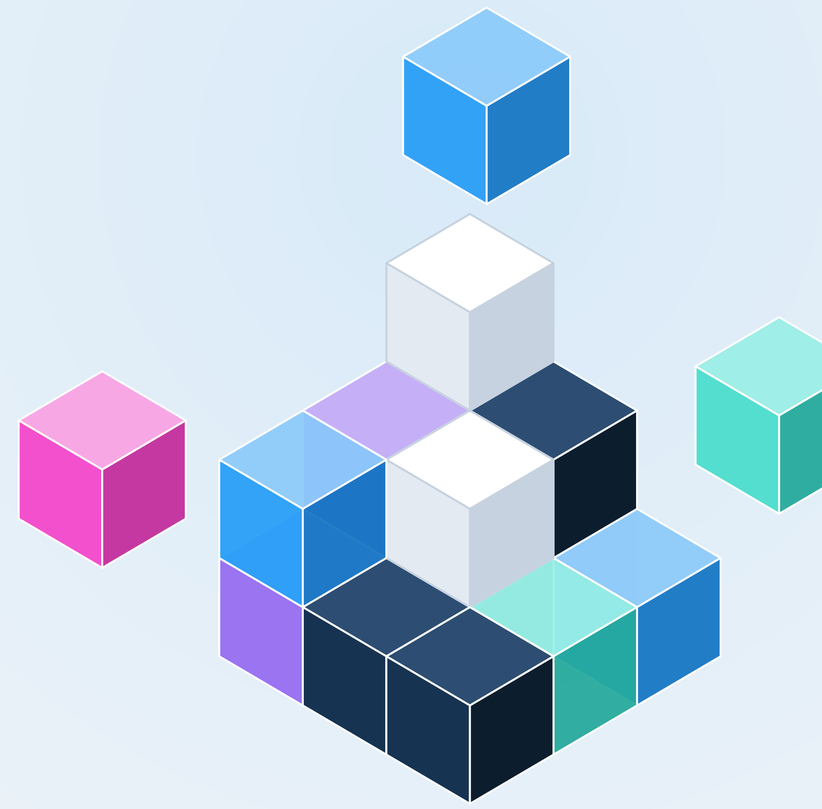
LEAN FOUNDATIONS

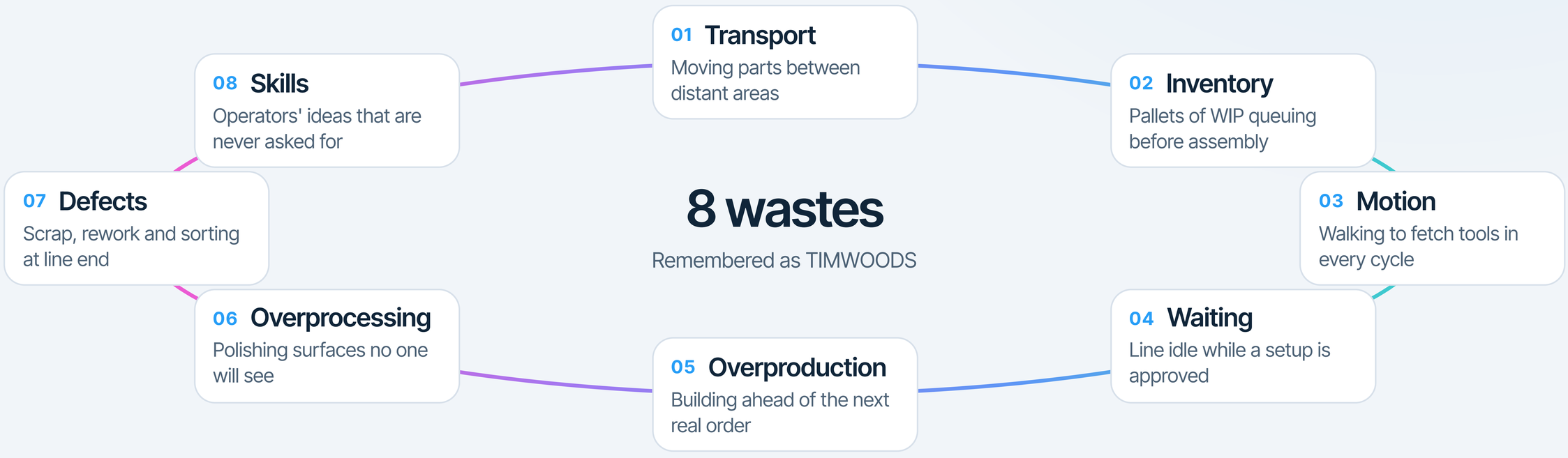
The 8 Wastes of Lean

Waste (muda) is any activity that uses time, space or resources without adding value the customer is willing to pay for. Lean groups it into eight types that appear in every process.



01 THE CORE MODEL

TIMWOODS · EIGHT FORMS OF WASTE



Value

What the customer pays for: a change in form, fit or function, done right first time.

Waste (muda)

Any activity that consumes time or resources without adding that value.

Overproduction

Often called the worst waste, because it creates most of the other seven.

02 SEEING WASTE

Most waste is accepted routine, so it must be looked for on purpose.

VISIBLE — HIDDEN

EASY TO SPOT

- Defects, scrap and rework in the quality report
- Waiting when a machine stands still
- Overflowing stock at a workstation

EASY TO MISS

- Walking and searching built into the routine
- Extra approval loops in office processes
- Unused skills and ideas of the team

03 WORKED EXAMPLE

GEARBOX ASSEMBLY CELL · ONE OBSERVATION WALK

OBSERVATION	WASTE TYPE	COUNTERMEASURE	RESULT
Walk to parts rack repeated in every cycle	Motion plus waiting at the rack	Point-of-use kit parts kitted at the station	Walk removed shorter, steadier cycle

04 MANAGEMENT TAKEAWAYS

01 — Start with overproduction

Build only to a demand signal; it shrinks inventory, waiting and transport.

02 — Go and see at the gemba

Waste is found by observing the work, not by reading reports.

03 — Blame the system, not people

Ask why the process makes the waste necessary, then change the process.

05 COMMON MISTAKE

LIMITATION

Cutting people instead of waste

Removing waste frees capacity. Turning that capacity into layoffs kills the ideas that would find the next waste.