"Not Your Father's Inventory Strategy"

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Manufacturers are always looking for ways to cut costs, and it's no coincidence that everyone's talking "lean" as the economy struggles to right itself. That means that someone's in charge of getting inventory off the books—someone who's probably not sleeping much these days. What's the problem? Pushing inventory upstream to suppliers, or downstream (as finished goods), seemed like a good strategy to meet cost-cutting needs, as did slash-and-burn reductions of stored stock levels. But in the face of shaky consumer confidence, lowered spending, and the ever-impending threat of layoffs, manufacturers must now embrace a fundamental truth: Smart inventory policy does more than cut inventory or push it around; it makes it possible to actually capture revenue at every stage of the product lifecycle.

What We've Learned

In the grip of intense financial pressure, supply chain globalization, and shrinking product lifecycles, equating inventory reduction with sustainable cost reduction is a Band-Aid approach to the bigger challenge of maintaining profitability. Inventory is the lifeline of the supply chain, and cutting too close to the bone can be disastrous. For example, if demand shifts, the pitfalls can include declines in customer service levels and rolling-havoc throughout the operation when there's even the slightest kink, such as a delayed parts shipment. And charging one group with slashing inventory levels can compromise the rest of the supply chain if the impact of each decision on the whole line can't be quantified.

Despite the inherent complexity and interdependency of the end-to-end supply chain, it's no secret that white-board charts and sprawling spreadsheets are still widely used as supply chain design tools. But by the time a room full of engineers cranks out a new "ideal" supply chain, and the plan filters through approvals, real-world conditions have changed and it's back to the drawing board.

Making a Change

Inventory strategies that are isolated from big-picture, business strategies will fail. The first step in creating world-class supply chains is thinking about the end game, i.e., the bottom-line success of the business, which is achieved by getting the right products on the right shelves at the right time. Of course, that's always been the goal, but shortening windows of profitability make the stakes higher than ever. And success hinges on the ability to achieve the right inventory levels every day, quarter after quarter.

Knowing how much inventory to put where is far from intuitive when you consider the complications of global supply networks, selective contract manufacturing, numerous distribution strategies, multiple-channel strategies, and other key elements that drive profitability. Leading manufacturers are investing in supply chain design solutions that can handle the hard math and re-configure inventory strategies in minutes or hours, instead of months, to stay ahead of market shifts.

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The key is adding flexibility, and using inventory at critical junctures to buffer against the ups and downs of the market. It's a cost-versus-strength tradeoff, and determining where and how much to "pad" the chain is tantamount to success. For instance, when customer demand spikes or a certain supplier can't deliver on a part, the supply chain is armed to absorb the impact and protect the margins. Being able to turn production on a dime—just like customer whims—adds incredible competitive advantage as well as resiliency.

The applications of inventory strategies to support bottom-line business goals are as various as the manufacturers that use them. For instance:

A Fortune 500 consumer electronics manufacturer wanted to take an already efficient supply chain to the strategic level. Supply chain design technology detailed several options, including keeping the current supply chain, shipping directly from an Asian hub instead of working through U.S. distribution centers, postponing goods at the factory or retail locations, or shipping factory-direct from China. The company implemented the best option, based on end-to-end supply chain optimization, and began shipping directly from the Asian hub while adjusting inventory levels to immediately reduce costs. The shift eliminated an inventory lag caused by the distribution process, and brought production a step closer to fulfillment and actual demand. The result was a 70 percent reduction in global inventories for the adjusted product, while maintaining best-in-class service levels and reducing variable costs.

A $3 billion Six Sigma manufacturer of consumer goods packaging optimized inventories based on each component's cost, lead time, and service level agreements, realizing significant savings on one of the company's most efficient supply chains. The company then reduced inventory an additional 20 percent by eliminating a supply chain "rule" that was intended to streamline operations but was actually adding cost: It had a "firm order" policy, where one facility's orders were frozen 35 days in advance of the next group's production deadline. While implemented to give the upstream group better planning ability, inherent forecast inaccuracy resulted in excessive waste. New flexibility achieved savings without pushing the burden onto suppliers or end users.

Smart, Not Lean, Inventory Management Will Define Leaders

It's the Fortune 1000 manufacturers already known for efficiency and spit-polished operations that will drive the next level of supply chain excellence, the kind with long-term, bottom-line impact. But achieving that goal requires thinking about inventory policy in a new way: As a strategy for introducing flexibility to arm the supply chain against inevitable disruption, to deliver on customer service goals, reduce time-to-market, support product ramp-ups and ramp-downs, and lower inventory costs.

New inventory strategies hold the key to short-term survival and long-term success. As the economy turns around, the "winners" who emerge will be those who employ supply chain strategies that support growth coupled with inventory optimization, and who capitalize on shifts in supply and demand while buffering precious margins against market mood swings.

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