

Recognition and Success Stories



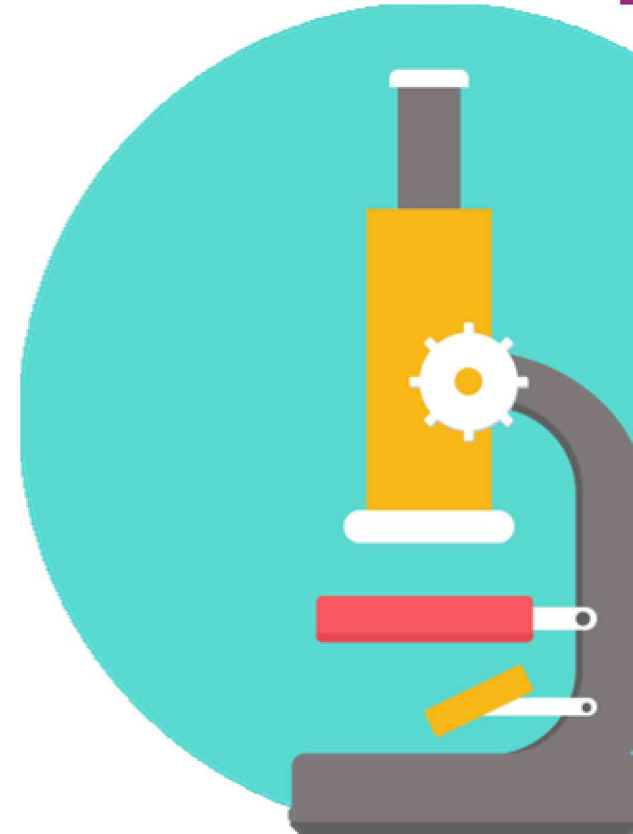
Lab Operating System

PRESENTED BY
Scott Aeilts

Imagine a workplace where...

We can:

- Effectively respond to the increased requests for additional science and engineering deliverables
- Improve the effectiveness and efficiency of our operations
- Follow leading best practices



Fundamentally lean is about reducing waste...

...But it's not what you think in an R&D environment



- We create waste when our world class workforce's time and talent doesn't add value to our mission.
- This waste may look like:
 - Creating designs that stay in the lab instead of generating learning
 - Doing work too soon and having to change it later
 - Learning something that is already known
 - Engaging in random improvements vs ones that add value to the end-to-end value stream



Your work can look different with lean

FROM

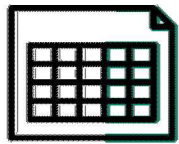
TO



Work and improvements are done in stovepipes



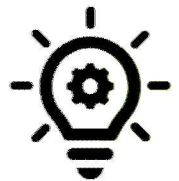
The entire organization performs work that is aligned on delivering customer value



Performance and status is opaque because we work with spreadsheets and not encouraged to share



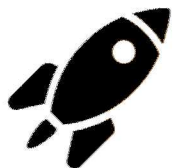
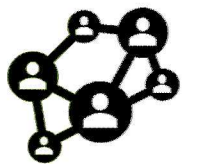
Simple visual communication aligns the team and provides real-time status



Deep knowledge within individuals; culture of heroic problem solving



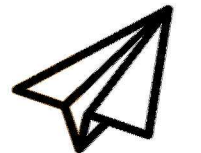
Broad access to knowledge across teams; culture of relentless improvement and knowledge sharing



Product development is linear (design - build - test) with loopbacks with emphasis based on schedule



Product development process is front-loaded and embraces learning and variation



Times are changing, we must too...

Lockheed Martin adopts
Lean Six Sigma and
Sandia begins applying
tools

1990's

Belt Community Focus

The Laboratory Operating
System is Sandia's approach
to Lean in an R&D
Environment

2019

2017

SNL Implements the
Laboratory Operating System
based on the Honeywell
Operating System

FUTURE

The Laboratory Operating
System becomes the way we
work through thinking and
behaviors



DREAM BIG



Recognition of Teams Applying Lean

Sandia National Laboratories

- Manufacturing Liaison Process
- Environmental Testing Facility Demand
- Builds Depot Redesign
- Separation and Transition Process for 2500: Phase 2
- Storage Transporter Repurposing 5S Event
- Systems Engineering Module Standardization

Kirtland Air Force

- System Authorization Access Request
- Freedom Of Information Act
- DoD Contract Security Classification Specification

Los Alamos National Laboratories

- Chemical Inventory Compliance

