

## Less Inventory = Better Service

By: Jerry C. Hahn

Can you have lower inventory and improve your service levels? Sounds like an oxymoron doesn't it? How can you risk having less inventory given the unpredictability of customer demand and emergency orders every day? You know from experience you too often are short some items and, if you aren't, they may be in the wrong place, where it can't do you or your customer any good. Then, you have the problem of not having the right stuff that the customer wants. It could be the wrong size, color, style. When you don't have the right inventory in the right place at the right time, you are caught short. You are losing sales. Customers that don't find what they are looking for they go elsewhere. Not only do you losing the sale, you risk losing a customer.

The answer is not having more or less inventory on the shelf. The issue is having the right inventory on the shelf, when you or your customer need it. That is the real challenge, avoiding running out of an item you been asked to provide or have it in the works but it's not here yet. The important thing is to have it where it needs to be. Too often the natural reaction is to order more – as many products as you feel is safe – to ensure you have the right level and types of products available. Too often forecasting is used to predict what your customers will use. Forecasting systems may provide an effective tool to look at the trends in the overall demand but they don't provide precise enough predictions of what specific inventory is needed at a specific point of use location.

Demand can vary widely from one geographic location to another. There are time lags between changes in end-user requirements and the supply chain's reaction. All of these factors make predicting demand for any product at the retail level a major challenge. There is however an answer to this dilemma. Service levels can be improved without more inventory, by breaking away from sophisticated forecasting and ERP systems into a much simpler solution.

In order to address your requirements IDEA brings the answers to two critical questions:

1. Where are the ideal places to hold inventory?
2. What are the correct logistics to replenish the inventory between raw material suppliers, manufacturers, distributors, distribution centers and retailers?

### Where

IDEA suggests biasing inventory held to locations where the predictability of demand is greater. Of course, consumption at the point of use can vary wildly. Nothing may be consumed for ten days then, in one day, demand is ten times the average. However, if you add up the consumption at the 200 stores fed by one regional Distribution center (RDC), such wild fluctuations largely offset each other. The variability of demand is less at

aggregation points – the greater the aggregation the smaller the variability of demand. Lower variability means that safety stocks can be proportionally smaller. (See Figure 1 below.) The overall effects are two: much shorter lead times to downstream points and significantly reduced inventories across the supply chain.

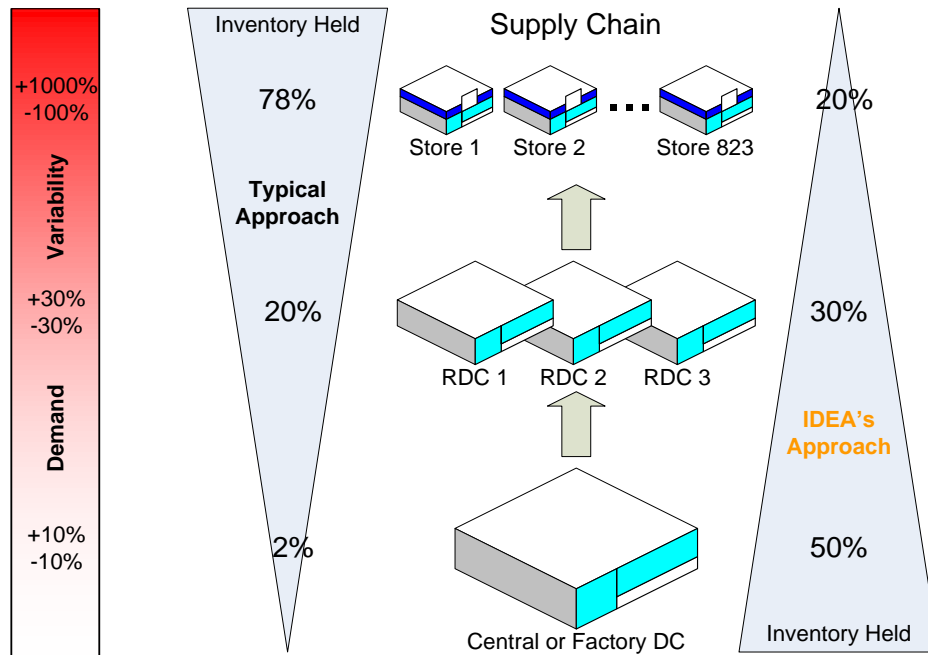


Figure 1

### What

To answer the second question above, the proper replenishment model is a pull system. Inventory buffers at every location are sized and resized over time so as not to stock out, in case of heavy demand and delayed re-supply<sup>1</sup>. Using the dependable availability of goods from the RDCs and the central DC, individual items are replenished frequently based on what was sold during a short period. (See Figure 2 below.)

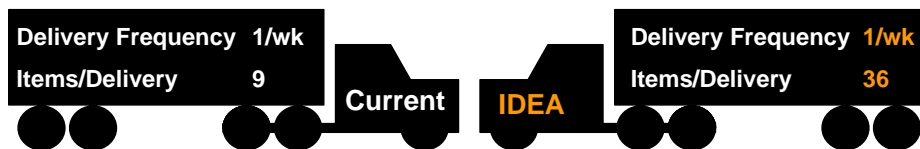


Figure 2

Together, holding inventory in the correct places and enhancing the flow of goods by having more items in each replenishment delivery means extraordinary availability which boosts sales and customer satisfaction. Moreover, frequent replenishment of each item, naturally results in lower overall inventories which reduce operating expenses and produce a lot of cash.

<sup>1</sup> Burch, David J., *How IDEA Buffer Management Works* explains both how to set ordering targets and how to manage those targets over time, in spite of the changes that inevitably occur which effect the needed inventory levels required to protect availability without holding too much working capital in inventory. The article can be found at [www.IDEAllc.com](http://www.IDEAllc.com).

## Conclusion

This article summarizes a breakthrough approach to business for all companies that hold physical products. We hope you can use these ideas to better your business. If you want help, we can assist. Our seven step implementation process models a customized solution that fits your requirements, quickly getting lasting results. We effectively guarantee our services since over 80% of our fees are based on your bottom line results.

### IDEA'S WAY OF THINKING

- *Neither an accurate forecast nor changing vendors is required for success*
- *There is a way to both increase sales and reduce inventory*
- *Supply chains sell less when clogged with inventory*
- *In the long term, unless the supply chain sells more no link can sell more*
- *We must help clients gain buy-in internally and with supply chain partners*
- *The majority of our fees are based on improved return on inventory*

### IDEA'S METHOD

- *Verify the existence of inventory imbalances and the benefits of moving from a "Push" to a "Pull" system*
- *Gain top management buy-in to the assessment and support of the approach*
- *Build knowledge and understanding across the supply chain, at all levels*
- *Utilize systems that deliver actionable information, integrated with existing software*
- *Work with you until expected results are achieved*
- *Share the tools and know-how to continually improve results*

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