

Chatou, September 15, 2004



THE LEAN GRAB-BAG

"Are you doing Lean in your company? ", is my question to companies that I meet.

Typical answers:

"You bet. We've created production cells. "

"Yes. We've transferred our inventory back to our suppliers. "

"Absolutely. We're implementing 5S. "

"We've been doing it for years without knowing it."

All of these applications are only partial. At best, they're doomed to vegetate; at worst, to disappear. Instead of profiting from the logical structure of Lean Production, companies reach into the Lean grab-bag. Quick Changeover, Kanban or Malted Milk Balls, you never know what's going to come out.

However, Lean offers a sequential structure for implementation:

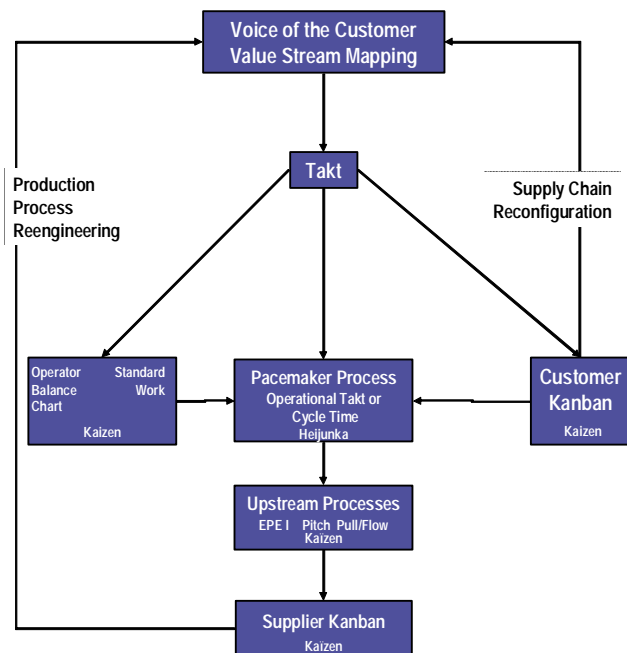
- Listen to the Voice of the Customer to select what value stream to map
- Calculate the takt of customer demand in the ideal flow

The takt opens up three parallel branches:

- Create the « Pacemaker Process » with its attributes Cycle Time, EPE Interval, Pitch, Heijunka Box, and Standard Work
- Balance operations to verify the capacity of the equipment and of the operators to meet Cycle Time

Create Customer Kanban loops to acquire detailed demand. Finally, create Supplier Kanban loops both internally for production and externally for suppliers, and create the feedback loops to improve production and supply chain processes.

ACCELERATION (with Lean)



Associated with the **Acceleration** functions shown above, are corresponding ones for **Anticipation**.

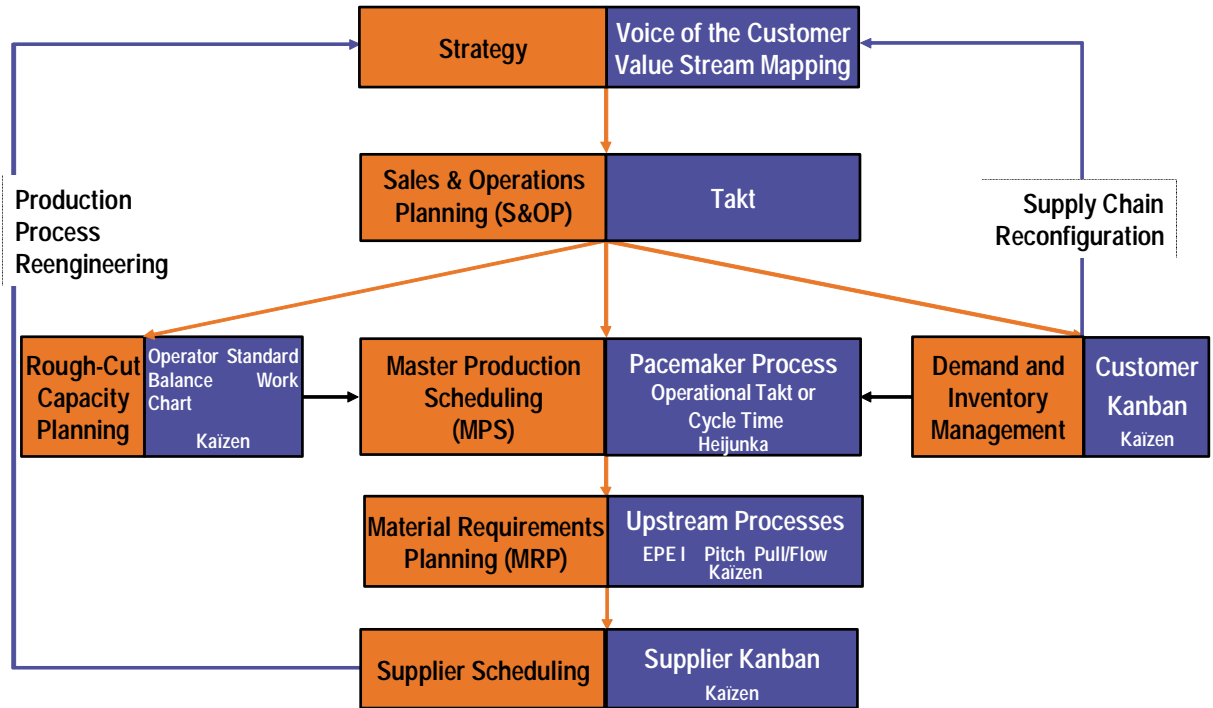
First, the choice of the customer value stream to map depends on the company's Strategic Plan. The takt is a subproduct of Sales and Operations Planning (S&OP).

The Pacemaker Process on the Acceleration side corresponds to the Master Production Schedule on the Anticipation side. Operation Balancing is supported by Rough-Cut Capacity Planning. The Customer Kanbans are associated with Demand Management.

Finally, Supplier Kanbans both internally and externally are the production or delivery authorizations which confirm the rates planned by Material Requirements Planning and the Supplier Schedule.

When these twin functions are shown side by side, we obtain a New Integrated Road Map:

HIGH VELOCITY MANUFACTURING AND SUPPLY CHAIN MANAGEMENT
ANTICIPATION (with MRP II) ACCELERATION (with Lean)



The complementarity between the functional flow of Lean Production for accelerating product flows and the functional flow of Manufacturing Resource Planning for anticipating product flows, is striking. Each of the two road maps is valid as a stand-alone. But it is when they are used together that they bring the most to a company in terms of waste reduction and cost reduction, shorter lead times, customer service improvement and productivity gains.

Forget the grab-bag. It's your competitors who will get the surprise!

