



Lean Tools for Process Improvement: 5S, Value Stream Mapping and Kaizen



Lean Tools for Process Improvement: 5S, Value Stream Mapping and Kaizen

Technical depth: Practitioner · **Practical mode:** Inspection walkthrough

Introduction

Waiting, rework, searching and unnecessary movement absorb a large share of the time in most operational and service processes, and they rarely appear in any report. Teams often know something is wrong but lack a shared method to see the waste, measure the flow and fix the cause. This Core Concept course introduces the core Lean tools, from gemba walks and value stream maps to 5S, standard work and A3 problem solving, and applies them on process walkthroughs. Participants leave with a Lean Improvement Action Plan on an A3 for a process in their own workplace.

Course Objectives

- Identify the eight wastes in a live process during a structured gemba walk
- Map the current state of a process with SIPOC and value stream mapping and calculate takt, cycle and lead times
- Apply 5S, standard work, visual management and kanban to stabilise a work area or service flow
- Solve a recurring process problem with the A3 method, 5 Whys and a fishbone diagram
- Run a short kaizen activity and put routines in place that sustain the gain
- Prepare a Lean Improvement Action Plan that a supervisor can approve and track

Target Audience

- Team leaders responsible for the daily output of production or service teams
- Frontline staff nominated to take part in improvement activities
- Process coordinators responsible for workflow, scheduling and handoffs
- Quality and operations officers supporting improvement projects
- Administrative staff responsible for back-office processes with high volumes

Course Outline

Day 1: Lean Thinking and the Current State

- Five Lean Principles of Womack and Jones
- Toyota Production System House: Just-in-Time and Jidoka
- Eight Wastes Identification with the TIMWOODS Checklist
- Value-Added Versus Non-Value-Added Activity Analysis
- Gemba Walk Planning and Observation Sheet

Day 2: Mapping and Measuring the Flow

- SIPOC Diagram for Process Scoping
- Current-State Value Stream Map Symbols and Data Boxes
- Spaghetti Diagram for Movement and Transport Waste
- Takt Time, Cycle Time and Lead Time Calculation
- Time Observation Sheet and Work Sampling

Day 3: Core Lean Tools in the Workplace

- 5S Workplace Organisation and Red-Tag Audit
- Standard Work Combination Sheet and Job Breakdown
- Visual Management Boards and Andon Signals
- Kanban Pull Systems and Supermarket Sizing
- Poka-Yoke Mistake-Proofing Device Selection

Day 4: Problem Solving and Sustaining the Gains

- A3 Problem-Solving Report Structure
- 5 Whys and Fishbone Diagram for Root Cause Analysis
- SMED Steps for Changeover and Set-Up Reduction
- Kaizen Event Charter and Daily Huddle Routine
- Lean Sustainment Audit and Leader Standard Work

Day 5: Process Walkthroughs and the Lean Improvement Plan

- Warehouse Order-Picking Walkthrough: Waste Spotting Exercise
 - Outpatient Clinic Walkthrough: Patient Flow and Waiting Analysis
 - Future-State Value Stream Map Sketch
 - Lean Improvement Action Plan Drafting on an A3
 - Peer Review and Action Plan Presentation
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Skills You Will Gain

- Waste Identification
- Value Stream Mapping
- Flow Measurement
- Workplace Organisation
- Standardised Work
- Visual Management
- A3 Problem Solving

Why Attend This Course

- Return with a Lean Improvement Action Plan on an A3 for a real process, ready for your supervisor's approval
- See waste and delay that routine reports hide, using a repeatable walkthrough method
- Lead short improvement activities with your team instead of waiting for a formal project
- Learn from participants who apply Lean in warehouses, clinics, offices and factories

Conclusion

Lean works when the people closest to the process can see waste, measure flow and fix causes as part of their daily work. This course moves from Lean principles and the current state, through mapping, measurement and the core workplace tools, to structured problem solving and the routines that sustain improvement. The final day applies everything on process walkthroughs and turns it into a Lean Improvement Action Plan on an A3, giving each participant a practical first project to lead on return.
