

Lean and CI Terminology List

This glossary provides concise definitions of 50 essential Lean and Continuous Improvement terms. In the digital version, each term is clickable, linking to detailed guides with examples and practical insights. Use this resource to quickly learn, apply concepts, and deepen your understanding of Lean methodologies.

5S A workplace organization system focusing on Sort, Set in Order, Shine, Standardize, and Sustain to improve efficiency, safety, and cleanliness while minimizing waste. It creates a visually managed and highly organized work environment.

8 Wastes (TIMWOODS) A framework identifying common wastes: Transportation, Inventory, Motion, Waiting, Overproduction, Overprocessing, Defects, and Skills underutilization. Eliminating these non-value-adding activities optimizes processes.

A3 Report A structured problem-solving document that captures critical information on a single A3-sized sheet, including problem description, root causes, countermeasures, implementation plan, and results.

Andon A visual or auditory signal indicating a problem in a process, enabling immediate attention and corrective action. Often used in production lines for real-time issue identification.

Bottleneck A constraint or resource in a process that limits the overall throughput, causing delays or inefficiencies. Identifying and addressing bottlenecks is key to process improvement.

Continuous Improvement (Kaizen) A philosophy emphasizing small, incremental improvements to processes, products, or services, fostering a culture of constant refinement and problem-solving.

Continuous Flow A production system where work moves steadily through each process step without delays, reducing batch sizes and increasing efficiency.

Cycle Time The time required to complete one cycle of a process from start to finish. Reducing cycle time improves efficiency and throughput.

DMAIC A five-phase Lean Six Sigma method: Define, Measure, Analyze, Improve, and Control. It is used for data-driven problem-solving and process improvement.

FMEA (Failure Mode and Effects Analysis) A systematic approach to identifying potential failures in a process, product, or system and prioritizing actions to mitigate their impact.



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Gemba

A Japanese term meaning “the actual place.” In Lean, it refers to observing processes directly on the shop floor to identify issues and opportunities.

Heijunka

A method for leveling production to meet demand consistently, reducing overburden, unevenness, and waste. It balances workload and resources.

Hoshin Kanri

A strategic planning method aligning organizational goals with actionable plans across all levels, ensuring consistent focus and direction.

Jidoka

The automation principle that enables machines or operators to stop production when defects occur, ensuring quality at the source.

Kanban

A visual scheduling system signaling when to produce or replenish items, optimizing inventory and reducing overproduction.

Key Performance Indicators (KPIs)

Quantifiable measures used to evaluate the performance of processes, teams, or organizations against defined objectives.

Lean Manufacturing

A methodology aimed at minimizing waste and maximizing value by optimizing processes, resources, and flow.

Muda (Waste)

Non-value-adding activities that consume resources without enhancing the customer’s experience. Examples include defects, delays, and excess inventory.

Mura (Unevenness)

Inconsistencies in workloads or processes that cause inefficiencies, delays, or quality issues. Addressing Mura leads to smoother operations.

Muri (Overburden)

Excessive strain on workers or equipment, causing stress, breakdowns, or errors. Reducing Muri helps ensure sustainable workloads.



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Non-Value-Added Activities

Tasks that do not directly contribute to meeting customer needs or adding value, such as rework, waiting, or unnecessary motions.

Obeya

A "big room" where teams collaborate and track progress on strategic initiatives, using visual tools for transparency and alignment.

One-Piece Flow

A production method where one item moves through each process step individually, reducing lead time and increasing quality.

Pareto Principle (80/20 Rule)

The concept that 80% of effects often stem from 20% of causes, helping prioritize efforts on the most impactful areas.

PDCA (Plan-Do-Check-Act)

A cyclical framework for continuous improvement involving planning, executing, evaluating, and adjusting processes.

Poka-Yoke (Error Proofing)

Techniques or tools that prevent defects by designing processes to make errors impossible or immediately detectable.

Process Capability (Cp, Cpk)

Measures of a process's ability to produce outputs within specified limits, reflecting its consistency and quality.

Process Mapping

A visual representation of a process's steps, inputs, and outputs, used to identify inefficiencies and areas for improvement.

Pull System

A production approach where work is initiated based on actual demand, reducing overproduction and excess inventory.

Root Cause Analysis (RCA)

A method to identify the fundamental cause of a problem, ensuring effective and lasting solutions are implemented.



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Short Interval Control (SIC)

A management approach involving frequent reviews of performance at regular intervals, enabling immediate adjustments to stay on target.

SIPOC Diagram

A high-level process map showing Suppliers, Inputs, Process, Outputs, and Customers, used to understand scope and flow.

SMART Goals

Objectives that are Specific, Measurable, Achievable, Relevant, and Time-bound, ensuring clarity and focus.

Standard Work

A documented process defining the best-known method to perform a task, ensuring consistency and efficiency.

Takt Time

The pace of production required to meet customer demand, calculated by dividing available time by demand.

Value Stream Mapping (VSM)

A visual tool mapping all steps in a process, highlighting value-added and non-value-added activities to improve flow.

Visual Management

The use of visual cues, signs, or tools to communicate information at a glance, enhancing clarity and reducing errors.

Voice of the Customer (VOC)

Customer feedback and expectations used to guide process improvements and ensure products or services meet needs.

Work-In-Progress (WIP)

Partially completed items within a process. Managing WIP prevents bottlenecks and ensures steady workflow.

Zero Defects

A quality management goal aiming for error-free production by emphasizing prevention and continuous improvement.



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Standard Operating Procedure (SOP)

A detailed, step-by-step document outlining how to perform tasks consistently and effectively.

Quick Changeover (SMED)

A method to reduce setup or changeover times in processes, increasing flexibility and productivity.

Fishbone Diagram (Ishikawa)

A visual tool used to identify and categorize potential causes of a problem, aiding in root cause analysis.

Gemba Walks

A practice where managers visit the shop floor to observe processes, engage with workers, and gather insights for improvement.

Huddle Meetings

Short, focused team meetings to review daily goals, address issues, and align on priorities, promoting collaboration and problem-solving.

Future State Mapping

A Value Stream Mapping exercise envisioning an optimized future state of a process, guiding improvement efforts.

Plan for Every Part (PFEP)

A material management tool detailing requirements, storage, and replenishment strategies for every part in production.

Spaghetti Diagram

A visual tool mapping the physical flow of people or materials in a process, highlighting inefficiencies and areas for improvement.

Process Audit

A systematic review of process performance and adherence to standards, identifying gaps and opportunities for refinement.

Takt Work

A Lean practice where tasks are structured to align precisely with Takt Time, ensuring balanced workload and consistent output.

