



**Lean** is a time-tested method for improving performance and results by removing waste (non-value added activities) and standardizing work within a process. Lean embodies a way of thinking and acting to continually improve services.

### 7 Wastes (+1)

Waste to eliminate from the process

- T Transportation
- I Inventory
- M Motion
- W Waiting
- O Overproduction
- O Overprocessing
- D Defects
- S Underutilized staff creativity

### Poka-Yoke

Mistake proofing

### Kaizen Event

A facilitated, rapid improvement event typically conducted over 3-5 days

- 1 Map current process
- 2 Identify waste
- 3 Brainstorm improvements
- 4 Map future process
- 5 Complete action plan

### Lean Principles

- Customer focus: provide what customers want, when they want it, and how they want it
- Value: define value from the customer's perspective and relentlessly drive out waste
- Respect: empower and engage employees to improve products and services
- Results: set ambitious goals and measure results
- Accountability and Transparency: follow through on commitments and communicate progress
- Continuous improvement: challenge the status quo, validate assumptions, Plan-Do-Check-Act, experiment and learn from experience

### WorkOut

Half-day method to help teams identify work unit issues and solutions

- 1 Define value streams
- 2 Identify challenges
- 3 Brainstorm solutions
- 4 Sort and prioritize

### 5S

A simple method for creating clean, safe, orderly, high performing work environments

- 1S Sort
- 2S Set in order
- 3S Shine
- 4S Standardize
- 5S Sustain

### 5 Whys

Root cause identification tool

- 1 Identify problem
- 2 Ask, "What should happen?"
- 3 Ask, "What did happen?"
- 4 Ask, "Why?" 5 times
- 5 Complete action plan

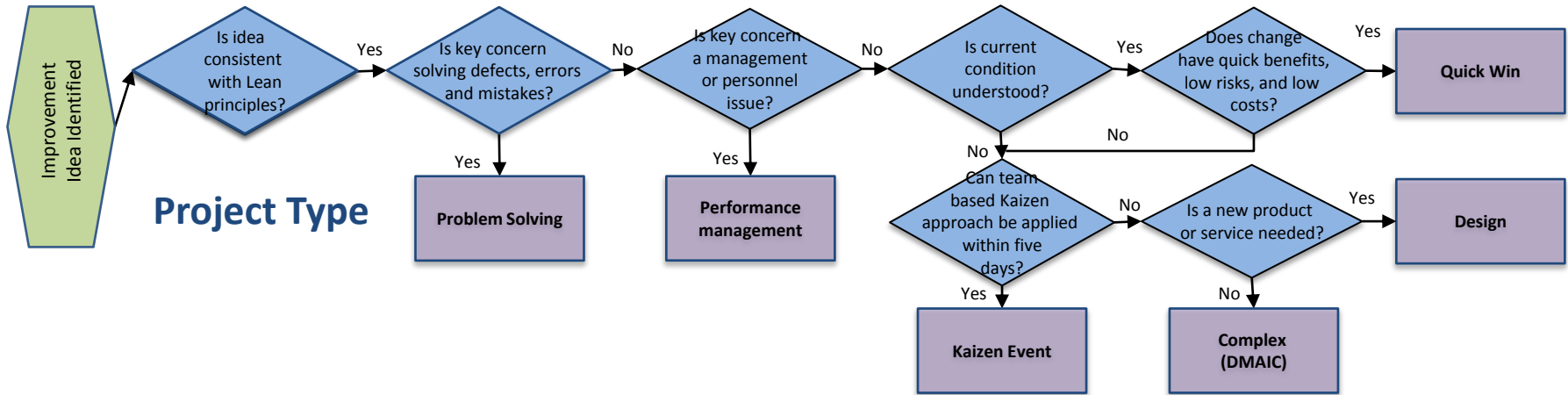
### A3

One-page problem solving or project charter tool

### Standard Work

How work should be done

- 1 Define process start and end
- 2 Determine requirements
- 3 Define process steps & time
- 4 Create forms/documents
- 5 Set quality control checks
- 6 Train supervisors and staff
- 7 Validate standard work
- 8 Make adjustments



## Project Methodology and Tools

Plan			Do	Check	Act
Define	Measure	Analyze	Improve		Control
<ul style="list-style-type: none"> <li>Project Charter</li> <li>Team Norms</li> <li>SIPOC Diagram</li> <li>Voice of the Customer Techniques</li> <li>Stakeholder Map</li> <li>Benchmarking</li> </ul>	<ul style="list-style-type: none"> <li>Swim Lane Map</li> <li>Value Stream Map</li> <li>Spaghetti Map</li> <li>Process Analysis</li> <li>Control Chart</li> <li>Statistics</li> <li>Cost/Benefit Analysis</li> </ul>	<ul style="list-style-type: none"> <li>Brainstorming</li> <li>Cause and Effect Analysis (Fishbone)</li> <li>5 Whys</li> <li>Affinity Diagram</li> <li>Relations Diagram</li> <li>Surveys</li> </ul>	<ul style="list-style-type: none"> <li>Brainstorming</li> <li>Idea Box</li> <li>Ranking and Voting</li> <li>2 x 2 Table</li> <li>Decision Matrix</li> <li>Cost/Benefit Analysis</li> <li>Impact Wheel</li> <li>FMEA</li> <li>Mistake Proofing</li> <li>Implementation Plan</li> <li>Performance Measures</li> <li>Before/After Analysis</li> </ul>		<ul style="list-style-type: none"> <li>Control Plan</li> <li>Standard Work</li> <li>Post-Project Review</li> <li>Storyboard</li> <li>Visual Measures</li> </ul>