

# Inventory Reduction: Getting Results...and Fast

*by R. Michael Donovan*

Clients appreciate fresh, objective insights and opinions that can help improve their business performance. If a situation presents itself where I can present a methodology or process, supported by software or not, that I know can improve a client's situation, I make my clients aware of the potential opportunity. In the case of this column, you -- my readers -- are my clients. With this in mind, this column is devoted to a discussion about the Inventory Quality Ratio (IQR) methodology, which is supported by a software product, that I believe you should be aware of. Keep in mind, as you read this that I am totally familiar with the methodology and have very successfully applied it on numerous occasions.

### **Management's Dilemma**

According to Harold Geneen, the legendary, former chairman of ITT and the founding father of the IQR methodology, "All the problems of business end up in inventory". He was fully aware of the impact of such things as poor sales and operations planning, overstated master production schedules, engineering changes, shortages, long cycle times, large order quantities, over zealous buying, early material receipts, poor scheduling among the many other possible causes for excess inventory problems. Most CEO's and CFO's agree that their companies con-

sistently carry 25-40% more inventory than necessary. In fact, the common top management mandate to reduce inventory is, at least in part, driven by this belief. A belief which is often right on target.

Most companies attempt to reduce inventory through such practices as Enterprise Resource Planning, Just-In-Time and modern approaches to supply chain management which have led to lower inventory levels, but there is still plenty of room for improvement. In fact, most all manufacturers carry at least 25% more inventory than they have to. For these companies, using the IQR methodology, inventory reduction of 20% plus in 6 months is a very high probability. The whole process can start with relative ease, create positive cash flow very quickly, and cause minimal, if any, organizational disruption.

From top management's point of view, material shortages have a far greater cost than hedging with a little extra inventory. From the inventory planners point of view, material shortages always create a far more negative management reaction versus periodic and less negative reaction to inventory excesses. As a result the "performance reward" system actually encourages hedging with inventory excess, a condition which left unchecked almost always assures inventory to spiral upwards and out of control.

Reducing the excess and preventing excesses from accumulating in the first place, requires a dollarized focus on the hedging - - something most systems do not do.

The inventory planner's primary focus on shortage avoidance, along with the sheer number of action messages, and other issues that must be dealt with, severely limits the time a planner has to devote to inventory excess reduction and prevention. What is needed is an approach that can help planners identify problems and prioritize immediate and preventive actions by their dollar impact on inventory. In contrast to conventional systems approaches that monitor only part numbers, quantities, and dates, the IQR methodology gives you a logical look at the dollar impact of the on-hand and on-order allowing inventory planners to understand which decisions will be most meaningful from a financial standpoint.

### **How IQR Works**

One of the key functions of the IQR is to take data from the host MRP/ERP system and then, part number by part number, set inventory dollar level targets and then prioritize specific items for dollar reduction action. During the modeling process the IQR segments each part number into one of several performance categories which are dynamically updated based on the latest projected requirements and other data from the host system. This dynamic inventory modeling function is controlled by user-defined parameters.

The IQR is a decision support system that provides several pre-defined ways and

numerous user-defined methods to view, analyze and prioritize inventory information to achieve and maintain a lower inventory investment. In addition, "what-if" capabilities to simulate the impact of varying material ordering guidelines supports an inventory reduction program. Also, the IQR is equipped with a comprehensive and very easy to use report writer which can calculate, segment and array inventory information in ways that will contribute to optimizing inventory performance.

When customer demand for product suddenly decreases, many companies experience a significant increase in raw material and component inventories until supply is rebalanced with demand. The IQR methodology has a much quicker response capability to deferring or canceling the supply that will inflate your inventory the most. The fact is, it's very difficult to avoid inventory excesses and cash consumption with sudden decreases in actual demand. Yet, when it happens the best tools to cope with the problem are of paramount importance in minimizing inventory excesses.

### **Measuring Inventory Performance**

The IQR methodology as an inventory performance measurement approach "obsoletes" inventory turnover which lumps "good" and "bad" inventories all together. In fact, turnover just masks the problem of excesses, slow moving and obsolete inventories. Once separated into IQR's seven quality categories, what is hiding in the denominator of the inventory turnover equation can startle the most experienced manager. The IQR

does not require additional or redundant data entry. It only takes a couple of days to write a data extract program to feed the IQR.

Learning to effectively use the IQR in conjunction with an MRP/ERP system requires about two days of training. Then, people will have the necessary information and understanding to systematically segment and prioritize actions on the high-impact items that will most significantly effect inventory investment.

### **Is It Worth It?**

The list of IQR user companies and their success stories in applying the methodology is quite impressive. In one client situation, the payback on the IQR occurred in one day and in others it usually took no longer than a few weeks to recover the entire investment.

You don't need massive amounts of inventory to benefit from IQR. Companies starting with as little as \$3,000,000 in raw material and finished inventories could benefit from its use. Of course, the larger the inventory the faster the payback.

During the evaluation phase (test drive) of the IQR, a company can profile their inventory and get a firm handle on what, where and how much the potential inventory reduction will be. If you are really serious about inventory reduction, a profile of your inventory will provide all you need to convince yourself of the potential benefit.

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