

## How to Build a Strong Business Case for Your Supply Chain Technology Investment, Part 2

In part one we outlined the approach, construct and key attributes around building a business case to support supply chain technology investments. In part two we will dive into the details of a sound business case that will compel action from the decision makers. Specifically, we will attack this challenge using a two dimensional, nine box analysis. The first dimension are the top factors that motivate organizations to invest in supply chain technology as identified in part one:

- Reducing operating and support costs
- Enhancing decision making
- Supporting customer expectations or demands



The second dimension in our analysis are the types of benefits:

- Tangible
- Intangible
- Risk mitigation

Applying these two dimensions to a nine box analysis will yield a compelling, comprehensive business case that should satisfy the financial, operational and customer support stakeholders in the organization:

	Tangible	Intangible	Risk Mitigation
Operational Improvements	Inventory reduction Less expediting costs Less obsolescence	Worker efficiency Ability to grow without adding headcount	Avoid unneeded expansion in plant & equipment Less workforce attrition
Enhance Decision Making	Inventory reduction Fewer production stops Fewer maintenance shutdowns	Responsiveness Reduce time to decide Employee satisfaction	Avoid excess inventory build up Avoid resource misallocation
Customer Fulfillment	Margin improvement from fewer lost sales Lower cost to serve	Customer retention Customer satisfaction Employee satisfaction	Decrease in customer attrition Decrease in employee turnover

### Tangible Savings

The most tangible and direct way to build broad support for an ROI is reducing inventory investment without sacrificing service levels. Inventory represents one of the largest assets for producers and distributors. However, it is a mistake to assume that inventory dollars removed from the supply chain directly equate to bottom line profit. While a million dollar decrease in inventory will directly impact the balance sheet, it does not directly lead to a million dollars in hard savings. The profit and loss impact of inventory reduction will be measured against two cost factors: weighted average cost of capital and inventory carrying costs. Each of these factors are expressed as percentages and applied to the net inventory reduction. The weighted average cost of capital (WACC) is the rate a company is expected to pay to finance its assets. Inventory carrying costs percent captures the direct and indirect costs of the

movement, storage, and replenishment of inventory. These costs include, warehouse infrastructure and equipment, insurance, labor, etc...

The net P&L impact of inventory reduction as it applies to ROI is the net inventory reduction multiplied by the (WACC) and carrying cost percentages. In our example above, a million reduction in inventory dollars would yield an \$180,000 annual savings is the WACC is 8% and the inventory carrying cost is 10% ( $\$1,000,000 \times 18\%$ ). This dollar figure represents that tangible, reoccurring savings of carrying less inventory to satisfy demand at the targeted service level.

The next component of tangible ROI is the cost of service interruptions. The impact of stock outs are tangibly expressed in two ways; expediting costs and lost sales. If the customer allows the supplier to fill a backorder, the resulting activities to procure and/or manufacture the missing materials are typically expediting activities, which create extraordinary costs to serve in terms of labor overtime and premium shipment methods. Conversely, is the customer cancels the backordered quantity, or the entire order, then a lost sale occurs.

Gross margin from lost sales and expediting costs are two tangible, financial impacts of poor service that can be reduced, thereby adding to the potential ROI impact.

### **Intangible Savings**

Given today's tight labor market, the most compelling argument for improving supply chain tools and processes is the ability to grow the business without adding head count. A GIB customer recently studied the impact of supply chain efficiency on their materials management group. What they discovered is a 53% improvement in the ratio between materials management personnel and revenue. Over the four years since implementing the GIB supply chain tools, the business grew much faster than the operational staff to support that growth, resulting in 53% more revenue supported by each person.

### **Summary**

Reducing inventory and improving customer fulfillment are two of the most tangible, impactful outcomes for manufacturers, distributors and retailers seeking supply chain optimization. The business case for supply chain technology investments must be set upon the firm foundation of tangible improvements, further supported by the less tangible but self-evident priorities of improving worker efficiency, decision-making, and asset utilization.