Lean is...

A way of thinking and a methodology focused on customer value by continuously eliminating waste in the process.
Some key words...

**Customer**: Any person who receives goods, services, or information

**Value**: Things or actions the customer is willing to “pay” for

**Waste**: Any activity that takes up time, resources, or space but does not add value to a process
The Eight Wastes

D  O  W  N

T  I  M  E
A3 – Problem Solving

Used when you recognize an issue but aren’t sure what the root cause is or how to fix it
Problem Statements clearly outline what problem is occurring and why it matters.
Problem Statement Examples

PROBLEM is happening to WHO causing IMPACT

“The wait times of over 30 minutes are leading patients to leave lower patient satisfaction scores”
Problem Statement Examples

WHO is affected by PROBLEM causing IMPACT

“Staff are trained inconsistently causing notable variation in their work.”
State the Initial Problem

- What is the problem?
- Who does it affect?
- What is the impact?

**Problem Statement:** I’m not leaving early enough in the morning causing me to arrive late to work.
Lagging Metrics

A lagging metric describes the results of a process and can tell us if there is a problem within that process.
Lagging Metrics

- Sometimes difficult to understand
- Are the result of many different activities
- Give us a general understanding of performance
Choose a Lagging Metric

**Problem Statement:** I’m not leaving early enough in the morning causing me to arrive late to work.
A3 – Problem Solving

Used when you recognize an issue but aren’t sure what the root cause is or how to fix it.
Examine Types of Potential Causes

The Cause and Effect Diagram is a brainstorming tool that forces us to consider many potential causes.
Complete Your Own C&E Diagram

Problem: Arriving late to work

- Method
  - Staff
- Environment
  - Supplies

Effect
Cause & Effect Diagram Categories

Method:
Causes involving how an action is performed, variation, and best practice vs reality (e.g. no standard processes, different shift standards, etc.)

Environment:
Causes involving whether the environment is conducive or restrictive to optimal outcomes (e.g. unclear job roles, counterproductive policy, room humidity, etc.)

Staff:
Causes involving whether there are enough staff and whether those staff have the skills or knowledge to complete the task successfully (e.g. understaffed, staff untrained on new process, etc.)

Supplies:
Causes involving not having enough equipment or supplies, not having the right equipment or supplies, or not having equipment or supplies that are simple to use and maintain (e.g. excessive clean times, under/incorrectly stocked patient rooms, etc.)
Complete Your Own C&E Diagram

Problem: Arriving late to work

Method
- Leaving at a bad time
- Not customizing my route
- Sometimes forget to check map app

Environment
- Nashville has bad traffic
- Job requires 8-5, in-person

Staff
- Only one person to do morning tasks
- I’m the only one who does my job

Effect
- Don’t own any other ways to get to work
- Phone app sometimes misses slowdowns

Supplies
By asking “why” questions, five times, we dig to the root cause of a problem.
5 Why

Problem: I’m leaving for work at a bad time

- **Why** am I leaving for work at a bad time?
  - ✓ I’m getting delayed from leaving.

- **Why** am I getting delayed?
  - ✓ ???

- **Why**
  - ✓ ???

- **Why**
  - ✓ ???

- **Why**
  - ✓ ???
**Problem:** I’m leaving for work at a bad time

- **Why am I leaving for work at a bad time?**
  - I’m getting delayed from leaving.

- **Why am I getting delayed?**
  - The dog (Buddy) won’t go out.

- **Why won’t the dog go out?**
  - He doesn’t like going out in the yard in the morning.

- **Why won’t he go out in the yard in the morning?**
  - The grass is wet.

- **Why is the grass wet?**
  - Sometimes I turn on the sprinkler before I let Buddy out.
Some tools to eliminate waste
5S - Organize
A systematic way of organizing objects in which everything has a place, is in its place, and is immediately useable

- Sort
- Shine
- Set (in order)
- Standardize
- Sustain
Standard Work

An established flow of best-practice steps to complete a task that are standardized across the organization.
Visual Management

A Lean technique in which information is communicated quickly using simple visual signals

• Process Instructions
• Status Information
• Directions
• In/Correct Locations
• Reminders
• Quick Identification
Once you’ve established what the problem is, you can begin to solve it.
Lean increases efficiency and value by...

- Focusing on the customer’s needs
- Identifying and eliminating waste
- Optimizing resources
- Standardizing best practices
- Discovering root causes
- Getting everyone involved
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