

keepingSCOR

Updating the Supply-Chain Council's implementation model

Who and how may change,
but SCOR Level 3 makes it clear:
The work is the work

Putting the 'e' in enterprise

by Peter Bolstorff



How does the SCOR model deal with “e”?

That was the burning question among the 10 executives who approached me after my “How to Use SCOR” workshop at the *Supply Chain World* conference this spring. They had already made the assumption that the SCOR model needs to be revamped to support the wave of “e-stuff.”

But I’ve used SCOR to implement **e-projects**, and have concluded that the model doesn’t have to change because — in simple terms — the Internet may change how things get done, but [the work is still the work](#).

In the context of a supply chain improvement project, most people understand the **material flow process** (SCOR Level 2), but have trouble with the **work and information flow process** (SCOR Level 3).

True, it is the most detailed part of the model. It contains the most acronyms. It requires a personal learning investment on your part.

But there is a payoff: Work and information flow comprises nearly 50% of the design effort in a SCOR project. It is the main change-management driver in such a project — and the primary place in the SCOR model that illustrates the value of **e-stuff** investments.

Many people think it sounds like too much value to be true. So let’s look at how **SCOR Level 3 process elements** can be used to design **who and how** to make “work happen” on the web.

We’ll use an example of a single piece of work: [scheduling product deliveries](#). But first, some background.

Level 3 = The Work

I recently participated in a project for a manufacturer that began with a very simple goal: “I want to buy more over the web.”

In the analysis phase of the project we determined why: to reduce both direct and indirect costs in materials purchasing.

What is SCOR?

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

Next we determined what: a new flow for materials from five suppliers (who were “web capable”), representing 10 different physical locations.

With those issues defined, we were ready to design the **work and information flow** using SCOR Level 3.

Level 3’s process elements offer at least four important characteristics critical to the overall supply chain

improvement effort:

First, they help you **describe the work** in relationship to your organization.

Second, they help **map the work** to your system applications, using key transactions.

Third, they help the SCOR Level 1 metrics to become **personal, real-time decision support tools**.

Fourth, they can be used to illustrate the impact of leading practices on your organization.

Describing the Work

Sometimes, the tricky part is relating process to function. I like to use the **Swim Lane** approach. It provides a picture of **who** does **what** work, as defined by the SCOR Level 3 elements.

Picture an Olympic-size swimming pool with a number of swim lanes — each representing a different function in your organization. The only difference? While a different job function “swims” within each lane, work gets passed across the lanes, from one function to the next.

That’s what SCOR’s **work and information flow design** is all about. It follows these basic steps:

- identify the **as is** (the number of lanes and how work flows across them);
- determine the disconnects (inefficiencies) and leading practices (model), and then map the **to be** — which typically **eliminates lanes** and focuses the work.

If **e-stuff** is what you’re worried about, let’s bring it into the pool.

The client I mentioned earlier wanted to **buy more over the web**. So we needed to change one of the key work elements — scheduling product deliveries — by

identifying the **as is** and **to be** functions involved with placing an order with the supplier.

As Is swim pattern: A paper requisition was prepared by **1.** a member of the production team, and was given to **2.** the person responsible for materials who entered the requisition on the system. It subsequently was passed onto **3.** a buyer on the purchasing team, who created a purchase order. Eventually it was faxed to **4.** a customer service representative at the supplier.

In this **four-lane WORK process**, a performance disconnect was identified: The order quantity and delivery date were never confirmed. So there was no way of knowing whether the manufacturer's expectations — what it would receive and when — were the same as the supplier's intentions. The result? Regular problems with invoice payments, inventory and service levels.

To Be swim pattern: A design was created so that only one function — the supplier — was required to enter an order, which eliminated the above disconnect. The actual **work** — scheduling product deliveries — remained, but the **who** changed.

However, in order to eliminate production, materials and purchasing functions, the manufacturer had to make some system changes, too.

Mapping the Work

Based on the **To Be design**, in which the supplier creates the purchase order, it became essential for the manufacturer to integrate its ERP application to the **work** — scheduling product deliveries.

To further address the capability of how to buy more on the web, it became apparent that an Internet link was required to accomplish several things:

First, it needed to link order entry to the ERP modules for inventory, purchasing and advanced planning to provide a more effective flow.

Second, the flag for replenishment was changed from a schedule-based requisition to actual consumption based on a production work order.

Third, the inventory data, replenishment signal, and purchase order needed to be something that a supplier could manage efficiently and effectively.

Another identified disconnect was the amount of effort wasted trying to pay bills. In order to pay a supplier, an exact match between the receipt, purchase order and invoice had to occur.

In this **To Be swim pattern**, the web link gave the supplier visibility into how its products were being used, and to inventory levels of those products on the factory floor.

With each product sold, the supplier was able to create a purchase order for the consumed quantity and agreed to replenish the next day. With the supplier in control of the purchase order, invoice and advanced ship notice, the transactional match needed for the company to pay its bill occurred even prior to shipment.

Using the Metrics

While the **Level 1 SCORcard** is being adopted at an ever-increasing pace by manufacturers, one of the least understood metrics relates to work and information.

The most frequent project application focuses Level 3 performance on three categories:

- Productivity (transactions per person per time period);
- Quality (measuring the yield of good transactions);
- Time (both the processing time of the work and the dwell time between steps).

Obviously, they are interrelated but it is helpful to break them down for diagnostic purposes. In this manufacturer's purchasing scenario, leveraging a web-based system to consolidate the purchase order and order-entry functions resulted in drastically improved transaction productivity, quality of match and cycle time.

Leveraging Leading Practices

Vendor Managed Inventory is a leading practice that both manufacturer and supplier agreed to support. It is illustrated by

changing the work — scheduling product deliveries — from a shared activity to a supplier-initiated activity based on point-of-use inventory position. The loop is closed with a [rapid replenishment practice](#) — in this case, daily replenishment of consumption.

This manufacturer gained an e-enabled supply chain, with the *net effect* being improved transactional productivity and more time freed up for the buyer to establish and leverage still **e-practices**.

Leading Practices provide the basic guidelines for designing work and information flow. The SCOR Level 3 Elements begin the process of designing how technology, people and performance work together to achieve a common objective in supply chain performance.

Learning points

- Integration technology with work processes is a central part of the Work and Information Design of the SCOR project roadmap.
- The SCOR model's 22 work steps bring the supply chain work processes together like a perfect puzzle. It's simple yet elegant.
- The [work](#) is the work; the [how](#) and [who](#) will change with e-enabled technology.
- Poorly designed workflow is easier to resolve than you think.
- Work and information flow accounts for nearly 50% of the design effort in a SCOR project. It is the primary change-management driver for implementation, and the primary place in the SCOR model that illustrates the value of investments in “e-stuff.” ◀

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About SCOR

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