



Which Way Do We **LEAN**?

What is LEAN?

There are many techniques that today are called Lean, from kaizen to Kanban, heijunka boxes to poke-yoke, not to mention programs like TQM and Six Sigma. What are they about? Which is right for us? What will fix our problems?

James Womack and his staff coined the term “Lean” in his book, The Machine that Changed the World: The Story of Lean Production. As he describes the concept, all Lean Production has two attributes:

- There is a process for quickly identifying and resolving product problems
- Decision-making is driven as far down to the workers as possible

This provides a great deal of latitude in designing any Lean improvement program.

Designing the Journey to Lean

First, any organization starting its journey to Lean needs to determine what kind of work it actually does. If the product is fairly standard with high volumes and stable demand then those tools that were developed primarily by Toyota for the auto industry such as Just-In-Time can be used. One feature of these techniques is the attempt to smooth out demand and create a steady flow of production to a “takt” time.

But a growing number of companies are finding that they must do more and more custom work, or modification of standards, in shorter and shorter periods of time. In these cases, they simply cannot control demand and will never see a steady flow of production. Companies that are doing customization, make-to-order, or engineer-to-order products with low volume and a high degree of variability are finding that they need to enhance the typical Lean program to attain the results they desire.

Using Enhanced Lean Tools

In fact, some companies can find lasting and profitable improvement only through focusing on reduction in the total lead time as seen by their customers. Reducing the speed of all the processes through the entire Customer Chain is the key to reducing those times. This requires understanding the queue times in each link of the chain, not just the “touch times”. Typical Lean Tools will attempt to smooth demand, set fixed production times, and set schedules weeks in advance. Using Enhanced Lean tools to reduce the total lead time can help a company that has variable demand for a wide array of customized or modified products.

There are many companies today that have made the very comments that began this the paper. Some of them will blame their Lean Team and never understand that their business requires a different approach. But companies with low volumes and high

variety products that understand and improve their Customer Chain will reach their goal to reduce lead times, obtain more repeat orders, reduce inventory, and attain lasting profitability growth.