

# Freeing Up Cash with Inventory Optimization

If you're a corporate financial officer, one of the ways you are measured is by your company's return on invested capital. If you're a private equity investor, you live and die by your ability to free up cash from a business. Either way, it's pretty much the same thing: you've got to turn assets into cash.

Inventory is an untapped, cash-rich asset. Most companies have installed supply chain systems to manage inventory from production through delivery. But these systems focus on transactions. They control what happens, give you visibility. They're missing optimization and analytics - that extra logic that drives the supply chain to operate more efficiently and throw off more cash.

That missing piece can cost a lot. Home Depot executives, speaking at a recent analyst meeting, said that every one-tenth improvement in their inventory turns means an additional \$200 million in cash.

Of course, you need plenty of inventory. Inventory is product - what you make, what you sell. If you slash it too much and don't have what customers want, when and where they want it, you may lose that sale. Customers have more choices and are less captive than ever. Rule of thumb is, they will switch to another product 50% of the time if yours is not in stock. That's a gross margin loss on any particular sale, money that does not go to the bottom line.

That's where inventory optimization comes in. It balances inventory and customer service levels - order fill rates, the percentage of time you deliver goods to customers as ordered and promised - to calculate the optimal mix of where to put your cash. Inventory is like any investment - it requires the right mix of risk and return. The risks are locking up cash in too much inventory or losing revenue because of stock outs. The return is rapid asset turnover into cash.

Inventory optimization systems calculate inventory and service levels automatically and dynamically to meet your business objectives on an ongoing basis, and direct your supply chain accordingly. They let you specify the aggregate inventory and service level balance that works right for your company - even vary it across products, customers, time intervals and geographies.

Inventory optimization systems use advanced logic and analytics to model and understand your forecasted demand. Behind the scenes, millions of SKUs are modeled statistically against variables like volumes, lead times and lot sizes to identify the right stock level and replenishment rate for each product in each location.

The systems hedge for the daily demand and supply volatility and random behavior across your supply chain, from finished goods assembly to the end consumer or retail shelf. They handle challenges like promotions, product phase-in and retirement, expiration and shelf life, end of season closeouts and new product launches - crucial in an age of product proliferation and shorter lifecycles.

## **A Tweak, Not a Replacement**

Inventory optimization systems bolt onto your existing management solutions. They provide a new logic to drive the systems. You don't have tear out and replace your information systems, with all the cost, man hours and lead time that entails. You just apply the new logic on top of the current one. It's like adding a thermostat or control system to already installed infrastructure. That means inventory optimization solutions go in fast, in three months or so. You can expect fast payback, too - reductions in working capital employed will recoup your investment in 6-9 months.

You can measure that return on investment - count that new cash - several ways. One is by the amount of cash generated from lowering inventory - a dollar of reduced inventory is a dollar of cash generated. Another way is by the cash generated from fewer lost sales. Your annual profit improvement can be calculated as:

$$\text{Annual Profit Improvement} = \text{Annual Sales} \times \text{Fill Rate Improvement} \times \text{Gross Margin} \times \text{Lost Sales Ratio}$$

(Lost Sales Ratio is the percentage of time when goods are not available and the customer goes to a competing source). For example, the annual profit improvement is \$2 million for a company with \$500 million in Annual Sales, 2% Fill Rate Improvement, 50% Gross Margin, and 40% Lost Sales Ratio.

It all adds up to better Return on Working Capital and more day-to-day liquidity, based on significant, sustainable improvements to underlying operational efficiency. So if your supply chain isn't paying off the way you expected, in liberating cash and increasing revenue by reducing inventory and improving service levels... If your VP Supply Chain or Inventory Analysts say that, in spite of substantial investments in ERP and supply chain planning systems, they've hit a wall in how well they can balance inventory and service levels. Then give me a call. We have now worked with more than 100 companies in 29 countries, including Colgate-Palmolive, BP, Cadbury Schweppes, Ferrari and Energizer, among many others. My direct line is 617.494.0080, ext. 210, or you can e-mail me at [jshamir@toolsgroup.com](mailto:jshamir@toolsgroup.com).

If you'd like to learn more about inventory optimization, there are many research reports available. A good one to start with is *Inventory Optimization: Improving Supply-Chain Performance in an Uncertain World* from market-research firm Industry Directions. [Click here](#) to see a copy - or forward it to your supply chain colleagues.

### About ToolsGroup

**ToolsGroup offers the world's best inventory optimization software for demand-driven supply chains, from assembly of finished goods all the way to the end consumer or retail shelf.** Our customers can accurately set safety stocks and other inventory targets, achieving "near perfect" customer service levels while cutting inventory by up to 40%.....[\(more\)](#)