

Enterprise Value: The New Lean Horizon

Lean Aerospace Initiative



LESAT Actions in Industry
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- **Observations from Beta tests**
- **Introduction to Beta test follow-up study**
- **Classes of enterprise using LESAT**
 - **Successful**
 - **Unsuccessful**
- **3 categories of management feedback control**
- **Acting on LESAT results**
- **Perceived cost/benefit of LESAT**
- **Emergent needs**
- **Conclusions**

- Significant progress in manufacturing and supply chain integration, but just beginning to address other enterprise processes
- Lean progress sometimes reaches a plateau due to low maturity in section I (Leadership) and section III (Enabling Infrastructure)
- Differences in perception are often disclosed between management layers
- Variability in LESAT rating across enterprise assessors is a revealing indicator of issues in executive team communication



- **Develop an understanding of how LESAT is (or is not) a part of management control**
- **10 LESAT beta test sites**
- **Post-assessment interviews about LESAT-driven action plans**

➤ **Successful**

➤ **Business unit**

➤ **Division**

➤ **Program**

➤ **Site**

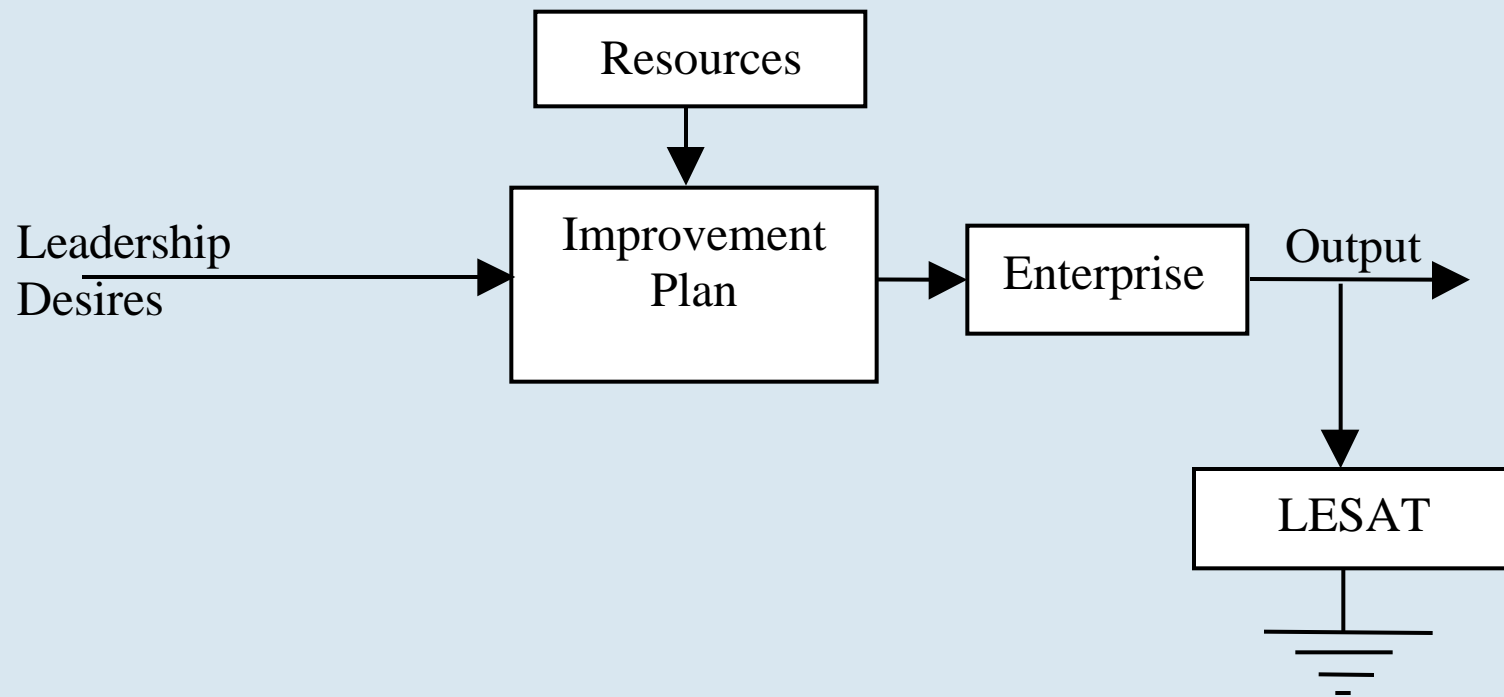
➤ **P&L**

➤ **Unsuccessful**

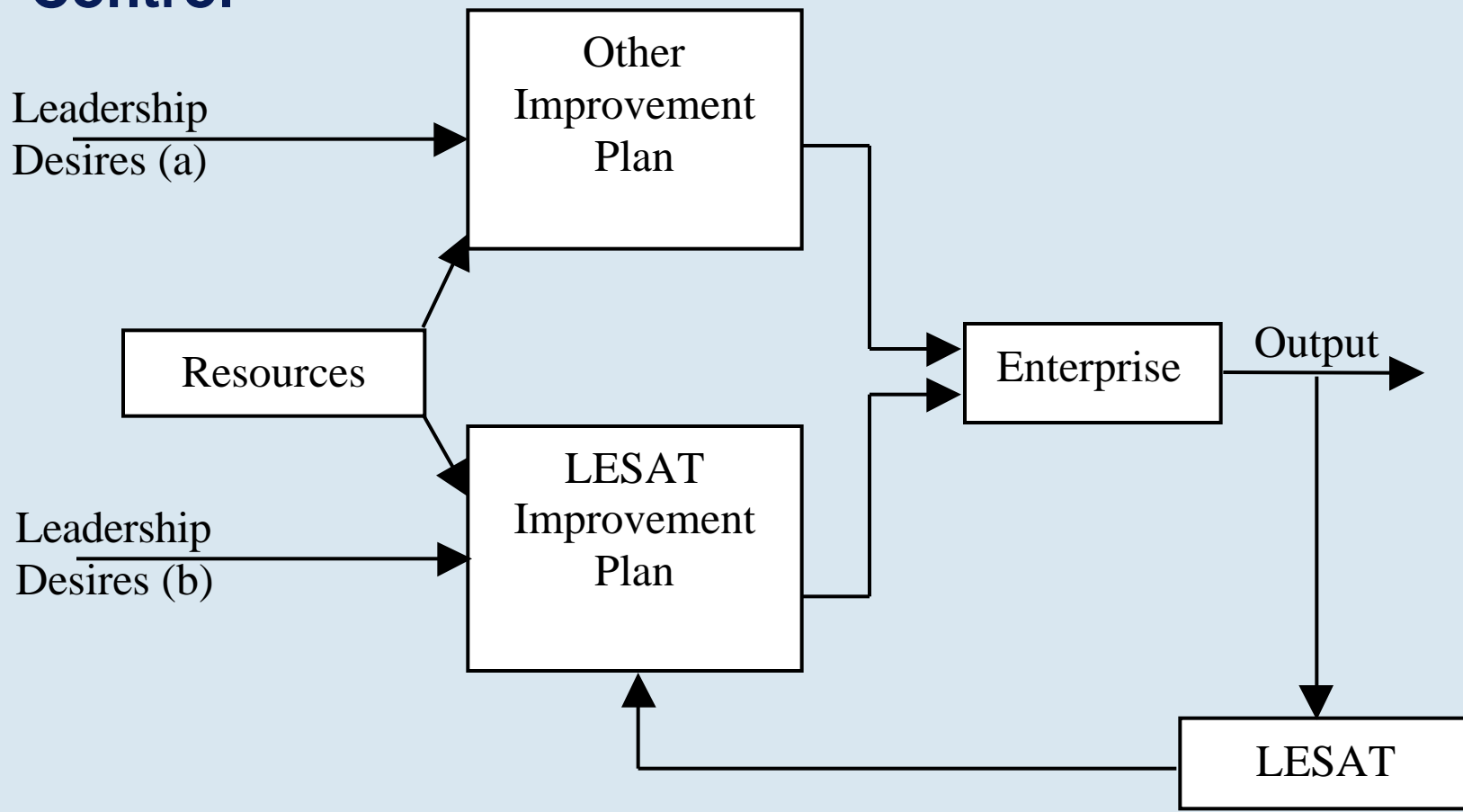
➤ **Support functions as enterprises**

➤ **But Section I of LESAT applicable**

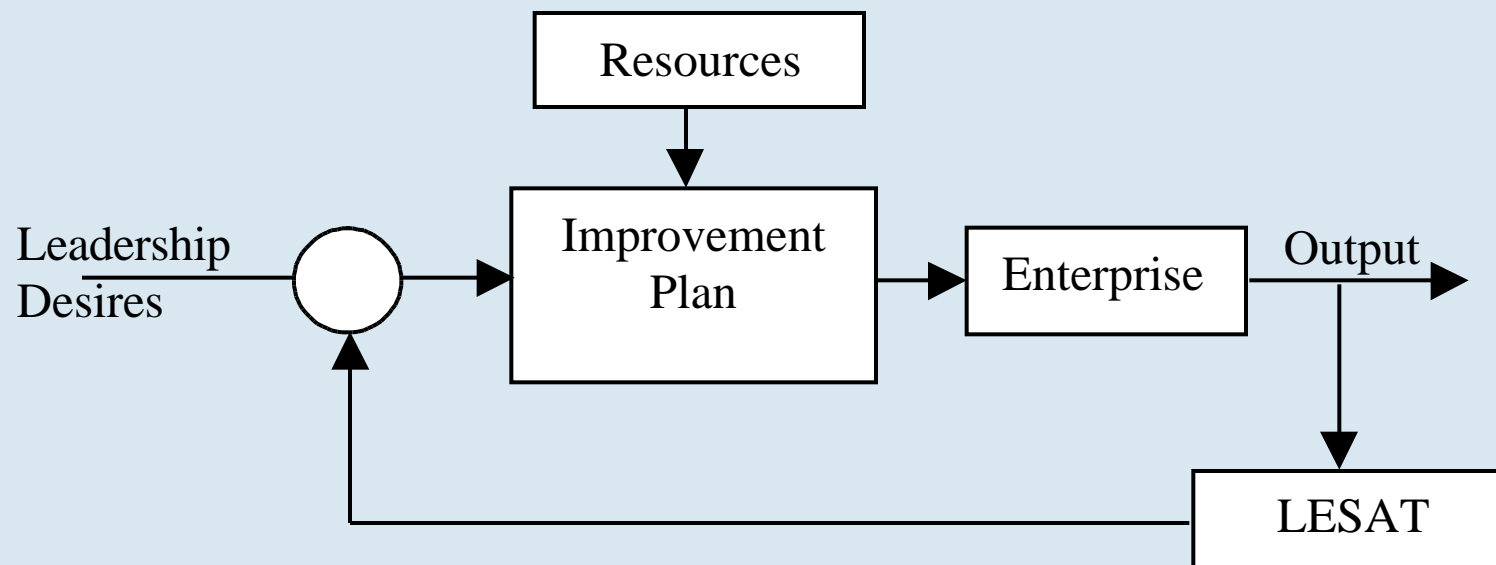
➤ Category 1 - Open Loop Assessment



➤ Category 2 - Dissociated Assessment, Closed Loop Control



➤ Category 3 - Integrated Strategy and Assessment, Closed-Loop Control





Acting On LESAT Results ☹️

- **Performed assessment, no action taken**
- **Arbitrarily mandate 1 point improvement across the board in 1 year**
- **Fix numbers to look better to upper management**



Acting On LESAT Results 😊

- **Address practices with lowest maturity**
- **Address practices with largest maturity variability**
- **Address lowest maturity in leadership section first**
- **Cross reference lowest maturity practices to business strategy**
- **Integrate improvement actions into Annual Operating Plans (AOP)**
- **Perform annual LESAT, aim for continual (incremental) increase in maturity**



➤ **Pros**

- **Assessment process is as valuable as results**
- **Increased executive communication**
- **Creation of common vocabulary**
- **Identify and support those who need education**
- **Open identification of enterprise-level issues**
- **Clear picture of lean maturity of enterprise**
- **Next level of lean maturity obvious**

➤ **Cons**

- **4-6 hours for intro session, rating, and report out**
- **Additional resources to conduct the assessment and deal with logistics and data**
- **Migration actions to next maturity level are unclear**
- **Starting point of improvement efforts is unclear**
- **Coordinating executives is difficult**



- **Enterprise Education and Curriculum**
- **LESAT communication, sharing, and refinement**
- **Enterprise-level decision aids and tools**



- **Formal concept of the “Lean Enterprise”**
- **Enterprise Transition to Lean (TTL) training**
- **LESAT facilitator training**
- **Emphasis on:**
 - **Executive education**
 - **Enterprise-level**
 - **Workshops**
 - **Courses**



LESAT Communication, Sharing, and Refinement

- **Continued sharing of best practices and LESAT experiences across consortium**
- **Assistance for new LESAT users**
- **Continuing interaction between MIT and LESAT users**
 - **Update LESAT with knowledge learned**
 - **Identify research/development needs**
- **Electronic LESAT (real-time analysis)**



- **Enterprise Metrics**
 - Value-based metrics
 - Need for balanced scorecard in aerospace industry
 - Multiple stakeholder optimization approach for sustainability

- **Diagnostic Tools/Decision Aids for LESAT users**
 - Maturity level analysis and interpretation
 - Prioritization of action plans
 - Cost/benefit knowledge for maturity level improvements
 - Simulation tools for high-leverage actions



- **Enterprise-level transformation methodologies**
 - **LESAT section I linked to TTL**
 - **Section II and III are need to be linked to LEM and other tools**
 - **Case studies on lean aerospace enterprise transformation (outcome measures)**



- Transformation is a continuous process that takes years
- LESAT acts as a “sensor” for closed-loop lean enterprise management control
- LESAT users fall into 3 Categories of Enterprise Management
 - Open Loop
 - Closed-Loop
 - Fully Integrated Closed-Loop
- Significant investment of time deemed worthwhile
- Increases understanding of the lean enterprise
- Sustainable transformation successes will be closely linked to Category 3 enterprises





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