
Flexible Membership

Team members transfer between tiers as well as on and off the team



Mechanism for Execution

Integrative meetings, transparent decision making, and scheduling tools are used to coordinate internally between members and tiers



What Does an X-Enterprise Look Like?

External Activity

- Maintaining credibility
- Involving all stakeholders
- Identifying core competencies and sources of expertise

Extensive Ties

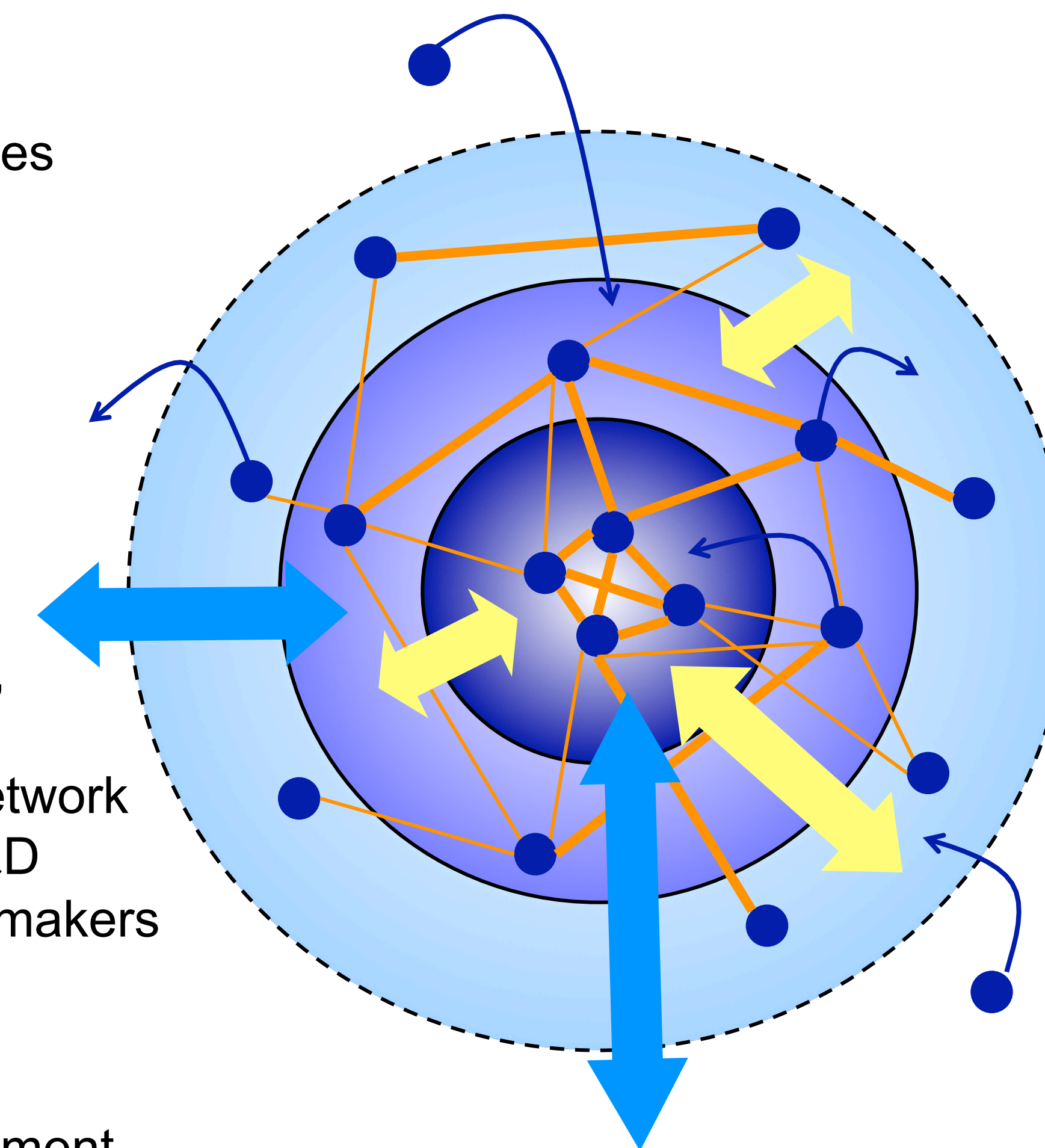
- Utilizing and integrating the knowledge network of the entire enterprise

Expandable Structure

- Core tier: system integrator, customer, major partners
- Operational tier: supplier network
- Outer-net tier: end user, R&D groups, government policy makers and others

Flexible Membership

- Level of activity and involvement based on enterprise needs not organizational boundaries



Mechanisms for Execution

- Accessible information through common information sharing infrastructure
- Distributed leadership based on flow-down of responsibility, authority, and accountability
- Management support mentality to enable execution
- Integration meetings focused on performance metrics and a shared approach to risk management

Internal Integration

- Rigorous application of systems engineering principles
- Single focus on objective of delivering value to the customer instead of various organizational goals
- Relationship building through communities of practice

Research Design

Key Questions

How do X-enterprises differ from X-teams?

Are X-enterprise characteristics indicative of enterprise performance?

Phase 1) Mini-cases (~3 interviews) in 4-6 programs in each sector to identify distinguishing enterprise factors and refine X-enterprise characteristics

Commercial Aircraft	Military Aircraft	Engines	Spacecraft	Avionics	Munitions
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Phase 2) In-depth case studies (20-30 interviews) of 6 programs to explore application of X-enterprise concepts; programs will be selected to set up a paired comparison to investigate X-enterprise characteristics as indicators of enterprise performance

Case A Case B

Case C Case D

Case E Case F