

EXPRESSPOINT ADOPTS THE SCOR® MODEL FOR STRATEGIC SUPPLY CHAIN PROGRESS

APICS Supply Chain Council Supply Chain Operations Reference (SCOR) model equalizes client requirements and fiscal goals.

GOALS

- Advance supply chain performance
- Maximize profitability
- Drive business growth
- Obtain consistent execution on deliverables
- Streamline organizational processes

APPROACH

- Apply foundational strategies and techniques from the SCOR model
- Gain support from stakeholders
- Define the project and its objectives
- Analyze metric and process performance
- Develop a project portfolio
- Implement plans

RESULTS

- Enhanced understanding of the end-to-end supply chain and its segments
- Implemented a formal sales and operations planning strategy
- Integrated supply chain processes with the budget cycle and financial statements
- Improved perfect line fulfillment
- Created a more flexible and responsive supply chain
- Refined metrics for greater visibility
- Reduced cost to serve

Driving Meaningful Change

ExpressPoint is a provider of multi-vendor depot repair and supply chain solutions for large original equipment manufacturers, field service providers, and third-party logistics providers. Offerings include planning and forecasting; sourcing, procurement, and stocking; reverse logistics; and repair and refurbishing of spare parts and subsystems for computers, telecommunications equipment, printers and components, and home-theater electronics. Each year, the organization delivers 1.6 million global shipments, with fill rates of 98 percent or higher, from its ISO 9001:2008-certified facilities in the United States and Mexico.

The ExpressPoint leadership team knows that collaboration, continuous improvement, and ease of doing business are essential to delighting their customers. Key business goals are on-time delivery, high-quality products and services that bring about improved asset use and field force effectiveness, and low total cost. In order to deliver on these objectives, company leaders recognized that they needed to strategically analyze and optimize the supply chain. The areas identified included planning and scheduling, repair processes, sourcing, engineering, and make and deliver processes.

“The organization structure had become disjointed,” explains Susan Buttner, ExpressPoint director of finance. “Through employee attrition, responsibilities were assigned to others who lacked expertise with supply chain strategy. Departments became siloed and vertical-thinking, focusing on their specific tasks rather than the holistic, end-to-end supply chain.”

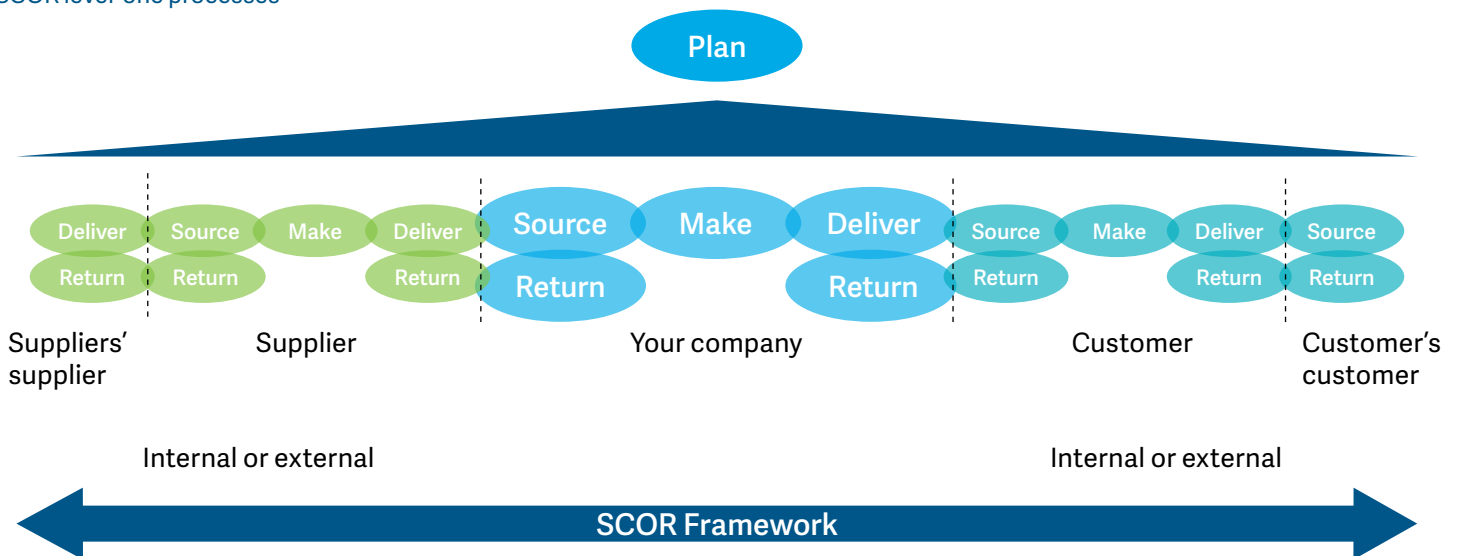
ExpressPoint executives devised a three-year strategy to drive phased changes, balancing industry cost, service, quality, and reporting standards. They selected the Supply Chain Operations Reference (SCOR) model and the supplemental *Supply Chain Excellence: A Handbook for Dramatic Improvement Using the SCOR Model* by Peter Bolstorff and Robert Rosenbaum to guide their work. Using a case study approach, *Supply Chain Excellence* explains how to effectively use SCOR to identify a strategic roadmap to improved supply chain competitive performance.

“These tools were chosen because they demonstrate a proven approach,” says Kelly Dudek, chief operating officer. “In addition, they teach employees to carry out day-to-day principles, the technique demands team ownership, and SCOR is a cross-industry standard.” She says she and her colleagues also valued the fact that the model’s format is similar to that of the six sigma master black belt and is consistent with their investment in lean and six sigma.

SCOR unites into a single framework essential supply chain and operations management elements. As Buttner puts it, “The model combines business processes, metrics, leading practices, and people into one structure,” adding that the tools are the “state-of-the-art industry standards.”

Under SCOR, supply chain and operations management are defined as the integrated processes of plan, source, make, deliver, and return—from the suppliers’ supplier to the customers’ customer. (See Figure 1.)

Figure 1
SCOR level-one processes



SCOR level-one metrics are sorted into five performance attributes; the first three focus on customers, the last two on internal performance. There are three levels of decomposition, including more than 250 diagnostic measures. (See Figure 2.)

Figure 2
SCOR level-one metrics

Attribute	SCOR 11.0 Metric
Reliability	RL 1.1 Perfect order fulfillment
Responsiveness	RS 1.1 Order fulfillment cycle time
Agility	AG 1.1 Upside supply chain flexibility
	AG 1.2 Supply chain upside adaptability
	AG 1.3 Downside supply chain adaptability
	AG 1.4 Overall value at risk
Cost	CO 1.1 Total cost to serve
Asset management efficiency	AM 1.1 Cash-to-cash cycle time
	AM 1.2 Return on supply chain fixed assets

Importantly, the SCOR implementation roadmap follows five steps. These are as follows:

- 1. Build organization support.** Here, the major deliverables are sponsor and stakeholder support and education. A common challenge is finding the tipping point for change.
- 2. Define the project.** In this step, the objectives are to create a business context summary, a definition of the supply chain, and the project scope and charter. The planning and organizing of the supply chain excellence initiative is a key issue to address.
- 3. Analyze performance.** This phase entails applying a scorecard and defect and process analysis. In addition, defining the metric and process performance gap is important.
- 4. Develop the project portfolio.** In addition to the portfolio, the implementation priority and a project list must be set.
- 5. Implement the project.** In this final phase, the focus is on the development, pilot, and implementation of the portfolio project—and attaining desired results without unnecessary risk.

The five steps in action

Dudek says she and her colleagues knew that a successful project would demand commitment by all stakeholders. “Getting this buy-in was going to be a principal predictor of implementation success,” she adds. The greatest challenge ExpressPoint faced along the way involved gaining both vertical and horizontal organizational alignment. Therefore, they focused on four key resources: an executive sponsor, a steering team to review and approve recommendations, a project leader and team, and a design team to analyze and recommend improvements.

The main concept behind SCOR is to analyze a representative supply chain deeply and then leverage improvements across other networks—remembering to think big, act small, and scale fast. As such, the first step for ExpressPoint was to define the supply chains in its organization, keeping in mind that a supply chain is a combination of product, customer, and geography. Team members began defining their supply chains by type of service and account. They soon realized that all types of services were provided to each account. Next, the various scenarios were sorted using revenue, volume, stockkeeping unit complexity, and inventory data. Ultimately, it was concluded that all services provided to the retail, manufacturer, and custom key accounts were important to business objectives.

Using the SCOR metric definitions as a guide, ExpressPoint team members defined their scorecard, collected a sample data set, and determined baseline data over a fiscal year. Lean and six sigma training was used to define and analyze metric failures, which then uncovered the defects that caused the metrics to fail. Meanwhile, SCORmark—a benchmark survey—was completed in order to provide a statistical comparison of ExpressPoint to similar businesses. Lastly, consensus was achieved between the project and steering teams as to the desired level of performance for each attribute. The agreed-upon caveat was that the team would prioritize one attribute with an advantage target, one attribute with a superior target, and the remaining attributes with parity targets.

“The gap between actual and target sets the stage for the following project phases while defining process improvements,” Dudek explains.

Next, ExpressPoint professionals created a SCOR process maturity map that rated and summarized activities as broken or missing, in need of improvement, or working effectively. This illustrative analysis enabled the identification of strategic process steps, system transactions, business rules, and significant disconnects. In the end, the team concluded that company planning processes and system capabilities were not integrated—and many were broken or missing. It also became evident that the sales and operations planning (S&OP) process did not align the business plan with long-term operational, sales, and financial strategies. The tactical planning processes were likewise disconnected from S&OP, as well as customer order plans, plant master production plans, and supplier risks over the near term horizon.

Having completed the metric and process performance analysis, desired improvements were grouped into logical projects and prioritized based on the benefits identified in

the scorecard. “The project team performed interviews and evaluated the 30-plus SCOR level-three processes identifying gaps,” Buttner says. “These disconnects were collated and weighted, aligning to a metric and strategic similarity. From this exercise, the projects were identified with an assumption of impact to the company.”

The science behind this benefit calculation is to relate each failure in the metric defect analysis to a SCOR process element. As processes are grouped, an understanding of the underlying issues will emerge and strengthen potential advantages.

The ExpressPoint team ultimately identified six projects. Two were prioritized for the initial wave of implementation: first, integrated supply chain planning—the scope of which included collaborative distribution requirements planning, master product scheduling, and S&OP. The objectives for this project were to heighten perfect line delivery, cut expenses, and increase inventory turns. Second, ExpressPoint aimed to target new repair and revenue opportunities.

The subsequent four projects included improving source process effectiveness, driving innovative engineering solutions to reduce material cost, and advancing both the make and deliver processes.

Today, ExpressPoint is benefiting from a greater understanding of the end-to-end supply chain—from its suppliers to its customers’ customers. “The SCOR model helped us better understand our supply chain and the competitive requirements,” Buttner says. “Refining our metrics gives us increased visibility and helps balance our customers’ requirements with our financial objectives.”

She adds that a formalized S&OP strategy was achieved, and its maturity level has been benchmarked. In addition, team members are working through the supply chain horizontally

and have completed the budget cycle for 2015, integrating the process with the financial statements.

“We have been able to improve our performance attribute of perfect line fulfillment and have reduced our cost to serve,” she says. “Furthermore, we continue to evolve upside supply chain flexibility and rough-cut capacity planning.”

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Susan Buttner, Director of Finance, ExpressPoint

Dudek says her company’s experience demonstrates a highly successful adoption of the SCOR model and the essential three ingredients for success: organizational support that starts at the top, a platform upon which SCOR can generate improvements, and a commitment from team members to learn and apply the right metrics and processes.

Buttner agrees, adding that it’s important to be committed to the change and appreciate that culture shift is a journey. “It will mature and evolve over time,” she says. “Ultimately, an efficient supply chain becomes the heartbeat of a company.”

About APICS Supply Chain Council

This report was developed by APICS Supply Chain Council (APICS SCC), an organization that advances supply chain and operations management and innovation through research, education, and publications. APICS SCC maintains the Supply Chain Operations Reference (SCOR®) model, the supply chain management community’s most widely accepted framework for evaluating and comparing supply chain activities and performance. For more information, visit apicsscc.org.

About the Supply Chain Operations Reference (SCOR)

The Supply Chain Operations Reference (SCOR®) model is a framework that enables users to address, improve, and communicate supply chain management practices. SCOR is a management tool and a reference model for end-to-end supply chain management. Organizations that use SCOR are consistent top performers in their industries, have grown in aggregate share value two-to-three-times faster than the Dow Jones and S&P 500 indexes, and have reaped significant cost savings and economic return on SCOR-related investments. The SCOR Framework is available only to APICS SCC members, affiliates, and sponsors. Contact APICS SCC to learn more.