Phase III Team Charter

CHARTER: Develop and deploy concepts, strategies and tools that optimize value streams supporting the design, production and sustainment of aerospace systems offering best lifecycle value.

EXPECTED BENEFITS: Best lifecycle value to the customer; “win-win” prime-supplier relationships; significant network-wide (value stream) performance improvements & shared benefits:

⇒ Greater efficiency; higher quality
⇒ Lead time reduction
⇒ Flexibility and responsiveness

CO-LEADS

MIT
Kirk Bozdogan
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INDUSTRY
George Reynolds
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GOVERNMENT
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**Major Phase III Research Topics**

- **Strategies, methods & tools for flowing lean principles throughout multi-tiered supplier networks**
  - **Lean transformation roadmap:** Change management strategies & enablers; implementation steps & metrics
  - **Methods and tools:** Self-assessment tool; common supplier development guide; value stream mapping; performance metrics; gainsharing methods; electronic integration practices

- **Models for innovative supply chain integration to deliver best lifecycle value to customer**
  - Supply chain design & integration models for building dynamic sustainable network-wide competitive advantage
  - Fostering & “pulling” innovation over supplier networks
  - Information infrastructure for building integrated virtual enterprises enhancing flexibility & responsiveness

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+ Involves major international cross-benchmarking survey in collaboration with UK-LAI & LARP
* Joint with Acquisition Research Team & with Lean Sustainment Initiative; in collaboration with UK-LAI, LARP and ISCM (see Chart #6)
# Joint with Product Development Research Team.
## Products

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<tr>
<th>PRODUCT CATEGORIES</th>
<th>MAJOR PRODUCTS (Examples)</th>
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| **OUTREACH**       | • Provide “content” support to regional supplier workshops  
                      • WEB-based communication products (on-going)  
                      • Annual “for fee” conferences on special topics open to all small-to-medium size aerospace suppliers* |
| **LEARNING**       | • Topical and/or implementation workshops (twice a year)  
                      • Lean transformation roadmap, methods & tools  
                      • Summer short course on supply chain management strategies and methods (yearly, starting in 2001; provide support to “Integrating the Lean Enterprise” short course in June 2000)  
                      • Supply chain design & management self-assessment tool*  
                      • Common supplier training and development guide*  
                      • IT tools for mapping supplier knowledge value stream* |
| **ENDURING**       | • Contributions to Lean Enterprise Model (LEM)  
                      • Conference reports, working papers and publications  
                      • Book contribution –“SUPERCHAINS” |
| **POLICY**         | • Policy recommendations (potential examples)  
                      ⇒ Fostering innovation in supplier networks  
                      ⇒ Interoperability, globalization & international collaboration |

*Contingent upon availability of additional funding.*
Lean Supply Chain Management Framework
(LAI Supplier Networks Team Product, 1995)

(1) Proactive planning, integration & management of the supplier network

(2) Early and substantial supplier involvement in design and development

(3) Mutually beneficial relationships

(4) Synchronized production and delivery

(5) Continuous cost reduction and quality improvement
Enterprise-Level Transition-to-Lean: Illustrative Roadmap
(From Debbie Nightingale, MIT, 10/29/99)

**Long Term Cycle**

- **Focus on the Value Stream**
  - Map Value Stream
  - Internalize Vision
  - Set Goals & Metrics
  - Identify & Involve Key Stakeholders

- **Develop Lean Structure & Behavior**
  - Organize for Lean Implementation
  - Identify & Empower Change Agents
  - Align Incentives
  - Adapt Structure & Systems

**Short Term Cycle**

- **Focus on Continuous Improvement**
  - Monitor Lean Progress
  - Nurture the Process
  - Refine the Plan
  - Capture & Adopt New Knowledge

- **Implement Lean Initiatives**
  - Develop Detailed Plans
  - Implement Lean Activities

**Entry/Re-entry Cycle**

- **Adopt Lean Paradigm**
  - Build Vision
  - Establish need
  - Foster Lean Learning
  - Make the Commitment
  - Obtain Senior Mgmt. Buy-in

- **Enterprise Strategic Planning**

- **Environmental Corrective Action Indicators**

- **Detailed Lean Vision**

- **Decision to Pursue Enterprise Transformation**

- **Create & Refine Implementation Program**
  - Identify & Prioritize Activities
  - Commit Resources
  - Provide Education & Training

- **Lean Implementation Framework**

- **Enterprise Level Implementation Plan**

- **Outcomes on Enterprise Metrics**

- **Detailed Corrective Action Indicators**
Workshop Expectations

- Foster transformative group learning & take-home results
  - Collaboration
  - Knowledge-sharing
- Make progress toward achieving Phase III team charter
- Start process focusing on development of roadmap & tools/methods for building lean supplier networks
  - Capture & consolidate group thinking (“base case”)
  - Establish process for further product definition & development
  - Charter subteams to develop & deliver tangible products
  - Define process for providing “content” support to subteams
- Identify major gaps in knowledge for calibrating Phase III research agenda
Workshop
Ground Rules

✦ Everyone: please participate, don’t act as a “tourist”
✦ Equal access to group dialogue; no one excluded
✦ All contributions welcome & respected
✦ Stay on topic & build on contributions by others
✦ Emphasize really important points, can work details later
✦ Avoid disproportionate discussion of specific issues
✦ “Park” issues/questions that can’t be readily resolved
✦ Make list of topics/areas where team needs more substantive knowledge (e.g., MIT research results, white papers, references, etc.)
Guide for Breakout Sessions

- Use workshop ground rules in all breakout sessions
- Consult more detailed guidelines in handout
- Make good use of limited available time (120 min)
  - Brainstorm (20 min): Capture group’s thoughts on major blocks of activities, implementation steps, tools/methods)
  - Consolidate (20 min): Cluster results into dominant categories
  - Structure (20 min): Order group’s output into a structured process (sequential, parallel elements)
  - Roadmap (45 min): Refine structured results; clarify major elements; identify links and feedback loops
  - Summarize (15 min): Prepare summary outbrief
- Push forward with all deliberate speed but avoid temptation to address all problems now