

ABSTRACT

Based on a particular case study, this paper presents results from the application of postponement strategy in the manufacturing and purchasing area on one business to manage low volume high mix under demand uncertainty and seasonal pattern. The aim of this research is to use this strategy to help improve order fulfillment lead time and labor cost.

The concept of postponement, as applied to manufacturing, retains the product in a neutral and non-committed status as long as possible in the manufacturing process. Because the inventory is generic, its flexibility is greater, meaning that the same components, modules or platforms can be embodied in a variety of end products. Thus, postponement is one of the most beneficial strategic mechanisms to manage the risks associated with product variety and uncertain sales.

The basic approach is analyses current products and processes to find the commonality in the processes and explore the level of material. By aggregate demand of the semi assembly commonality and pre build in the time that production has excess or idle capacity.

The project starts with setting up a project model between As-Is and To-Be when using the postponement strategy. The result from this implementation is the average order fulfillment lead times is reduced by 12.7%, and labor utilization results is lower labor cost spending.