

## Reduce Inventories and Improve Business Performance

Companies today must be fast and nimble enough to react quickly to changes in customer demand and do it with little inventory. Gone are the days when manufacturers could stock pile large quantities of raw materials, load-up the shop floor with work-in-process, and pack warehouses with finished goods. The old ways caused erratic and long lead times, high costs and required too much cash for working capital.

In a survey conducted by R. Michael Donovan & Co., Inc., 82 percent of senior executives who responded said that inventory reduction was a major concern. Some saw inventory as just something that absorbs massive amounts of cash while others recognized that high inventories were an indication of other serious problems. Certainly, money tied up in inventory could be better spent elsewhere: new product development, expanded marketing and sales, acquisitions, modernization, reengineering, expansion, debt reduction, and many others.

### High Inventories are indicators

In some cases, inventory is so bloated that a high percentage of it will become obsolete before it is sold. Worse, too much inventory is a certain indicator of more serious and costly business process and systems problems that can be rooted very deeply across the organization. These may include poor forecasting, inadequate order/product specifications, ineffective production scheduling, poor quality, bottlenecks, long cycle times, product and process problems, and/or inappropriate performance metrics, to name a few.

And these problems can compound themselves. Long lead times lead to a requirement to forecast, and long-range forecasts are by nature inaccurate. When actual customer demand is not what was forecasted, unsold inventory quickly accumulates in expensive piles, while expensive expediting is used to produce the needed products that are in short supply. Salable throughput decreases while customer service goes down. Generally, the cycle just keeps repeating itself, further compounding cash flow, profit and service problems.

### How to reduce inventory

Most executives agree that top heavy inventories are a giant cash vacuum and need to be reduced in order to free up cash for investment in revenue-growth activities. How can this be accomplished? One of the major impediments to inventory reduction is the mistaken notion that just improved inventory management is all that is required to get the job done. The real culprits are the inefficient business processes that cause excessive inventories to exist in the first place. Here are eight suggestions:

**1. Don't always blame inventory control.** Certainly, lack of control contributes to excessive inventory, but often behavior in inventory-controlling functions is driven by management's highly negative reaction to material shortages compared to rare and less severe response to high inventory levels. Send the correct signals to those functions that control inventory so that they are properly motivated towards reduction. For the most part, it is inadequacies in cross-functional business processes that cause the need for inventory buffers to exist; address the cause of the problem, not the result. Identify the underlying causes, get control so that inventory buffers are not needed, then reduce the inventory accordingly. Otherwise, the inventory reduction will only exacerbate the underlying problem.

*“Successful people ask better questions and as a result, they get better answers”*

Anthony Robbins

Where Lean Thoughts can become Reality

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**2. Reengineer.** Major reductions (20% to 50% or more) in all forms of inventory, without harming customer service, usually require the reengineering of the order-to-delivery cycle to find ways to do it faster, better, cheaper. Dramatic rethinking of business processes often results in significant reductions in lead times and increases in control that eliminate the need for inventory buffers. As a bonus, this kind of change usually pays benefits in increased quality and improved customer service.

**3. Improve Supply Chain Management** By streamlining the entire supply chain, a company can reduce inventory, improve time to market, compress cycle times, free up more cash, decrease costs, and improve profitability. World class manufacturers have allocated the necessary resources to speed up the order-to-delivery cycle and improve the entire supply chain with the result clearly visible in customer service performance and the reduction of all forms of inventory. Manufacturers are establishing computer-to-computer links with suppliers and customers to provide them with a "window" on their operations. Through this window, suppliers for example, can find out when the customer will run out of the item they supply and automatically restock it. This streamlining of the supply chain enables manufacturers to reduce inventory buffers, decrease cycle time and achieve significant cost reductions.

In addition, many manufacturers are actively consolidating their supplier base, using fewer vendors but establishing a much closer relationship with those they do business with. Both parties gain greater business leverage through such relationships. The manufacturer and the supplier, in many cases, work together to improve products and operations and thereby reduce material costs, improve delivery timing, and the like.

**4. Improve production scheduling.** This is one of the least understood and least appreciated aspects of manufacturing and distribution. A common result of poor production scheduling is product flow imbalances, causing bottlenecks and reduced throughput. This results in erratic output, high inventory, long cycle times, and reduced customer service.

**5. Use effective performance metrics.** It's surprising that many manufacturers actually reward behavior that tends to bloat inventory levels. For example, measuring production efficiency, utilization and standard hours produced (primarily for overhead absorption,) can result in the production of parts (that go into inventory) even when there is no other rational reason to do so. When the sales function is really measured, and therefore operates, on absolute booking dollars without consideration to product mix and timing, the inevitable result is more inventory in manufacturing or finished goods and lower customer service.

**6. Utilize "pull" based on demand.** Many manufacturers base raw material and/or finished goods inventory stocking levels on inaccurate long-term sales forecasts. The high cost of these "bad numbers" depresses overall business performance. One result is that companies that use a total "push" inventory system will always end up with high inventories. An excellent method for achieving greater effectiveness with working capital and freeing up valuable cash is to acquire materials and put them through production so fast that inventory doesn't have time to become a "liability". Of course, this requires a well-engineered order-to-delivery process that can have enormous benefits beyond just inventory reduction, especially in customer service.

**7. Reduce cycle times.** Cycle time reduction almost always means reduced costs, reduced inventory levels, improved production predictability, increased customer service, and better quality. To reduce cycle time, manufacturers need to streamline every aspect of their operations, especially the order-to-delivery process. If this is done right, you will by necessity "fix" many support functions as well.

**8. Develop flexible manufacturing.** When a manufacturer is rigidly set up to produce long production runs, there is a tendency to maintain higher than necessary production levels even in the face of reduced demand. The "inflexible" manufacturer maintains high production to absorb overhead. This may make some bad numbers look good, but the costs and inefficiencies are not eliminated; they are buried in inventory. To minimize inventory and improve customer responsiveness, more and more manufacturers today are building flexibility into their operations - flexibility in how they operate in order to quickly respond to changing customer demand. Today, the VALUE that a manufacturer offers its customers is more important than having just the lowest overall price. Today's customers are demanding short lead times, quality products, on-time delivery, good customer service, and a good price. The consequence of non-compliance to these customer demands will be lost business - something you can not allow to happen.