



The 99+ Percent Customer Service-Level Club

Demand-driven inventory optimization can get you to those new levels of efficiency and your supply chain under control

By Joseph Shamir

Customer service is free. Remember the old adage from the 1980s: "Quality doesn't cost, it pays"? This mantra applies to customer service as well. A high customer service level pays for itself by capturing revenue from lost sales and cutting such costs as expediting.

The new gold standard in customer service is a 99+ percent fill rate. Fill rate can be defined as the percentage of demand you fulfill as the customer requested. It can be measured by case fill, order line fill or complete order fill. We'll talk about why near-perfect fill rates are desirable and how to get there, but first let me first reaffirm that companies are achieving it. Here are a few industry leaders that have joined the elite 99+ percent customer service level club in recent years.

Barilla is the largest pasta producer and distributor in the world. You can't miss it on your grocery store shelf. But pasta buyers can be finicky. If fusilli is not available, customers will usually switch to a competitor's product. Worse yet, after a customer tries the competitor's brand, there is a chance they might stick with it. In this type of situation, stock outs can result not only in lost sales, but also in lost customers (i.e., lost future sales). In this highly competitive market environment, Barilla has targeted and is achieving a 99.6 percent fill rate, the highest customer service level in its industry. Despite the heightened service levels, the company is operating the entire distribution network with less than two weeks of inventory.

Diageo North America, the world's leading premium drinks business, did the same. There is a good margin in a premium product like Baileys or Guinness, so profits from incremental sales can add up. Rather than optimizing inventory to keep down working capital costs, it can make more sense to optimize service levels. Diageo is achieving a 99.6 percent case fill rate in its U.S. spirit warehouse network, and with less inventory — a 10 percent improvement in inventory turns.

A third company, a Fortune 500 global consumer packaged goods company, not only improved fill rates to above 99 percent in one division, but the company simultaneously reduced average finished goods inventory by about 24 percent. Needless to say, the financial people were ecstatic. All three companies saw

significant benefits from achieving 99+ percent customer service levels: more revenue, customer satisfaction and retention, reduced risk of product obsolescence, and keeping out the competition — all with less inventory and working capital cost.

Getting There

So how do you get to these levels? The "perfect order" has become a benchmark of supply chain performance. But a perfect order has a lot to overcome: demand and supply volatility across complex networks of customers, factories, warehouses, geographies and partners. A 99+ percent service level requires lots of perfect orders.

One way that doesn't work is deploying an army of expeditors putting out fires across the supply chain. Most companies fight these fires because they accept the inherent instability — and the emergency measures they have to undertake to overcome it — as a cost of doing business. It takes a host of good people, diverted away from planning and optimizing and focused on expediting, to react to this instability. For example, one consumer products company I know has a dedicated organization of 23 expeditors for North America.

Faced with the complexity of today's global demand and supply chains, no one planner or group of planners, can realistically deliver consistently high service levels without help. This is not a sustainable, efficient process. Help comes in the form of technology — in this case, a technology called demand-driven inventory optimization. The demand-driven comes from improving the short-term stock keeping unit (SKU)-level forecast. The inventory optimization comes from improving the inventory mix and the safety stocks.

Together these model random behavior across the supply chain, factoring in probabilities. This technology anticipates where things could veer off course, hedging for daily demand and supply volatility. Then it generates inventory strategies to minimize the impact of that "noise" (fluctuations) on customer service, defining the precise relationships between inventory behavior and the target service level for each individual SKU location. The result is a sustainable process that delivers high service levels with an efficient cost structure.

"Calming" the Supply Chain

The result is also a "calmer," less costly supply chain. Inventory optimization systems quiet the noise — the unexpected demand, the breakdowns in supply or logistics, the complications introduced by manual intervention.

That's another reason why customer service pays. Since inventory optimization systems precisely target inventory and "calm" the supply chain, companies don't blindly overstock or blindly expedite when there is a stock-out. These companies

buffer where there is likelihood of demand and sales and as adequate service level has to be guaranteed. It not only maintains high fill rates and increased sales, it also reduces overall inventory and frees working capital through the delivery of an optimal mix of inventory across the supply chain.

Sales, margin contribution and customer retention rates go up; inventory, expediting and operational costs go down; and supply chain personnel can concentrate on forward-reaching planning and optimization. Demand-driven inventory optimization can get you to those new levels of efficiency and your supply chain under control.

So join the 99+ percent club. Membership is not only free — it pays. "Companies must drive global supply chain performance through consistent customer service metrics. Subordinate all other metrics under this key metric," says Tim Payne, from the March 31, 2006 Gartner Report, "Five Key Themes for Balancing Customer Service with Efficiency in the Supply Chain."

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