The Eight Wastes of Lean (TIMWOODS)

In Lean thinking, waste is any activity that uses time, money or effort but adds no value for the customer. Taiichi Ohno, the engineer behind the Toyota Production System, described seven types of waste in factory work. Later, Lean practitioners in the West added an eighth one: unused skills and talent. The first letters of all eight form the word TIMWOODS: Transport, Inventory, Motion, Waiting, Overproduction, Over-processing, Defects and Skills. Once we learn to see these wastes, we can remove them from any process, in a factory or in an office.

1. Transport and Inventory

Transport is moving materials, products or information from place to place when the move adds no value. Every extra move costs time and creates a risk of damage or loss. Inventory is keeping more materials, stock or unfinished work than we need right now. Extra stock ties up money and space, and it can hide problems in the process. Both wastes grow quietly, so we have to look for them on purpose.

Example: A family buys rice in bulk every month, although the cupboard is already full. Seen as inventory waste, the extra bags tie up money, and some go past their date. The family now buys only what fits on one shelf, and nothing is thrown away.

At work: Hamdi, who leads the order team in a spare-parts company, follows one order through the warehouse. He spots transport waste: each box crosses the building three times between packing and the loading door. The team moves the packing table next to the door, and the boxes now travel only once.

2. Motion and Waiting

Motion is unnecessary movement by people, such as walking, reaching, bending or searching. Transport moves things, while motion moves people. Waiting is time when people, machines or work stand still because the next step is not ready. Waiting often hides behind approvals, missing information or slow equipment. Both wastes tire people and slow the work without adding any value.

Example: A cook keeps the salt, the oil and the pans in three different corners of the kitchen. Seen as motion waste, every meal means dozens of extra steps. With everything within arm's reach, cooking becomes faster and calmer.

At work: In Hamdi's team, each order waits a full day for a manager's signature, even for small amounts. The team names this waiting waste. Now team leaders approve orders below a set limit, and the day of waiting disappears.

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3. Overproduction and Over-processing

Overproduction means making more, or making it earlier, than the customer needs. Ohno saw it as the worst waste, because it creates many of the others, such as extra stock and extra transport. Over-processing means doing more work than the customer values, such as extra checks, extra steps or extra polish. Both wastes feel like hard work, so they are easy to miss. A simple question helps: would the customer pay for this?

Example: A bakery bakes two hundred loaves every morning but sells only about one hundred and fifty. Seen as overproduction waste, fifty loaves are thrown away each evening. The bakery now bakes to its sales record, and the waste stops.

At work: Hamdi finds over-processing waste in the daily order report. The staff type every order into two separate systems, although nobody reads the second one. The team stops the double entry and saves an hour every day.

4. Defects and Skills

Defects are errors that need rework, repair or replacement, or that reach the customer. Each defect also wastes the time and materials of every step before it. Skills, the eighth waste, means not using people's knowledge, ideas and talent. When people are only told what to do, their best ideas are lost. Often, the people who do the work know best how to improve it.

Example: A tailor cuts a shirt without measuring twice, and the sleeves come out too short. Seen as defect waste, both the cloth and the hours are lost. Measuring twice before cutting prevents the defect next time.

At work: Hamdi asks the packers about skills waste: which of their ideas has nobody ever asked for? One packer, who once worked in a shop, suggests coloured labels for the busiest parts. Picking errors fall, and the team now collects ideas every week.

Conclusion

In summary, TIMWOODS names the eight wastes of Lean: Transport, Inventory, Motion, Waiting, Overproduction, Over-processing, Defects and Skills. The aim is not to make people work faster, but to remove the work that adds no value. We start by walking through a real process and asking, at every step, which waste we can see. Small changes, made together with the people who do the work, add up to faster, calmer and better work.

Sources

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