Technical Newsletter No. 21

July 15, 2004

THE TWO ROAD MAPS

The typical company that I visit has lots of « Action Plans » in place. Under pressure to show results rapidly in many areas, a small company will have a dozen of these plans. "Everything is high-priority", said one Top Manager. One large multinational had... 45! What chances do you think that company has of getting all these Action Plans done, or even the most important ones? Slim, and none!

Nevertheless, two road maps exist to avoid the trap of an excessive number of Action Plans and for increasing the probability of success of each of them:

- for *Anticipating and planning the demand flow and the procurement flow*, the road map is the MRP II flow chart.
- for *Accelerating physical and information flows*, the road map is the value stream map of Lean Production.

ANTICIPATION ACCELERATION FUTURE VALUE STREAM MAP MANUFACTURING RESOURCE PLANNING (MRP II) Îlot Cadenceur охох ROUGH-CUT DEMAND Ilôt Câblage PRODUCTION SCHEDULING CAPACITY Usinage- Marquage MANAGEMENT 00 - FIFO -MATERIAL REQUIREMENTS PLANNING

So many companies have tested, utilized and perfected these two road maps, that their durability is proven. You can't go wrong in using them.

However, many companies and software houses ignore them or modify them at will. But all airplanes that fly look like each other because of the laws of aerodynamics, and all management systems which generate real-life results have the same structure. Are we going to reduce by half the wings of a new plane or give it a rudder on its nose? That's exactly what happens when someone reinvents, consciously or not, the two road maps shown above.

The most common deviations that I run into are:

- (1) *A Sales and Operating Plan which contains only demand,* and which leaves the validation of capacity to the Master Production Schedule alone. Overbooking is guaranteed!
- (2) The lack of a feedback loops on the dates in the Master Production Schedule, in Requirements Planning or in the Supplier Schedule, which results in dates' piling up in the past-due. And yet, the MPS is supposed to set the production rate for the Pacemaker Process in the new Lean flow to level load.



(3) *Just creating production cells*, without basing their future required production flow on the takt time (the interval between two demands of a product made by the cell). That's similar to cleaning airplanes quicker, hoping that that will reduce lateness in departure times, rather than calculating the rate of cleanings on the rhythm of the departure schedule.



Profiting from the full potential of Lean Production won't happen if there are 45 unrelated road maps called Action Plans. Productivity losses are inevitable from working on everything at once. Action Plans are fine, but they should be attached to a header in either the Lean or the MRP II road map.

In a subsequent Newsletter, we'll talk about a single road map integrating both Lean and MRP II.

