

Who's on first?

SCOR can help organize who does what and keep score of the progress as you fill out your supply chain lineup card

by Peter Bolstorff

What is SCOR?

The **Supply Chain Operations Reference** model, developed by the *Supply-Chain Council*, provides a standard methodology for managing supply chain projects centered on Plan, Source, Make, Deliver and Return. SCOR is **SCTN's** recommended implementation model for supply chain initiatives.

Three seemingly unrelated events contributed to the theme of this article: first, the NCAA final four weekend for men's and women's basketball (I coach 5th grade girls basketball at my daughter's school); second, a replay of Abbott and Costello's classic "Who's on First" comedy routine on a local radio station; third, and most important, my participation in a recent management roundtable focused on organizational alignment around supply chain processes.

- The winning basketball teams had a well-thought-out game plan that took advantage of their strengths and capitalized on their opponents' weaknesses. They enjoyed near-perfect execution of the plan by utilizing each player in their appropriate role, and the whole team — from the trainer to the starters — shared the same objective: to win.
- The comedians clearly needed a **common language mutually understood by all** in their baseball conversation. Costello's confusion, of course, is played for laughs, but how many times have you gotten involved in definitional sparring on how to define and measure supply chain with your colleagues and executive team? Not so funny then, is it?
- The roundtable participants identified four main players who kept running into each other "on and off the court," and who couldn't communicate with each other using the same language. The players included:
 - Centralized-shared operational functions such as purchasing, warehousing, product development, transportation, call center, marketing and finance (accounts payable/accounts receivable)
 - Business unit functions including sales, engineering, manufacturing, purchasing, customer service, planning and finance (cost accounting)
 - Centralized information technology functions such as application development, system operations and business intelligence/data warehouse/reporting
 - Centralized process improvement functions including lean manufacturing, Six Sigma and supply chain.

As the roundtable discussion opened up, most admitted that while they knew intuitively what to do, they did not have

a supply chain game plan that clearly defined roles for supply chain processes, shared objectives and measures for success. They also lacked a common language to frame supply chain issues for their organization.

As you might have guessed by now, the SCOR model can provide a **framework to help organize who does what** and keep score of your performance. Here is a way to help organize your supply chain game plan.

In their classic business process reengineering book, *Improving Performance: How to Manage the White Space on the Organization Chart* (Jossey-Bass, 1985), Geary Rummler and Alan Brache lay out a game plan for performance improvement. They describe **three levels of performance**: organization/function, process and people/jobs. Each level needs to address three factors of performance: goals/strategy, design and measurement/management.

A supply chain version of this — including a new level called technology — is shown in **Table 1**. A comprehensive supply chain game plan addresses the questions in each cell of the matrix. The ideal sequence is to begin with organization goals and strategy, then move left to right and top to bottom, finishing with technology management and measurement.

In general, the more cells that are addressed, the better the game plan and **the better the chance to win** within your competitive environment. Following is a quick assessment of all four levels by one of the participants (whom I'll call **Beth**) of her company's (**Company X**) current supply chain game plan and how she thought SCOR could help shore it up.

Organization goals, design and management

Company X had just completed a strategic business plan for revenue and profit growth over the next five years. It included both organic sales growth as well as targeted acquisitions in new markets. It also included potential divestitures of non-core businesses. The appropriate effort was applied to identify internal strengths and weaknesses as well as opportunities and threats (SWOT).

In thinking this through, the executive leadership team had identified several new organizational structures based on financial reporting of profit and loss (P&L) statements and consolidation of some functions into a more centralized staff group. One of the targeted functions was "supply chain," in spite of the fact that no single executive had a common understanding of what supply chain meant.

The key performance indicators that the executive team managed with rigor each month included revenue, operating income, unit cost and inventory. Beth was the highest ranking Company X official associated with supply chain, and was a favorite candidate to lead that new centralized effort.

Beth's supply chain game plan at the **Organization** level of performance was

for the most part blank. In terms of organization goals, though customer channels and lines of business were pretty well defined, Beth did not have a consensus on how many supply chains were a part of Company X, and she had only pockets of anecdotal feedback regarding the requirements for delivery reliability, flexibility, responsiveness, supply chain cost and asset management efficiency. The big blow was the absence of effective sales and operations plans aligning unit and financial plans. **Organization design had its own problems.**

The obvious supply chain functions within Company X still operated in silos and exhibited all three kinds of organizational learning disabilities. They include Not Invented Here (NIH), Not My Job (NMJ) and We're Unique

(WU). To make matters worse, there was intense debate within the business units as to **how much control would be lost** in responding to their customer's demands and achieving their business plans. Furthermore, the way Company X implemented its ERP system wasn't a confidence builder.

Lastly, to magnify the blank in organizational management, Beth described 14 different ways business unit leaders within Company X were using to define delivery performance, none of which included both "on-time" and "complete" components.

Beth identified the following SCOR project tools to help put her supply chain organization level game plan together:

Business Context-Supply Chain Profile Document, summarizing key

components of her operational strategy and resources

Supply Chain Definition Matrix to identify the number of Company X supply chains

Competitive Requirements-Chip Exercise prioritizing delivery reliability, flexibility and responsiveness, supply chain cost, and asset management efficiency for each market/customer channel

SCOR Level Three processes to help determine responsibility and accountability for supply chain planning, execution and enabling processes between business units and potential central staff

SCORcard, including **SCOR Level One** metrics, **Hoovers'** industry comparison and **PMG** benchmarking comparison.

Table 1. Supply Chain Improvement Game Plan Questions

| | Goals — Supply Chain Strategy | Design | Management and Measurement |
|---------------------|---|--|---|
| Organization | <p>Has the organization's supply chain strategy/direction been articulated and communicated?</p> <p>Does the supply chain strategy make sense in terms of the business strategy and plans, including external threats and opportunities and the internal strengths and weaknesses?</p> <p>Given this supply chain strategy, have the required sales and operational outputs of the organization and the level of performance expected from each been determined and communicated?</p> | <p>Does the formal organization structure support the supply chain strategy and enhance the efficiency of the overall business?</p> <p>Are all relevant supply chain functions in place?</p> <p>Are all the current functions necessary?</p> <p>Is the current flow of sales and operational inputs and outputs between functions appropriate?</p> | <p>Is customer-facing, internal-facing and shareholder-facing performance measured?</p> <p>Have the appropriate supply chain performance requirements, priorities and goals been set?</p> <p>Are supply chain resources appropriately allocated?</p> |
| Process | <p>Are goals for Plan, Source, Make, Deliver and Return processes linked to customer/organization requirements?</p> <p>Are the appropriate enable processes in place to support supply chain planning and execution?</p> | <p>Are the current supply chain processes the most efficient/effective Plan, Source, Make, Deliver and Return processes for accomplishing the supply chain process goals?</p> | <p>Have the appropriate Plan, Source, Make, Deliver and Return process sub-goals been set?</p> <p>Are the Plan, Source, Make, Deliver and Return processes being performance managed?</p> <p>Are sufficient resources allocated to each Plan, Source, Make, Deliver and Return process?</p> <p>Are the interfaces between Plan, Source, Make, Deliver and Return process steps being managed?</p> |
| People/Jobs | <p>Are job outputs and standards linked to Plan, Source, Make, Deliver and Return process requirements? And, are they cascaded from the organization level?</p> | <p>Are Plan, Source, Make, Deliver and Return process requirements reflected in the appropriate jobs?</p> <p>Are job steps in a logical sequence?</p> <p>Have supportive policies and procedures been developed?</p> <p>Is the job environment sound?</p> | <p>Do the performers understand the job goals (outputs they are expected to produce and standards they are expected to meet)?</p> <p>Do the performers have sufficient resources, clear signals and priorities, and logical job design?</p> <p>Are the performers rewarded for achieving job goals?</p> <p>Do the performers know if they are meeting job goals?</p> <p>Do the performers have the necessary knowledge/skills to achieve the job goals?</p> <p>If the performers could answer "yes" to all the above, would they have the physical, mental and emotional capacity to achieve their job goals?</p> |
| Technology | <p>Are goals for technology linked to business requirements?</p> <p>Do the technology goals support Plan, Source, Make, Deliver and Return processes and people/jobs?</p> | <p>Is the most efficient/effective technology being put in place to accomplish the Plan, Source, Make, Deliver and Return processes?</p> | <p>Have the appropriate technology sub-goals been set?</p> <p>Is the technology being performance managed?</p> <p>Are sufficient resources allocated to support effective use of technology?</p> <p>Are the interfaces between technologies being managed?</p> |



Process goals, design and management

Company X was in year three of its Six Sigma program. It was enjoying anticipated savings primarily driven by projects aimed at unit-cost reduction within the manufacturing and purchased goods realms. It was challenged to get the anticipated savings out of the champions and black belts in the supply chain functions. It seemed the more projects the champions launched, the bigger the anticipated savings, but the slower the return.

Project selection was getting to be a challenge — easy at first, the brainstorming was getting more difficult, and the confidence level of picking the right project was diminishing. Furthermore, project leaders and teams were getting frustrated at the lack of support and consequent progress on what seemed to be an endless cycle of cross-functional decision-making gridlock. What was so easily accomplished in manufacturing seemed to take forever in supply chain.

Lastly, process owners were identified but ended up mirroring their relevant functional scope of control and hence had performance measures that reinforced suboptimization. As director of customer service, Beth was both a Six Sigma champion and a customer service process owner, so she had first-hand knowledge of the issues.

Beth's game plan at the **Process** level of performance had some questions addressed, but no cell was completely finished. As for process goals, her biggest challenge was to define supply chain from a pure process point of view versus a collection of functions. For example, the SCOR definition of **Deliver** roughly equates to tasks that Company X defines as part of **Logistics, Customer Service, Transportation, Credit and Accounts Receivables**. The rest of the row was dependent on this cell. Once the processes were defined strategically, then the other two factors — **Process Design** and **Process Management** — could leverage the already effective Six Sigma infrastructure.

Process Design had one additional challenge — picking the right size project. Beth needed to address in her game plan a way to match the Six Sigma project execution methodology with the right size supply chain process improvement effort. Implementing **Plan Supply Chain** is a much bigger scope that **Schedule Product Deliveries** and may call for a more traditional business process reengineering approach.

Lastly, Beth needed to transition Company X from functional management to process management, looking at supply chain cost as the sum of order management, material

acquisition, planning, inventory carrying and IT costs was 180 degrees away from current operating practices.

Beth identified the following SCOR project tools to help her put her supply chain Process level game plan together:

SCOR Level Two geographic maps and thread diagrams to help identify strategic supply chain processes utilized by all resources

SCOR Project Roadmap-Six Sigma convergence points to help assess appropriate application of improvement approach

SCOR Level Two metrics to help establish common definitions and goals

SCOR Level Three swim diagrams to help identify work and information processes

Transactional analysis and productivity spreadsheets to help chart performance and point to key issues

Effort-Impact diagram to help prioritize improvement project sequence.

Job goals, design and management

Company X took pride in how it treated its people. Various incentives were in place to reward performers and manage those who did not meet expectations. The company was very proactive about career planning and development, and supported this process with both internal and external training and education opportunities. All this culminated in an annual review process for each employee.

Beth's game plan for the **Job** level of performance needed only to address the **Job Design** factor. **Job Goals** and **Job Management** could simply leverage the already existing corporate culture and processes, and those questions were addressed. Her challenges in Job Design included five issues:

1. Identify the process requirements.
2. Translate them into a set of **Job Descriptions-Levels-Pay**.
3. Assess personnel against requirements.
4. Make a hiring decision.
5. Train all personnel effectively how to operate the new processes.

As the whole organization learned from its enterprise resource planning (ERP) implementation, people using processes with technology is where performance is won or lost in supply chain.

Beth identified the following SCOR project tools to help her put her supply chain Job level game plan together:

SCOR Level Four process maps to help determine job tasks and scope of responsibility

SCOR Business Blueprint to help communicate how all the supply chain processes fit together

SCOR Level Three metrics to help individuals see the ultimate goals they have in carrying out the process tasks

SCOR dictionary as a resource for people to consult

Supply-Chain Council as a resource to others who have used SCOR.

Technology goals, design and management

Company X implemented its ERP system as many do — low on process reengineering, high on system-enabled best practices, short on money to take advantage of new management reports, and not enough training. Twenty-four months past the “go-live” event, the company is now facing a significant upgrade and is looking to use the lessons learned from the past to guide it to use more functionality faster. As a result, three major process reengineering projects were about to be launched — one focused on planning, another on customer service (vendor-managed inventory), and the third on available-to-promise. Beth was a steering team member for the customer service projects.

All the questions at the **Technology** level were answered as a part of the ERP implementation. The issue is that they were answered independent of the Organization, Process and Job levels. Rather than starting from the top and moving down, Company X had started with the technology row and stopped.

Beth's game plan for the Technology level involved three parts. First, she needed to tweak the scope the reengineering projects to mirror the processes defined in the **Process Design** cell. Second, she needed to redo the answers for each factor in the Technology level using the reengineering projects as the environment to get everybody on the same page. Third, she needed to slightly delay the project to get the appropriate Organization level resources in place to establish the appropriate ownership for implementation.

Beth identified the following SCOR project tools to help her put her supply chain Technology level game plan together:

SCOR Level Three inputs and outputs from the dictionary to help define information flow

SCOR Business Blueprint to help communicate how all the supply chain processes fit together and define high-level business requirements

SCOR Level Three metrics to help identify technology performance measures

SCOR Level Three leading practices and technology features to help establish the desired process state.

At the conclusion of the roundtable, all the participants came away with three “a-ha's”:

- First, a good game plan requires more than just establishing a service level and safety stock replenishment plan.
- Second, you don't need a 200-page strategy document to guide your team to victory.
- Third, getting started will help you focus on the white spaces in your own supply chain game plan. ◀



Peter Bolstorff is the founder of Minneapolis-based **SCE Limited**, a training firm spun off from **PRAGMATEK Consulting Group Ltd.** that is focused on educating the do-it-yourself business marketplace in supply chain improvement techniques. He chairs the SCOR Integration Committee and the Supply-Chain Council's Technical Committee, and designed the Supply-Chain Council's executive education series to aid in the successful implementation of SCOR. He is serving a two-year term on the SCORboard, the board of directors for the Supply-Chain Council. He is also the co-author (with **SCTN's** Bob Rosenbaum) of *Supply Chain Excellence: A Handbook for Dramatic Improvement Using the SCOR Model* (AMACOM, 2003).

To reach Peter Bolstorff: peterbolstorff@attbi.com
For more about SCE Ltd.: <http://sce.webex.com>
To comment on this article: sctneditor@penton.com

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.