



# Book Lean Thinking

## Banish Waste and Create Wealth in Your Corporation

James P. Womack and Daniel T. Jones  
Simon & Schuster, 1996

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### Recommendation

James P. Womack and Daniel T. Jones sound a battle cry against institutional waste. What a pity, they say, that so much time, energy, and money are needlessly thrown away. They urge executives to redefine their values based on customer experiences and to track the flow of value from manufacturing to final sale. The result, they promise, is that companies will save time, energy and money - and will revolutionize their entire organizations in the bargain. Not content to simply study western problem-solving methods, the worldly authors guide their readers through a wide array of Japanese manufacturing wisdom as well. Their generosity and depth make this a pleasantly informative book, which defies the current trend in business books of proclaiming doom and then offering a quick fix. This book would rather proclaim hope, which is just one of the reasons that *BooksInShort* recommends it to serious managers who want to trim the fat.

### Take-Aways

- Waste is a scourge upon the face of most organizations.
- Eliminating waste in your organization is just like eliminating fat in your diet - important and critical to healthy living.
- Value is what your customer says it is.
- Your product travels a long way - make sure the way is paved.
- Transparency between firms that work together should not be viewed as a bonus - it should be viewed as a rule.
- Honor your product above your organization.
- Customers won't choose against you if you let them design their own product.
- Benchmark perfection.
- If you want to get lean, you might have to get a little mean.
- Everyone from your customer to your supplier to your CEO will benefit from lean thinking.

# Summary

## A Tragedy of Waste

A.C. Bradley, a great Shakespearean scholar, defined tragedy with just one word: waste. The thing that bums us about Hamlet, Romeo and Juliet, then, is simple. They had such tremendous potential. You can learn a lot from Bradley's definition. First, it gets right to the point - the first characteristic of a man who knows what he's talking about. And of course, it provides a fundamental insight into the nature of tragedy.

“Most senior managers are rewarded on the basis of how well their firm does, and specifically by how much money it makes. Note that no one is looking out, first and foremost, for the performance of the whole value stream, the only issue of relevance to the customer.”

In Japanese, the word for "waste" is "muda." Interestingly enough, muda carries a handful of business connotations. It points to human activity that burns resources without leading to any substantial value, mistakes that require someone to expend energy to fix, huge inventories that build up when supply outpaces demand, redundant or unnecessary processing steps and people waiting around for parts to finish their jobs.

“The definition of value is skewed everywhere by the power of preexisting organizations, technologies and un-depreciated assets, along with outdated thinking about economies of scale.”

Waste covers all the things that happen, but shouldn't happen, in your organization: all the activities that unnecessarily spend time, money, and energy, and ruin potential. And that's a tragedy.

Do you value your resources? Do you value your time? If so, lean thinking about business will help you do more with less. You can magically transform all that muda into value for your organization and your customers.

“‘Pull,’ in simplest terms, means that no one upstream should produce goods or services until the customer downstream asks for it.”

Certainly you wouldn't pass up the chance to double your labor productivity, to cut your production time, to eliminate the number of errors that reach your customers, and to move your ideas more quickly from brainstorm to product. Certainly you're ready for lean thinking. The following five principles will help you shave the fat off your organization's thinking.

### Principle One: Specify Value

If you want to help your customers, think like them. What's valuable to them? Their money, their time and the quality of the product or service that they receive. For them, value is not something on a chart. It's not abstract. This can't be stressed enough - for the customer, value is a concrete reality. Your job is to create this reality, every day, again and again.

“An excellent spot for observing the value stream is the aisle of the supermarket, for it is here that a thousand streams empty into the arms of the customer.”

What's valuable to your shareholders or senior managers may not be what's valuable to your customers. But, in the long run, whatever makes customers happiest will also make your shareholders and managers happiest. Forget the product you know, the product you've always made. Forget the strengths and roles of your tech experts. Please forget the bells and whistles. Go back to square one. Walk arm in arm with customers to create the kind of value that suits their interests. Once you've redefined value, you're ready to jump into the value stream.

### Principle Two: Discover the Value Stream

You have a very important assignment. Think of yourself as a geographer in an unexplored rainforest. You've got to locate and identify the main source of water. You will meet many strange, wild and potentially dangerous creatures along the way. That's right, you're going to have to set foot in your own store. You're going to have to observe your producers, your truck drivers, your low-

level managers and even your customers. Be careful.

“Lean thinking must start with a conscious attempt to precisely define value in terms of specific products with specific capabilities offered at specific prices through a dialogue with specific customers.”

But don't be afraid to get your hands dirty. The value stream is the entire trip your product takes from concept to design to launch; from product orders to scheduling to delivery; from raw material to finished product. Learn the hundreds of points of activity in every value stream. What points are unnecessary? What points could be eliminated to make the stream flow more quickly, more efficiently, or more forcefully toward its source?

“To hell with your competitors; compete against perfection by identifying all activities that are muda and eliminating them.”

The ultimate goal of discovering your value stream is the creation of a lean enterprise. Most likely, many firms contribute to your final product or service. They probably talk with you as little as necessary. This must change. In a lean enterprise, every firm in the value stream should communicate openly and honestly with every other firm. The key to this is transparency and common purpose. Firms simply can't keep things from each other. They have to adopt lean thinking principles and do what it takes to cut out their share of muda.

### **Principle Three: Create Flow**

Okay, you have redefined what you mean by value, and you have figured out the geography of your value stream. Now call your own bluff. If you're not really committed to lean thinking, this step will expose you. Why? Because it is difficult and it contradicts several traditional business methods, particularly the batch-and-queue method.

“Perfection is like infinity. Trying to envision it (and to get there) is actually impossible, but the effort to do so provides inspiration and direction essential to making progress along the path.”

You can make a product two ways. You can split all the steps of the building process into departments. Then, some departments will produce parts and others will assemble them. Different departments will manage the building process and the putting-together process until a product is sealed, stamped, and delivered. The alternative to departmentalized production is working continuously on one product at a time, from start to finish, and then going back and working on the next product. This approach has flow. It honors the product more than the organization.

“The change agent is typically something of a tyrant, hell-bent on imposing a profoundly egalitarian system in profoundly inegalitarian organizations.”

Imagine you wake up one morning with an earache. You take the time to make an appointment with a doctor. Then, you take the time to show up 15 minutes early for your appointment. Your doctor looks into your ear 50 minutes later for a grand total of 30 seconds. Of course, there's nothing he can do. Your problem calls for an Ear, Nose, and Throat specialist. So you set up an appointment, again taking time out of your schedule. Again you show up early. And again you have to wait. When the doctor finally sees you, he scoops some wax out of your ear and sends you on your way. Your problem is solved, but not without a huge amount of hassle. If your doctor concentrated more on his flow of patients, this never would have happened.

“When you convert a pure batch-and-queue activity to lean techniques you can eventually reduce human effort by three quarters with little or no capital investment.”

To improve the flow in your organization you might have to shake it up. This might break its heart, but your organization, its departments, and its hierarchies must step off the pedestal to make room for your product or service. Once it's up there, you've got to watch your product like a hawk. Its every step has to be cushioned. Nothing - no job, no seniority, no company rule - can stand in its way. It has an appointment with each individual customer.

“One of the critical features of lean techniques is immediate feedback.”

The flow approach will help employees. They no longer have to perform the soul-numbing job of making and shipping parts that

don't seem to count much in the real world. When they are involved in flow, they will be fundamentally connected to the finished product. They will see exactly how they contribute. They will know right away if they did a good or a bad job - and this will motivate them to make the product's trip as smooth as possible.

## **Principle Four: Use Your Pull**

As your organization begins to master the technique of flow, an interesting opportunity will arise. When you cut the crap out of your processes, you'll be producing products more quickly than you could have imagined. This gives you the chance to make the customer a fundamental part of the process. If you're focusing on one product at a time, you can tailor the process along the way. If your customer wants an orange bike instead of a blue one, all you've got to do is slightly modify the flow of that order. If your employees are capably adapting to flow techniques, they'll have no problem with the concept of customer pull.

Customer pull has unbelievable bonuses. You won't have to worry about your sales forecast - instead, you'll be making whatever is needed whenever it is needed. You won't have to worry about your customers' finicky habits. When they know they can pull whatever they desire from your organization at their own convenience, they won't change their minds about you. Give customers what they want and you eliminate their dangerous propensity to choose.

## **Principle Five: Approach Perfection**

Once you get all these principles rolling, you're no longer competing with other organizations, you're competing with yourself. How fast can you move your products? How many diverse customers can you serve? How lean can you be? Lean thinking allows you to court that unrivalled beauty, perfection, because it is a perpetually self-improving system.

As you become better at listening to your customers, they become better at talking. In turn, the pull on your organization becomes stronger. This calls for a swifter flow, a stronger value stream. What looked like it was working one day will be revealed as muda the next. There's no telling how tight this whole process can become.

## **A Plan of Action**

If these principles excite you and seem to make more sense than the principles your organization abides by now, you're ready for action. So, you'll need a plan. Approach lean thinking with vigor, but don't get out of control. These steps will help you:

### **1. Do Your Homework**

Like any other long-range project, you want to do as much prep work as possible. If you wanted to write a book, you'd probably want to do all your research before you wrote a single word. That way, when you sat down to write, your book would write itself. The same goes for changing your organization into a lean enterprise. First, you'll need a change agent to lead the charge. This person should have a firm grasp of the changes and philosophy you're trying to implement. Giving this person the knowledge needed for the job is the second step. Consultants can help.

Next, you need a crisis point at which to launch your operation. If you can save a unit that's in trouble by applying lean thinking, you'll prove the value of lean thinking at the same time that you introduce its methods. You don't need strategy. You simply need to discover your value stream and take immediate action. Then, you need to demand results. Making a lean enterprise isn't a passive process. Once you've got results, expand, expand, expand. Apply lean thinking to every point in the value stream.

### **2. Change Your Organization**

Once you see some results from lean thinking, shuffle your organization. First, organize your firm based on product families. Remember that the value has to flow. Point your streams directly at your customers and eliminate wasted moments. This process, unfortunately, will expose a lot of unnecessary jobs. Cut them right away. (Don't worry, better jobs will come from lean thinking.) Get down to the level you need to be at, and then assure the rest of your workers that their jobs are safe. Don't stop at one small improvement. After you've made part of your organization lean, insist that your employees make it even leaner. You've got to be tenacious on this front.

### 3. Make Leanness Systematic

Teach all your employees to think lean. Make your tools lean. Bring in outside help, if you must, for this step. To work effectively, leanness has to be built into the very fiber of your organization. Keep things transparent. Everybody, and every firm, associated with your product must keep an eye on everybody else. You're only as lean as your least lean employee or firm.

### 4. Finish the Process

Once you've made your organization lean, get to work on your suppliers and your customers. Have your own lean promotion team to help people understand the benefits of the process. Your suppliers will be happy to hear that leanness will help them cut costs, and they'll be extra happy to hear that they won't necessarily have to charge less for their products. People will still expect to pay the same price they have always paid. Your customers, in turn, will realize that they can be a part of the manufacturing process that directly serves them.

## About the Authors

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