

keeping**SCOR**

Updating the Supply-Chain Council's implementation model

Before you buy, re-connect

by **Peter Bolstorff**

Looking to buy new technology? First, figure out how well you're using what you've got.

After spending 18 months in a concerted effort to cut cost from its supply chain and achieving just a third of the targeted savings, a multi-billion-dollar manufacturer asked me to work with six of its business teams to see what else could be done.

Locked up in a windowless basement at one of the manufacturing plants for two days, we had been sweating out a map of material flows and work information flows throughout the company when the answer finally revealed itself to us: While each of the six business teams was using the available

software to serve its own strategy, the **software was vastly under-utilized** at the enterprise level.

What the mapping process made clear to the various executives was that each business unit had put a different emphasis on how to use the software. One general manager

admitted his business was using about two-thirds of the software's modules; another confessed to using only three of the 15 modules; the average functionality was about 40 percent.

In hindsight, that probably shouldn't have come as a surprise, based on the way this company — and so

What is SCOR?

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



Learning points

1. Don't under-fund implementation. That's why many companies are only using half the functionality of their current systems. The SCOR model provides a standard implementation framework to get the ROI by tying new technology investments into operational strategy and leading business practices

2. Adopting and using new business practices/processes to serve your supply chain will do more for the P&L than new technology will.

3. Getting the businesses involved in prioritizing leading practices is a way to remove the technology component from the improvement process and gain a more cohesive decision-making process. It invites them to be part of the solution, not merely users of the system.

many others — fund the implementation of enterprise applications: at the business-unit level.

It's a common problem, and it's usually handled in a less sensible manner. Too often, when a company has trouble wringing efficiency out of existing technology, the response is to simply buy more.

At different points in the past 10 years, **MRP, ERP, APS, WMS**, and now, business-to-business e-commerce all have claimed to be key technologies for more effective management of the supply chain. So businesses have spent hundreds of millions of dollars moving to the next level of computing, paying for each expensive step the same way:

acronymssolved

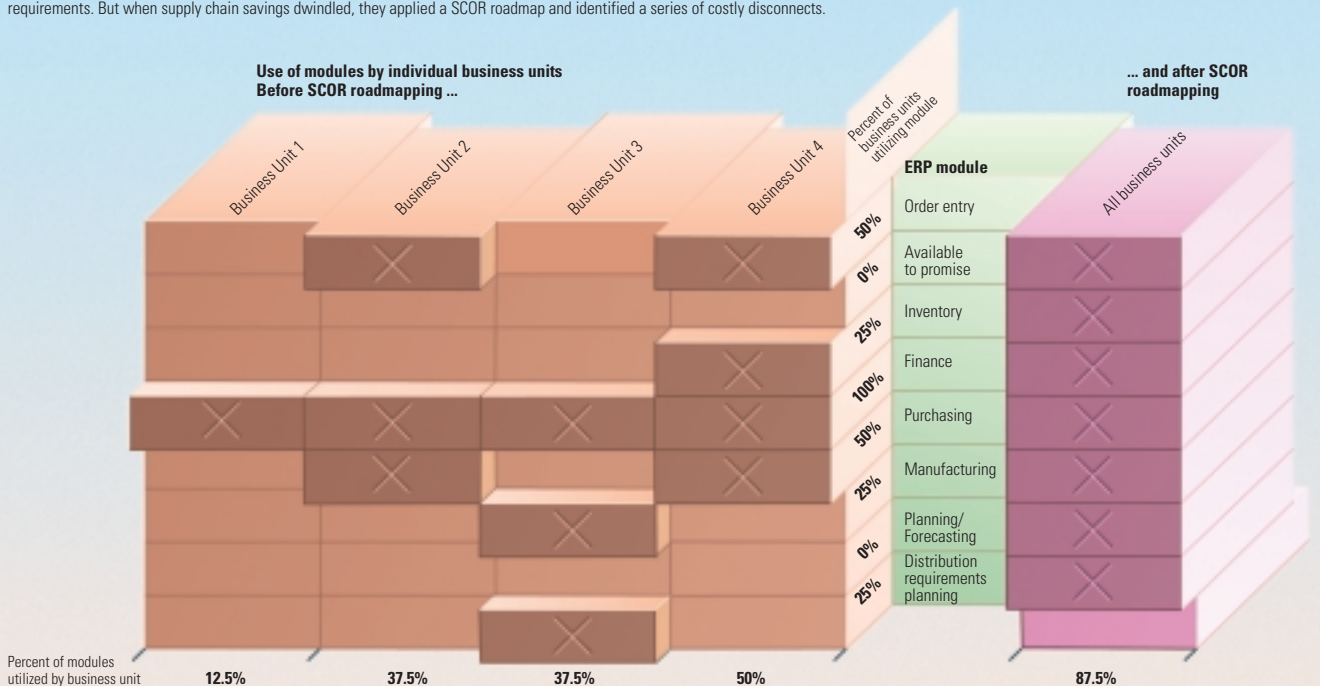
- APS:** Advanced planning system
- CPFR:** Collaborative planning, forecasting and replenishment
- ERP:** Enterprise resource planning
- MRP:** Manufacturing resource planning
- WMS:** Warehouse management system

by asking the business units to cough up the cash to make the software work for them.

The result is a **series of disconnects** that limit the software's big-picture capabilities. But if a company can tie all of these technology investments into operational strategy and leading business practices, the ROI from existing technology can greatly improve.

Getting the most from ERP at a multibillion-dollar manufacturer

Each of four business units funded the implementation of a centralized ERP system differently, based on their unique business requirements. But when supply chain savings dwindled, they applied a SCOR roadmap and identified a series of costly disconnects.



Process problem: Promised ROI of the ERP had not been met, and full functionality of existing technology had never been achieved in each of the four business units. But money was still being spent to acquire new technology. For example, Business Unit 4 was seeking to invest in a bolt-on APS system, even though it wasn't using the ERP's existing planning/forecasting module.

Process improvement: By using the SCOR model to build in operating and competitive requirements, the business units were able to let the **TO BE** business practices drive the software's functionality.

To learn more about the Supply-Chain Council: www.supply-chain.org
 For basic information about SCOR: www.supply-chain.org/html/scor_overview.cfm

The savings can be used for anything you want: new software that the company really *does* need, or perhaps as a return to investors.

Either way, finding those savings is one value of the **SCOR model's** implementation roadmap.

In the case of the six business teams I was working with, the roadmap process taught us that they might have been working cooperatively, but that they weren't necessarily working to the same set of goals.

So we developed three key goals that would provide dramatic financial returns to the company:

1. Leverage current technology to **improve planning**;
2. Develop a **vendor-managed inventory** practice;
3. Integrate business-to-business technology into the current system to **communicate better** with suppliers.

The next step would be to change business practices to achieve those goals by identifying leading practices, setting a competitive operational strategy and aligning any **requests for new technology** with the **TO BE vision** for the current technology.

One of the critical steps in the SCOR Project Roadmap is to identify and group disconnects. Disconnects can be thought of simply as barriers to reaching a performance goal. A disconnect is generally based on one of the following:

- Organizational issues (e.g., logistics doesn't work well with manufacturing);

- Process problems (e.g., forecasting process does not work well with the sales planning process);
- People issues (e.g., Joe does not get along with Sara);
- Technology (e.g., multiple systems with poor interfaces).

Disconnects can occur at any of the three levels in the SCOR model:

- Operational Strategy;
- Material Flow;
- Work/Information Flow.

It's not uncommon for a \$200 million business to have more than 200 individual disconnects grouped into 10 categories spanning all three levels of the model.

In an effective approach to business process reengineering, the goal in the **TO BE design** is to eliminate these disconnects. In short, the process reengineering team develops a disconnect list. Then it establishes competitive performance requirements and identifies special constraints.

With these in hand, it can create a TO BE design.

Here are some specific examples of disconnects that helped my client to identify and support the right technology investment:

Operational strategy disconnect:

One business unit operated in an OEM market where the major accounts were introducing new products in an aggressive time frame. As a result, the unit's supply chain priorities were: responsiveness, delivery reliability

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and lean inventory. Its actual performance was: large manufacturing runs, long lead time, large (and poorly positioned) inventory, and a high cost based on the percentage of orders that had to be expedited.

That disconnect didn't result because the business unit was doing a bad job; it resulted because the unit was simply following the supply chain priorities of the other business units.

To resolve this disconnect, the corporate and business teams agreed that multiple supply chains could exist with different performance priorities.

Work/information disconnects:

There were disconnects between the internal planning processes. (The specifics were identified using the SCOR model as P1: plan supply chain; P4: plan delivery; D1.3: reserving inventory; D1.3: delivery schedule) and the OEM customer's planning processes (labeled by SCOR as P1: plan supply chain; P2: plan source; and S1.1: schedule material deliveries).

The businesses had not implemented available-to-promise, planning and forecasting, or distribution requirements planning.

To resolve these disconnects, the business team identified **vendor-managed inventory** (VMI), available-to-promise, and **collaborative planning forecasting and replenishment** (CPFR) as leading practices to provide backbone to work flow redesign. Using SCOR, the design team put together a cross-functional process to support the service and financial goals of the OEM market.

Material Flow Disconnects:

The corporate distribution infrastructure was a multiple-step distribution flow, in which material went from manufacturing to manufacturing warehouse to regional warehouse to customer regional warehouse to customer manufacturing warehouse to customer manufacturing.

The **TO BE design** leveraged the full capabilities of the current ERP system to support the key discipline that would make this distribution flow work smoothly: CPFR processes with key OEM customers.

The design also included aligning competitive requirements with operational strategy, which focused on reducing manufacturing cycle time and manufacturing direct shipments.

By the time our work was done, the company had also identified technology that it really

did need to acquire: sophisticated e-commerce capabilities.

The **moral of this story** is quite simple: Use what you've got before making more capital investments. The SCOR model is a valuable tool to help you analyze, design and

implement changes in your business processes in order to increase the functionality of your current software. The savings from improvement can fund new technology investments that are missing from your ERP system. ◀



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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.