Process Improvement Glossary

5 Whys	Asking why repeatedly to discover the root cause of a problem.
5S	A system for organizing the workplace to reduce waste and make problems visible. The 5S's: sort (keep only what is essential), set in order (a place for everything and everything in its place), shine (clean and tidy), standardize (systems and procedures to maintain first 3 S's), and sustain.
A3	A standard, one-page description of the problem, hypothesis, and the improvement to be tested. It combines analysis of data and intuition, to present a compelling story in support of strategy deployment. The succinct format supports effective communication and use of data to problem-solve. The name comes from the "A3" size of paper (11"x17") that is used.
Andon	Japanese term for "lantern". Historically, a light system would alert someone of a quality or process problem in the production line. Today, a light may be triggered automatically, or an employee can manually alert the team and leadership of a problem. The intent is to alert the entire team, including leadership, that there is a problem so the team can respond and fix the problem before the workflow is stopped, if at all possible. ("The Machine That Changed the World" points out that there are hundreds of andon calls a day in a Toyota plant, but the line never stops. That is because workers respond to the Andons promptly, and usually are able to correct the problem within the tact time.)
Bottleneck	A step of a process that limits the capacity of a larger process or system. By removing or improving the bottleneck, the process is able to achieve greater results. Also known as a "Constraint."
Catchball	An aspect of Strategy Deployment in which goals and objectives are worked on iteratively between one level of the organization and the next level down to achieve the best possible understanding and description of how each specific goal in the Annual Plan will be described and accomplished. For example, goals are set at a higher level in an organization, while further details are defined by those closer to the work. The higher level provides information to those who report to them, and receives feedback to refine goals and shape implementation. The process continues until there is agreement about strategic intent and the work to achieve it.
Constraint	A point in a process that acts as a limiting factor and prevents a system from achieving goals. There are three primary types of constraints: equipment, people, and policy. Also known as a “Bottleneck”
Continuous Improvement	The organizational imperative for all employees to be perpetually engaged improving all aspects of operations. Yesterday's breakthrough performance is today's standard upon which to base further improvement.
Countermeasure	A planned action that is taken in response to an abnormal condition. The word “countermeasure” is used instead of “solution” because it is recognized that when one problem is eliminated or reduced, other problems become more visible
Current State Process Map	A description of the current flow of work in a value stream. This map is used as the basis of an analysis process that starts with identification of waste and bottlenecks in the process, which will form the basis of the improvement plan.
Customer	Those who receive the output of our work product or service. In areas that do not provide service directly to customers, we use the expectations of stakeholders, authorizers, and regulatory compliance as proxies for the customer requirements.
Cycle Time	The amount of time required to complete a job or a step of a process
Fishbone Diagram	A quality improvement tool used to identify potential factors causing a problem and enabling countermeasures to be developed. Causes are usually grouped into six major categories, including: Machine, Method, Material, People, Management, and Environment.

Future State Process Map	A symbolic representation of a future vision for the value stream created by the team that originally developed the Current State Map and projected the future project in which non-value-added activities have been eliminated.
Gemba	Japanese term for "actual place." "Going to Gemba" refers to the process of going where the work happens in order to discover the true nature of the work.
Gemba Walk	Leaders walk the gemba, or the “the actual place where work happens”, in order to learn about the work, listen to front-line staff, observe execution of improvement activities, and to model Lean Leadership tenets of “Go See. Ask Why. Show Respect”.
Heijunka	Japanese term for "to make flat and level." A heijunka is a tool that allows level loading of work assignments for smooth steady flow.
Inventory	Material and information that have accumulated and are not being used immediately. There are three types. 1. Material supplies (warehouses, etc.) 2. In-process Material and information that have accumulated within a work process. And 3. Finished goods.
Just-Do-It	Straightforward actions that can be taken to realize improvement without need elaborate planning or work. Typical “just-do-its” include low-risk policy changes or low-cost decisions regarding capital investments (facilities changes, IT purchases).
Just-In-Time (JIT)	A system of production that provides what is needed only when it is needed.
Kaizen	Japanese term for "improvement." Literally translated as “to change for the better.” *See also: Kaizen Event*
Kaizen Event	A focused event (usually five days long) targeted at a cross-functional process, with the goal of significant process and/or outcome improvements. Includes representatives of all staff and leaders involved in the process.
Kanban	Japanese term for "visual card," a kanban is a signal that triggers action. It supports the steady flow of work by signaling that an item is needed and in what quantity whereby preventing the build up of inventory (work in process) between steps of a process.
Lean	Lean is not an acronym. It is a term coined by James Womack to describe the philosophy and approach demonstrated in the Toyota Production System. It is a systematic, customer-centric approach to identifying and eliminating waste through continuous improvement.
Leveling	Creating a steady flow of work through the value stream when the work process is uneven.
Mistake-proofing	Design, device, or procedure that prevents defects from occurring. Statement in the original is not true. Mistake-proofing is supposed to keep the defect from occurring in the first place.
Model Line	In a Lean transformation, an organization frequently chooses one part of the business to be the Model Line or "laboratory" for implementing change.
Pareto	A bar graph for ranking opportunities for improvement in descending order.
PDCA	Plan, Do, Check, Adjust cycles of incremental improvement, each building on the last cycle, customer-focused, and data-driven.
Poka Yoke	Japanese term for "mistake-proofing." Pronounced "poke-a-yokay":
Process Map	A visual representation of a process, including descriptions of process steps and roles involved in the process. The process map is useful in identifying waste and making improvement opportunities visible, including attributes like handoffs or checking steps.
Process Walk	Go see a process from start to finish in order to learning about the current state and results of a process before proposing improvements.
Pull	A customer-driven system that produces and moves products only when the customer needs it. Downstream activities signal their needs to upstream activities. Pull systems strive to eliminate overproduction and are one of the three major components of a just-in-time production system, along with takt time and steady flow.
Push	Push systems produce and move products without regard for the actual pace of customer demand. As a result, the amount of work-in-process build and effort may be wasted on unnecessary products or services.
Root Cause Analysis (RCA)	A structured approach to identifying specific factors or actions that result in undesired outcomes. Multiple tools can be used to do the analysis including Five Whys, Failure Modes Effects Analysis, or Pareto Analysis.

Standard Work	A method of doing critical tasks in a process that is documented, consistently followed, and currently believed to be the best way to do the work. Defines the tasks, sequence, and pace to ensure that demand is met on time, quality is consistent, workers are safe, and fewer costs are incurred.
Steady Flow	A process designed to move work in a steady process without batching.
Strategy Deployment (Hoshin Kanri)	One of three management systems that, together, create a comprehensive Lean enterprise. Strategy Deployment starts with setting a vision and associated hard business and broad-brush goals. Leaders engage the organization in cascading communication (catchball) to gather data, refine focus, and learn how to best achieve the goals. The leaders participate in the conversations to clarify the priorities and act as teachers in problem-solving thinking. Staff at all levels are involved in continuous improvement and learning from the data.
Takt Time	The pace of production required by the customer. Calculated by the available working hours in the day divided by the rate of customer demand.
Value Added	A process step for which the customer is willing to pay for the output.
Value Stream	A series of steps to bring a product or service to the customer, from order to delivery.
Value Stream Map	A visual representation of a value stream that includes every step involved in bringing a product or service to the customer from demand to delivery.
Visual Display	An arrangement of tools, parts, and indicators of system performance so that everyone involved can understand the status of the system at a glance.
Visual Management	A strategy for creating and sustaining process stability through the use of visual cues. Ideally, visual management includes standard contingency plans triggered when a visual display indicates that current performance is different that target performance.
Visual Workplace (Visual Controls)	A workplace with standard work established to ensure that the flow of work and process metrics give team members the information they need at a glance, so they know if there are problems and respond with contingency plans as needed.
Waste (Non-Value Added)	No value is added from the customer's perspective. There are seven categories of waste: overproduction, waiting, transportation, overprocessing, inventory, motion, defects. Also known by the Japanese term "muda." See also: Contrasting concept: Value Added
Work Cell	Designed to support continuous steady flow by arranging processing steps sequentially and adjacent to each other.
Work In Process (WIP)	Products in various stages of completion within a process.