

Standard Operating Procedure (SOP)

Lean Assessment and Value Stream Mapping Procedures

This SOP details the **lean assessment and value stream mapping procedures**, including steps for identifying waste, analyzing current processes, mapping value streams, prioritizing improvement opportunities, and implementing lean principles to enhance operational efficiency. The goal is to streamline workflows, reduce inefficiencies, and maximize value delivery to customers through systematic assessment and continuous improvement.

1. Purpose

The purpose of this procedure is to systematically assess operational processes using Lean methodologies and value stream mapping, in order to identify and eliminate waste, improve efficiency, and increase value to the customer.

2. Scope

This SOP applies to all departments and teams involved in workflow optimization, process improvement, and Lean initiatives.

3. Responsibilities

- **Lean Assessment Team:** Conduct assessments, facilitate mapping sessions, and guide improvement activities.
- **Process Owners:** Participate in mapping, provide process data, support and implement improvements.
- **Management:** Approve resources and support Lean initiatives.

4. Procedure

1. **Initiate Lean Assessment**
 - Identify process or workflow to assess.
 - Assemble multidisciplinary team with knowledge of the process.
 - Define assessment goals and desired outcomes.
2. **Collect Current State Data**
 - Observe process operations and gather relevant data (cycle time, WIP, defects, etc.).
 - Interview key stakeholders and process participants.
 - Document process steps, inputs, and outputs.
3. **Map the Current State Value Stream**
 - Use value stream mapping (VSM) tools to visually represent the process.
 - Identify process steps, material/information flow, wait times, and bottlenecks.
 - Mark areas of waste ("muda") such as overproduction, motion, waiting, defects, etc.
4. **Analyze for Inefficiencies and Waste**
 - Systematically review the map for non-value-added activities.
 - Classify and quantify waste types (7+1 lean wastes).
5. **Develop a Future State Map**
 - Brainstorm and prioritize improvement opportunities with the team.
 - Map an optimized "future state" with lean principles (pull systems, flow, mistake-proofing, etc.).
6. **Create and Manage Action Plan**
 - Develop actionable steps for implementing improvements.
 - Assign responsibilities and establish measurable KPIs.
 - Set timelines for review and completion.
7. **Implement Improvements**
 - Execute improvement initiatives as outlined in the action plan.
 - Monitor results and measure against KPIs.
8. **Review, Standardize, and Sustain**
 - Conduct follow-up assessments to verify effectiveness.
 - Standardize successful process changes.
 - Share learnings and best practices across teams.
 - Plan for ongoing continuous improvement cycles.

5. Documentation

- Completed value stream maps (current and future state)
- Assessment reports and data collection sheets
- Action plans with assigned responsibilities and deadlines
- Improvement results and KPI tracking sheets
- Standard work documentation for sustained improvements

6. References

- Lean Thinking by Womack & Jones
- Lean Enterprise Institute: www.lean.org
- Internal process and quality control manuals

7. Revision History

Version	Date	Description	Author
1.0	2024-06-05	Initial Release	Process Improvement Team