

What is Lean Thinking?



Specify Value

As Womack and Jones note in *Lean Thinking*,

"The critical starting point for lean thinking is value. Value can only be defined by the ultimate customer. And it's only meaningful when expressed in terms of a specific product (a good or a service, and often both at once), which meets the customer's needs at a specific price at a specific time."

Above all, lean practitioners must be relentlessly focused on the customer when specifying and creating value. Neither shareholder needs, nor senior management's financial mind-set, nor political exigencies, nor any other consideration should distract from this critical first step in lean thinking. Once more, here's another passage from Womack and Jones on how managers can start off on the wrong path:

"Why is it so hard to start at the right place, to correctly define value?

Partly because most producers want to make what they are already making and partly because many customers only know how to ask for some variant of what they are already getting. They simply start in the wrong place and end up at the wrong destination. Then, when providers or customers do decide to rethink value, they often fall back on simply formulas (lower cost, increased product variety through customization, instant delivery) rather than jointly analyzing value and challenging old definitions to see what's really needed."



Identify the Value Stream

The value stream is the set of all the specific actions required to bring a specific product through the critical management tasks of any business: the problem-solving task running from concept through detailed design and engineering to production launch, the information management task running from order-taking through detailed scheduling to delivery, and the physical transformation task proceeding from raw materials to a finished product in the hands of the customer. Identifying the entire value stream for each product is the next step in lean thinking, a step which firms have rarely attempted but which almost always exposes enormous, indeed staggering, amounts of waste.

In order to get started mapping your own value streams, LEI recommends that you read and use the *Learning to See workbook*. Additionally, the library section for this tool contains a wealth of further material about this critical principle.



Flow

Only after specifying value and mapping the stream can lean thinkers implement the third principle of making the remaining, value-creating steps flow. Such a shift often requires a fundamental shift in thinking for everyone involved, as functions and departments that once served as the categories for organizing work must give way to specific products; and a "batch and queue" production mentality must get used to small lots produced in continuous flow. Interesting, "flow" production was an even more valuable innovation of Henry Ford's than his better-known "mass" production model.

Lean managers eager to implement flow in their organizations can learn more about the topic in the books [Creating Continuous Flow](#) and [Making Materials Flow](#), and they can use these workbooks as an excellent starting point when implementing this principle.



Customer Pull

As a result of the first three principles, lean enterprises can now make a revolutionary shift: instead of scheduling production to operate by a sales forecast, they can now simply make what the customer tells them to make. As Womack and Jones state, "You can let the customer pull the product from you as needed rather than pushing products, often unwanted, onto the customer." In other words, no one upstream function or department should produce a good or service until the customer downstream asks for it.

Of course following this principle is a bit more complicated than that. A good place to start with implementation is the LEI workbook [Creating Level Pull](#), which also has an excellent Library section with many resources to help with this principle.



Pursue Perfection

After having implemented the prior lean principles, it "dawns on those involved that there is no end to the process of reducing effort, time, space, cost, and mistakes while offering a product which is ever more nearly what the customer actually wants," write Womack and Jones. "Suddenly perfection, the fifth and final principle, doesn't seem like a crazy idea."