

Perspective

First Quarter 2010

Practical ideas for manufacturers and distributors

Large Savings Through Optimizing Inventory

Companies can increase working capital by improving inventory practices. By improving one turn, a typical company can save hundreds of thousands of dollars. In the example below, ABC Company has a Cost of Goods Sold of \$40M and may be able save over \$500,000 annually by optimizing their inventory with an improvement of one turn.

ABC Company Information:			
Cost of Goods Sold (annual)	\$40,000,000		
Total Inventory Value (average)	\$7,575,000		
Days in Inventory	69		
Your Inventory Turns equal	5		
Your Annual Cost of Carrying Inventory to the current expense to maintain inventory	\$2,045,250	to	\$3,484,500
Cash tied up in Inventory	\$7,575,000		

If ABC increased their Inventory Turns by 1:			
Your Inventory Turns would equal	6		
Days in Inventory	58		
Annual Cost of Carrying Inventory would be	\$1,719,601	to	\$2,929,690
Annual Savings would be	\$325,649	to	\$554,810
Cash tied up in Inventory would be	\$6,368,891		
One time cash savings would be	\$1,206,109		

* The first table shows current inventory turns and annual inventory carrying costs which is where the company's performance is today. The second table shows what the company could save if they increased their inventory turns by 1.

Inventory Carrying Costs

Improved inventory management not only can reduce the capital tied up in the inventory itself, but also reduce the carrying costs associated with that inventory, both of which will improve your bottom line. Inventory carrying costs categories include:

- Facility costs
- Utilities
- Insurance & taxes
- Labor

Inventory Carrying Costs Elements with Cost Percentage			
Interest/Opportunity Cost	10%	to	15%
Handling & Storage (People & Space) Damage & Shrinkage (Scrap & Obsolescence)	4%	to	8%
Taxes & Insurance Redistribution Cost (in the wrong location)	3%	to	6%
Transactions (Counting, Moving, Planning, Issuing, Reconciling)	5%	to	10%
Gen. & Admin. Staff (Managers, Planners, Physical Mgmt.)	5%	to	7%
TOTAL	27%	to	46%

Source SC Council, APICS, Best Practices and Industry Experience

* This table shows the annual carrying costs elements add up to a large number when you calculate the total effect of each category. The annual negative effect on the company's bottom line can run between 27 percent and 46 percent of the inventory value.

- Physical counting of inventories, cycle counting
- Obsolescence
- Lost opportunity costs
- Interest on debt
- Deterioration

Find the Triggers and Rules Within Your Supply Chain

Each company has triggers that to determine when to enter a customer order, purchase order or forecast an item. Entering a customer order (trigger) could take one week through the process and includes a number of steps:

1. Customer calls and places an order (trigger)
2. The order triggers the procurement process and production schedule
3. Purchasing department orders the item

When a trigger occurs, most companies make a variety of adjustments, following rules that have been established over the years. For example, if the customer order is for 100 widgets due February 1, customer service may have a rule to set the due date as Jan. 25 to ensure timely delivery. Purchasing may have a "rule" to order 105 percent of the materials needed to ensure sufficient materials. Production scheduling now sets a

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Sustainability in Manufacturing - A Growing Trend

The United Nations World Commission on Environment and Development was created to address a growing concern about the accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development. In establishing the commission, the UN General Assembly recognized that environmental problems were global in nature and determined it was in the common interest of all nations to establish policies for sustainable development. In 1987, they released the Brundtland Commission Report. The report defined the term sustainability as meeting the needs of the present without compromising the ability of future generations to meet their own needs and discussed sustainable development and the change of politics needed for achieving that.

Sustainability has evolved over the decades. The 70s were focused on environmental compliance, the 80s on footprint reduction, and the 90s on energy efficiency. Now companies are looking at how products can be adapted improve society's impact on the environment.

In today's economic environment, the term green is used often. Green is about an organization improving its impact on the environment. A company can produce less waste, consume fewer inputs (such as raw materials, energy and packaging materials) and utilize resources more efficiently. Green not only improves internal operations, it looks at external factors such as the supply chain to reduce the impact on the environment. Green initiatives also often lower costs.

With increased emphasis on the environment and a desire by consumers to be environmentally conscious, manufacturers and distributors are undertaking green initiatives and making their businesses sustainable.

Fifty-three percent of the respondents to the RSM McGladrey 2009 Manufacturing and Wholesale Distribution survey now plan green, up from 46 percent in 2008. Companies in the Building Materials and Chemicals industry segments were most likely to report such plans, at 70 percent and 60 percent of the time respectively, but respondents from every industry segment reported they would be undertaking green initiatives.

Concern for the environment was the most common reason cited for green initiatives by survey respondents. Manufacturers and distributors are embracing changes

which result in environmentally acceptable green processes and products.

There is a growing consensus in the business community and across the country that green leads to sustainability and is truly indicative of a trend. Our surveys have reported more companies are becoming engaged in adopting green initiatives and more consumers are supporting environmentally conscious businesses. These initiatives are the cornerstone of sustainability and strengthen relationships with customers, partners, investors and the communities in which companies operate. Manufacturers and distributors are moving in this direction not only because it is the right thing to do, but because the market is driving the movement. Green and sustainability are becoming a standard requirement not only to enter the market, but to stay in the market. Some companies who have made this change include:

- PC maker Dell – leading the way in recovery of parts from electronics
- GE – developed a hybrid locomotive
- Wal-Mart – funded truck manufacturers in producing a hybrid diesel truck
- Philadelphia Eagles – now separate recyclables from trash after games
- Coors – distilling waste beer into ethanol that Valero is distributing at gas stations in Colorado

As green becomes integrated into our processes and products, sustainability has moved to the forefront. Sustainability used to mean increasing your profits steadily, but it has now evolved where it considers the entire business environment – from the beginning of the process to consumption by the end user – and includes not only economic impact and development around the world, but social and cultural aspects of a business and all of the stakeholders.

Sustainability is about the long run. It's not a flash in the pan or a PR program, it is developing a strategy which drives down costs, increases revenues through new products and customers, retains employees and extracts their creativity and innovation capability, and addresses the concerns of the entire globe about being here in the future. Resolving social and economic challenges while growing the business is truly where sustainability results in success over the long term.

The 5th Annual RSM McGladrey Manufacturing and Wholesale Distribution Survey

What is the "new normal" for the industry? RSM McGladrey aims to find out when it launches its 5th annual Manufacturing and Wholesale Distribution National Survey the week of March 2, 2010. The survey collects information on and reports current state-of-the-industry practices and trends. As a thank you for their participation, respondents receive an exclusive first-look at the survey results, a copy of the final report and a confidential report that allows each respondent to compare how they answered against the national averages. For more information, visit our website at www.rsmmcgladrey.com.

Net Operating Loss (NOL) Carryback Change

On Nov. 6, 2009, President Obama signed The Worker, Homeownership and Business Assistance Act of 2009, which included provisions that extend the net operating loss (NOL) carryback period to five years for taxpayers incurring losses in tax years ending after Dec. 31, 2007 and beginning before Jan. 1, 2010.

Typically, taxpayers are allowed to carryback an NOL to the previous two years, or may elect to forgo the carryback of an NOL and just carryforward an NOL. The American Recovery and Reinvestment Act of 2009 previously amended IRC section 172(b)(1)(H) to provide certain eligible small businesses (ESBs) with gross receipts of less than \$15M an expanded NOL carryback period for NOLs incurred in 2008.

Current economic conditions require all companies to take every step possible to improve cash flow. The

newly extended period for NOL carrybacks presents an opportunity to mitigate losses by capitalizing on potentially significant tax benefits, but this requires a careful analysis and planning.

To maximize potential NOL carryback benefits, companies should focus on certain key areas, including:

- Income recognition
- Expense recognition
- Inventory
- Capitalization policies and methods.

However, companies also must remember that the carryback election is irrevocable, and so they should also consider a variety of issues that can limit the value of the NOL carryback.

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schedule to meet the Jan. 25 date, but also may have its own rule to start early to meet that date.

Such rules generally have evolved over time and may not have been reevaluated in many years because “we’ve always done things this way.” Yet such rules, many of which are established to cover flawed processes, can lead to excess inventory, excess inventory carrying times, or both. Triggers and Rules must change to optimize inventory on a sustained basis.

Where Should You Focus in the Process?

Select the areas of your supply chain with the most significant issues. Overall, there are nine areas in your supply chain that you need to address to optimize your inventory. Each area has its own challenges to analyze triggers and rules.

1. **Sales Order Process** – Formalize the business process improvement by mapping the process from beginning to end, noting any triggers. The goal is to challenge and improve on the rules. While there are many others, some considerations include:
 - a. **Whether your products** are make to stock, make to order, or engineer to order
 - b. Order entry or order releases practices
 - c. lead-times,
 - d. percentages over order quantity, to name a few.
2. **Procurement Process** – Formalize the business process improvement by mapping the process from beginning to end, noting any triggers and rules. Consideration include using blanket orders, ordering by releases, key sources, lead-times, distance to suppliers, percentage over order and receiving dates rules.
3. **Demand drivers** – Review forecasting methods, innovative and functional products, sales forecasts, historical forecasts, economy by industry, seasonality, min/max rules, service level goals, customer’s industries and customer plans (furloughs, shutdowns).
4. **Standardize material usage** – Review usage, analyze on hand inventory, review material

substitutions, and review standards for identifying similarities (size, type, commodity families).

5. **Eliminate Obsolete Inventory** – Review slow moving inventory, analyze inventory tied to specific customers, utilize substitutions and sell or dispose of obsolete inventory. Review of obsolete inventory should include dates of actual usage, not inventory moves; volume review; customers’ future plans for usage; industry outlook for customers; and bill of material accuracy.
6. **Improve Supply Chain Strategy** – Analyze stages of interaction within the supply chain, assess collaboration building blocks and tie supply chain strategy to business strategy. Considerations are supplier and information technology constraints, information exchange, organizational design, key performance indicators, processes, systems & technology and people.
7. **Improve Technology** – Evaluate ERP modules to ensure that reporting needs are met and consider aligning business needs, processes and people.
8. **Improve Communication** – Assess level/type of communication within the supply chain and degree of collaboration between customers, suppliers and your company.
9. **Improve Data Integrity** – Investigate cycle count accuracy, large write-ups or write downs, unexplained errors in data, incorrect bill of material and inventory evaluation problems.

It Doesn’t Happen without Responsibility

Calculate the opportunity your company is missing by not improving your inventory by at least one turn, and establish a one turn initial goal for your company. Start by optimizing your inventory and keep in mind that improvements will not happen without a plan (including a timeline), an executive responsible for the program and an agreed upon way to measure improvement. It took many years to create your triggers and rules, and it will also take time to implement changes to improve them.

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