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Keeping your focus

flashpoints

An effective supply chain strategy will take aim at four areas of potential change:

- customer behavior
- product flow
- system utilization
- CPFR

The SCOR project roadmap can effectively integrate supply chain strategy with annual business strategy.

by Peter Bolstorff

How do you take your company to the next level of performance? If you ask Brad Fitzgerald, it starts with SCOR readiness throughout the entire organization.

Fitzgerald is supply chain director for data storage and color management company *Imation* (www.imation.com), a 3M spin-off. Back in 1996, when the Supply-Chain Council was formed, Imation was an early adopter of the process reference model, led on by Fitzgerald's ready-aim-fire approach to its SCOR deployment.

First, Fitzgerald prepared everyone in the organization — from the president on down — to get ready to use SCOR by understanding its impact on the business. Then, his supply chain team began to aim portions of SCOR to selected projects, such as a financial infrastructure for performance.

Next, Imation launched a Supply Chain Program Office, which allowed the company to achieve parity cost. And as of this past summer, Fitzgerald's supply chain team was ready to fire at the biggest target yet: defining strategic changes — using the entire SCOR project roadmap — to achieve superior cost.

As your organization grows in its knowledge and application of the SCOR model, all levels of performance can be effectively improved. You might start by addressing immediate deficiencies, then move into establishing a supply chain **continuous improvement** plan. By then, you're ready for bigger

trophies, such as defining investments to achieve strategic competitive advantage. Just as a rifle proves more effective at a longer range than a shotgun, the project roadmap helps you to aim at the next level of performance — and bigger supply chain trophies.

Imation discovered that the biggest prize of all was its integration of the project roadmap with its annual business strategy and planning processes. The company achieved this by taking clear aim at four strategic changes: customer behavior, product flow, system utilization, and **collaborative planning, forecasting and replenishment** (CPFR).

Customer behavior

Material flow is either **evolved** or **designed**. A significant part of evolution comes from your customers — one contract at a time. A material flow strategy provides a set of guiding principles to align customer/supplier needs with your company's competitive requirements, based on each contract.

To illustrate this concept, one of the SCOR model's homework assignments is to produce a set of invoices that show typical customer buying behavior and the business policies driving the behavior. It is critical to understand the **invoice elements** that drive gross-to-net sales, such as deductions, terms, programs, credits, etc. Other invoice elements include direct costs (standard costs), warehouse and freight costs, and indirect costs, such as order processing, purchasing and planning.

For the Imation team, the competitive requirements to succeed in the marketplace required achievement of superior supply chain costs, advantage delivery reliability, parity responsiveness and parity asset utilization. Using the invoice exercise as a starting point, the team identified a *base* material flow to support the company's competitive requirements and identified changes by customer to achieve them. The material flow was easily configured to accommodate customer needs beyond those provided in the base.

Product flow

Product flow is either **simple** or **complex**. A significant part of the complexity has to do with how well your "go to market" strategy is synchronized with your product Bill of Materials (BOM).

To illustrate, let's look at another SCOR homework assignment, which requires the calculation of the total number of possible material flow combinations that need to be planned, sourced, made and delivered. For example, 150 finished goods, stocked in five warehouses, shipped to 1,000 customers, comprised of 1,500 component parts, sourced from 1,000 suppliers, and made in three factories have a theoretical potential of 750,000 routes to customer locations sourced from a theoretical potential of 3,000 source routes.

For the Imation team, the *as is* cost structure in place supported a very complex configuration. Driving the complexity from the demand side were promotional plans tied to customers who required packaging changes supported by new part numbers, which were sourced from the appropriated manufacturing locations. Each business planner had to submit a forecast and establish a supply plan for each part number in each distribution center. It was an uphill battle all the way.

What is SCOR?

The **Supply Chain Operations Reference** model, developed by the Supply-Chain Council, provides a standard methodology for managing supply chain projects.

Using this information as a starting point, along with a leading business practice called **postponement**, the design team developed an effective strategy to meet both the customization needs in a highly promoted market and simplify material flow. Postponement delays final customization of the product until the order shows up. In this case, it changed promoted items from **make-to-order/deliver-stocked product** to **make-to-order/deliver-to-order**.

System utilization

System utilization is identical (in manufacturing terms) to machine utilization. Rather than taking raw materials and producing widgets, a system takes raw data and produces transactions. As with a machine, it is the combination of people doing work and the system running well that produces good output.

Four key transactions align with the SCOR elements: **sales order** (deliver), **purchase order** (source), **work order** (make) and **planning events** (plan). There are two important planning events as well: forecasts and replenishment (or planned orders).

System utilization is comprised of similar concepts to that of machine utilization. **Run-time** (or up-time) is the percentage of hours over a period of time where the machine is actually producing transactions. **Cycle time** is the rate with which transactions are produced (including manual work-arounds). **Yield** is calculated by dividing the good transactions (no rework, edits, inaccurate data, etc.) by the total transactions. **Productivity** is defined by good transactions produced over a defined period of time. Run-time, cycle time and yield all contribute to overall productivity. Of course, productivity relates directly to cost and indirectly to a company's ability to e-enable itself.

As an example, the Imation team discovered that pricing complexity impacted overall system utilization in two ways. First, it negatively impacted the cycle time of SCOR's Process Inquiry and Quote because system functionality was not turned on; each quote was a manual exercise.

Second, and more importantly, it negatively impacted overall sales order yield. Inaccurate pricing, manual entry and rework contributed to poor sales order yield, which impacted costs, receivables and gross-to-net sales.

CPFR

Sales strategy must support — and be supported by — supply chain strategy. It is important to design strategy around leading practices — such as CPFR — that can support both.

In short, CPFR is a business growth model to improve **gross margin return on investment** (GMROI) at the customer (retail/distributor) level and increasing sales at the manufacturer level through more effective use of inventory. The core concept is simple: Jointly create business rules to develop a forecast, and automatically replenish products to maintain a service level of **zero stock-outs**.

CPFR consists of nine steps:

1) Develop front-end agreement (annually);

2) Create joint business plan (semi-annually/quarterly);

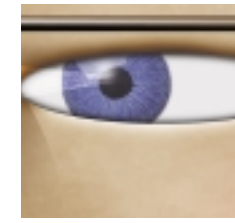
3) Collaborate with sales forecast (monthly/weekly);

4) Identify exceptions for sales forecast;

5) Resolve/collaborate on exception items;

Points to ponder

- Understanding customer behavior through invoice illustrations helps align your customer needs, business policies and competitive requirements. It's all there: delivery, lead times, costs and assets.
- Having the SCOR mentality in place makes projects go faster. You can execute the project roadmap 25% faster by having the SCORcard and P&L (profit-and-loss) hotlinks already in place.
- The SCOR roadmap can be synchronized about four months in advance of your planning and budgeting process to facilitate program-based forecasts.
- The SCOR project roadmap can help with big *and* small issues; you don't need to use it all to save money.



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6) Order forecast collaboration (monthly/weekly);

7) Identify exceptions for order forecast;

8) Resolve/collaborate on exception items; and

9) Order generation (weekly/daily).

SCOR is able to take these steps and engineer the necessary work and information flow to accelerate the implementation of the practice. The Imation team used the SCOR roadmap in the context of a collaboration already begun at one of its key accounts. It also provided a roadmap for appropriate technology investments to make the planning event a more productive process.

Hitting the target

The SCOR project roadmap can be effectively used at multiple performance levels: eliminating deficiencies, establishing a continuous improvement process, and defining strategic supply chain investments to support competitive advantage.

The Imation team took aim at defining a very simple set of strategic changes for taking the company to the next level of superior performance. ◀

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About SCOR

The Supply Chain Operations Reference model (SCOR) has been developed by the Supply-Chain Council and is *SCTN*'s recommended implementation model for SCM initiatives. While the author of this article is affiliated with the Supply-Chain Council, this article was prepared under the direction of *SCTN* and was not subject to prior review or approval by the Supply-Chain Council or any of its members/affiliates.