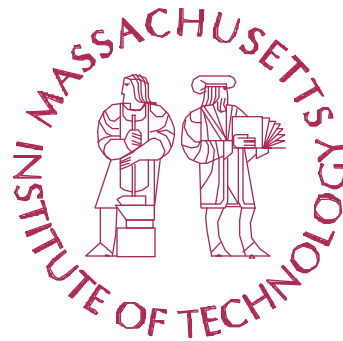


Lean Aerospace Initiative Plenary Workshop

Transition-To-Lean Pilot Project



March 23 - 24, 1999

Presented By:
Debbie Nightingale
LAI



Evolution of the Lean Enterprise Model (LEM)

*The LEM is the integrative tool for
the products of the LAI Consortium*

- **The LEM continues to evolve and expand as LAI matures**
- **Currently, we are focused in three areas**
 - **Developing Version 2.0 : The WEB LEM**
 - **Adding new 'lean' data within existing LEM Architecture**
 - **Developing Pilot Transition-to-Lean Models**



Evolution of The Lean Enterprise Model (LEM)

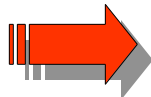
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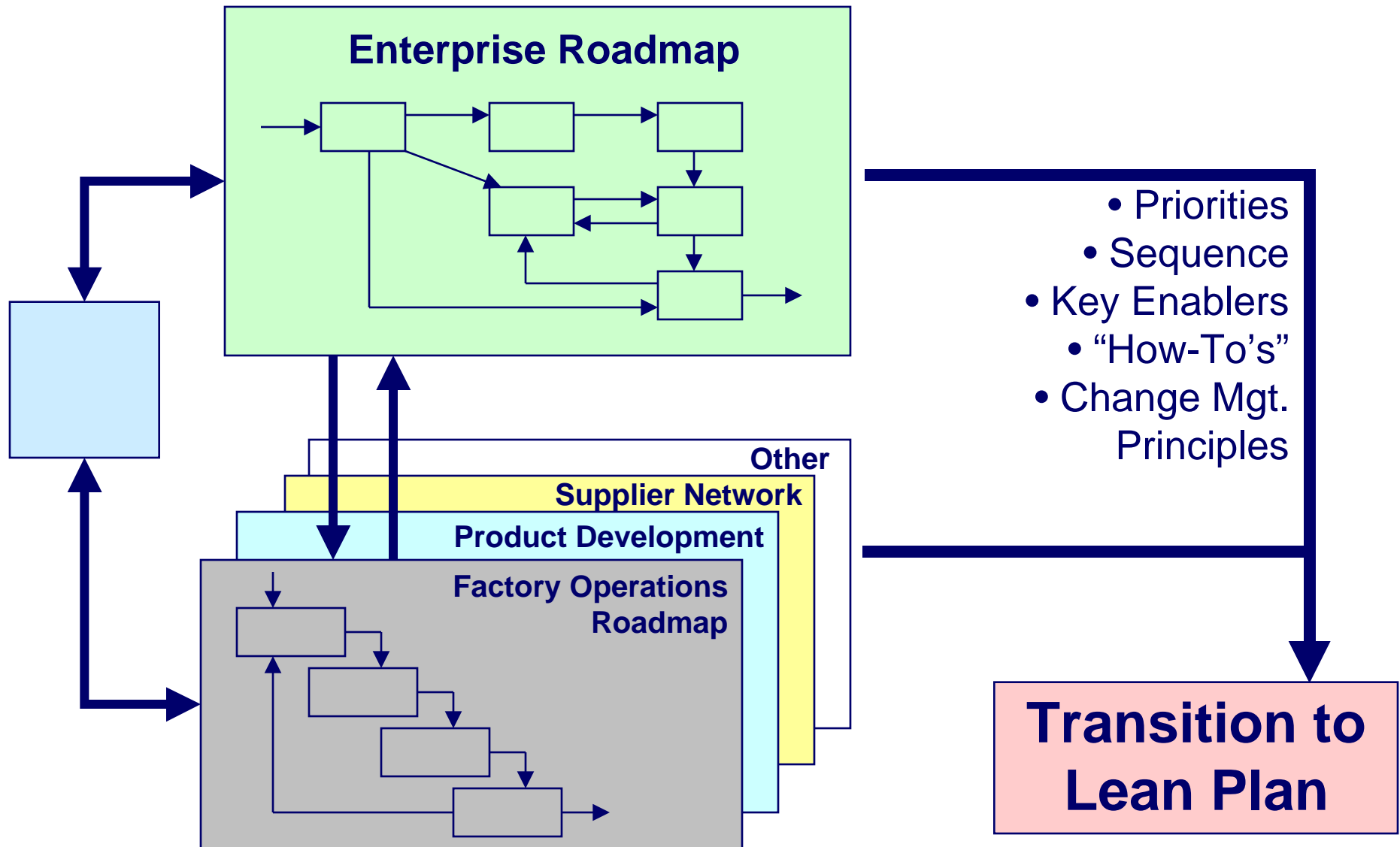


Developing Pilot Transition-to-Lean Models

Focus today will be on:

- status of the TTL activity**
- illustration of the Enterprise-level conceptual framework**

Transition to Lean Module Product Architecture





Overview of TTL Model Pilot Activity

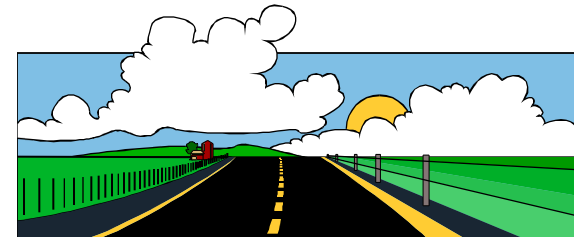
- **Developing Lean Transition Models at Two “Levels”**
 - Enterprise Level
 - Factory Operations
- **Pilot Project Activity**
 - LEM IPT assigned teams to each level
 - Work in process to evolve and populate conceptual frameworks
- **Engaged in Co-operative effort with Implementation IPT**
 - Assuring that mutual efforts are synergistic
 - Providing for future integration of products
- **Phase II Objectives**
 - Complete Pilot sufficiently to demonstrate value of pursuing in Phase III
 - Provide further guidance in selecting areas of research in Phase III



Enterprise Level Roadmap Conceptual Framework

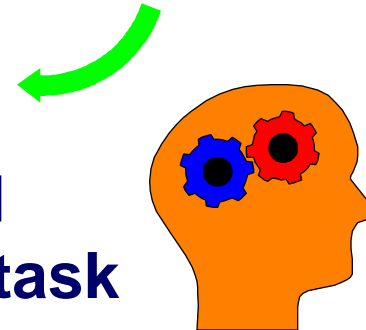
What is the Enterprise Level
Transition-To-Lean Model ?

Begins with a description of a
Top Level Flow of primary activities
referred to as “The Roadmap”



Then, provides descriptions of key tasks
required within each primary activity

Finally, leads discussion of issues,
enablers, barriers, case studies and
reference material relevant to each task
in a common structured framework



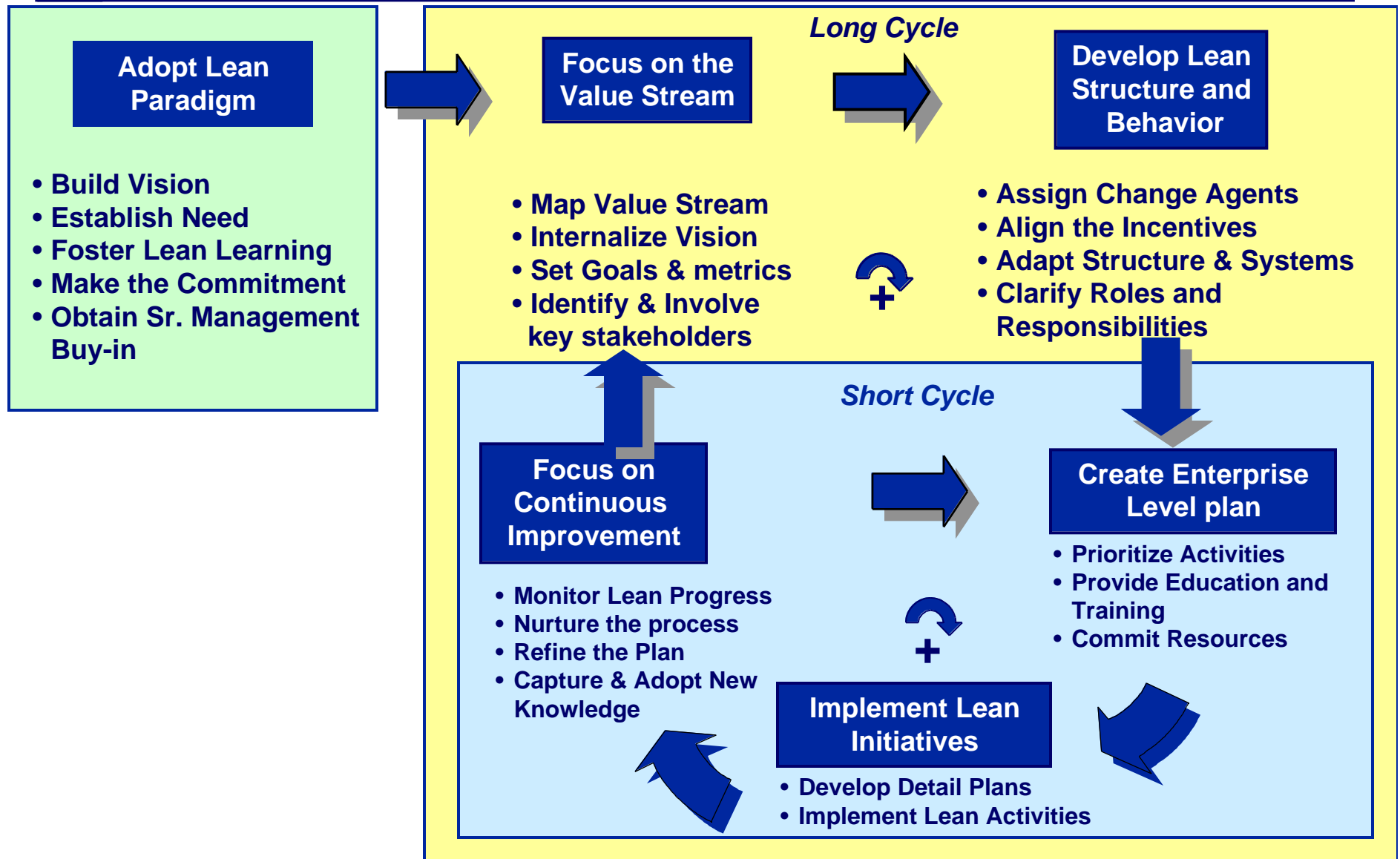


Enterprise Level Roadmap Conceptual Framework

What Will the Enterprise Level TTL Model Provide?

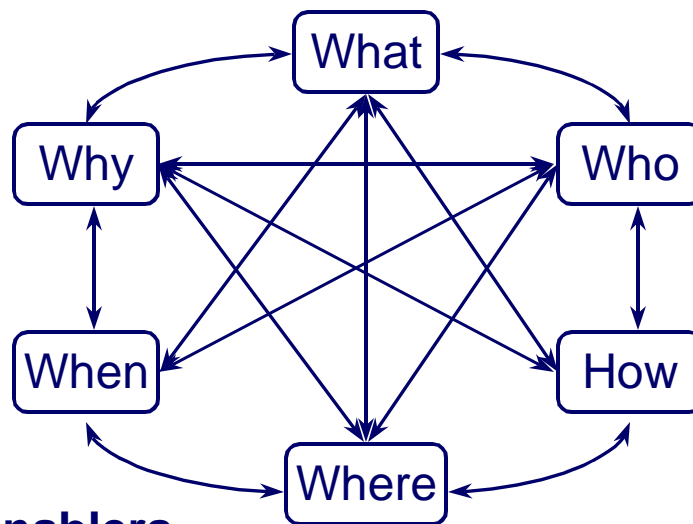
- A robust path that Enterprise Leaders can follow to transition their organizations to a new plateau of “leanness”
- Critical issues, barriers, and enablers to be faced ➡ linked to LEM best practices, metrics, case studies and reference material
- Efficient and effective tool that will improve the quality of thinking and awareness of Enterprise Leaders on the challenge of transitioning their organization
- Guidance in making the transition process, itself, a ‘lean’ process.

Enterprise Level Roadmap Entry, Short and Long Cycles



Common Discussion Framework Is Used

- Discussion of issues
- Six Interdependent Elements of Implementation

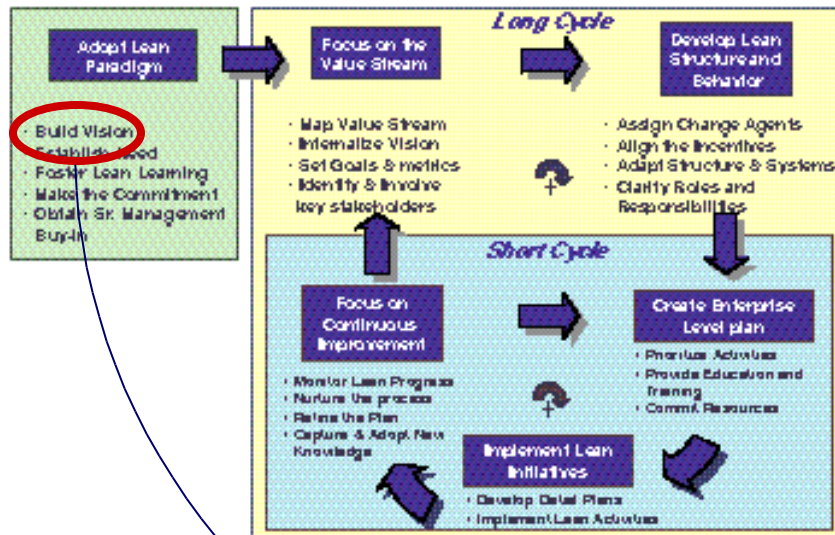


As developed by
the Implementation IPT

- Enablers
- Barriers
- Related Case Studies
- Further Reference Material

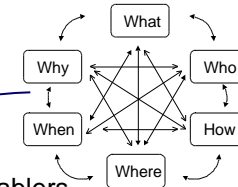
'Drilling Down' to an Example of TTL's Content

The Roadmap



The Discussion Outline

- Discussion of issue
- Six Interdependent Elements of Implementation



- Enablers
- Barriers
- Related Case Studies
- Further Reference Material

Issues surrounding the task of "Build Vision" during the activity of "Adopting the Lean Paradigm"



“Build the Vision” Description template

Transition to Lean Roadmap

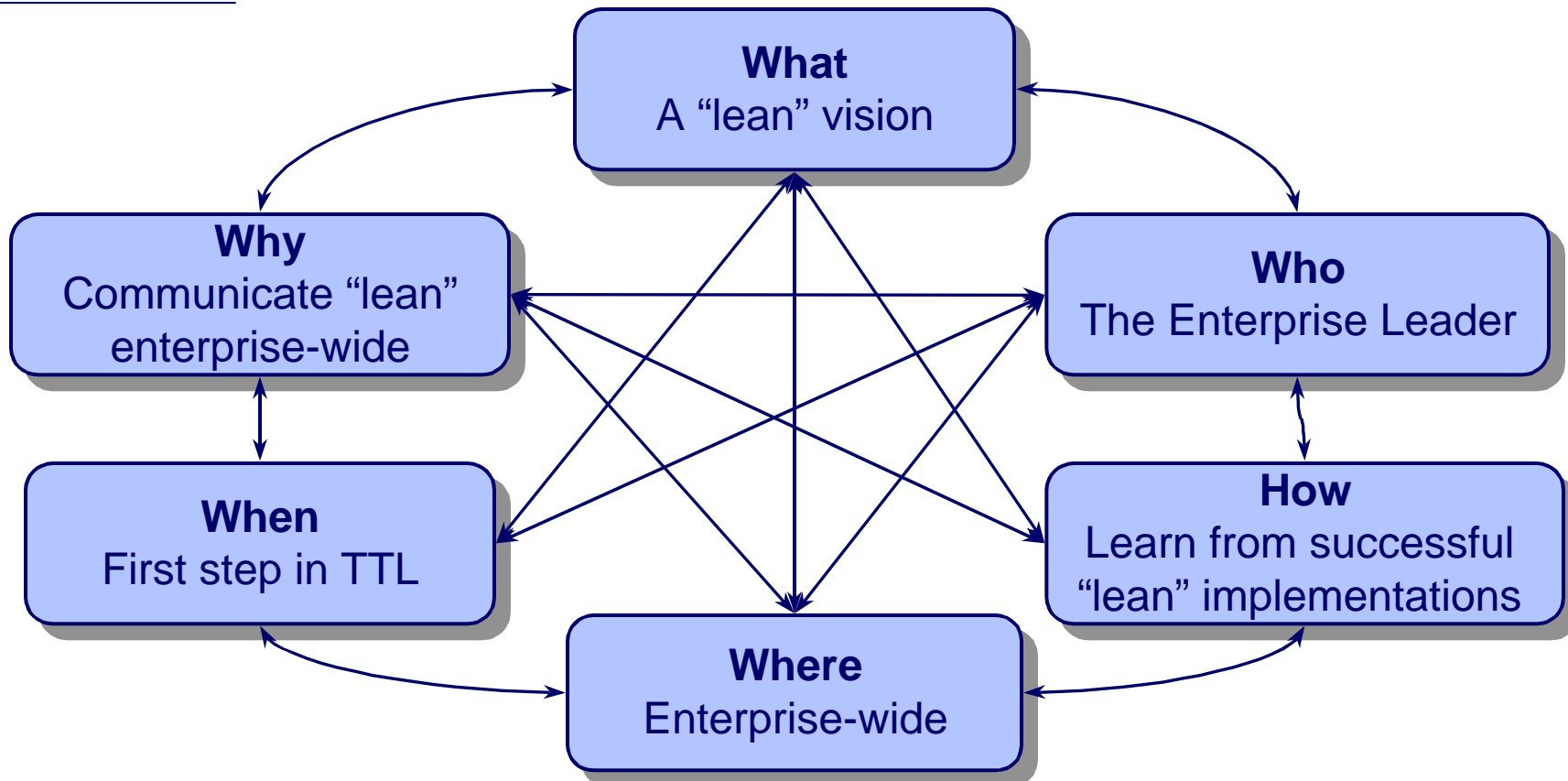
PHASE: Adopt Lean Paradigm
ACTION ITEM: “Build the Vision”

DISCUSSION ISSUES:

- How do you change a vision that the culture has been successful operating with in the past?
- Should this be an internal only or externally influenced process?
- How do you assess the applicability of other successful transformations to your Enterprise?
- How does the lean vision at the Enterprise level tie into other levels of the enterprise?

“Build the Vision” Description template

TENSIONS





“Build the Vision” Description template

BARRIERS (Example)

- **Lack of knowledge of the lean principles and practices**

ENABLERS (Example)

- **Learn from other’s who have proven to be successful in implementing lean at the Enterprise level.**

CASE STUDIES (Example)

- **Jack Welch, CEO- General Electric, is known by his peers as a highly regarded transformer of organizations.**

FUTURE RESEARCH QUESTIONS (Example)

- **“How important is Executive leadership in the success of lean initiatives?”**

Plan For Assessment of Enterprise Level Model

