Supply Chain Operations Reference (SCOR®) model

Overview - Version 10.0

About Supply Chain Council

Supply Chain Council (SCC, supply-chain.org) is a global nonprofit organization whose framework, improvement methodology, and benchmarking tools help member organizations make dramatic and rapid improvements in supply chain performance. SCC established and maintains the supply chain world's most widely accepted framework for evaluating and comparing supply chain activities and their performance: the Supply Chain Operations Reference (SCOR®) model. The SCOR framework makes it possible for organizations to quickly determine and compare the performance of supply chain and related operations within their organization and against other organizations. SCC and its member volunteers continually advance these tools and provide education on how to leverage them for achieving superior supply chain performance.

A consortium of 69 organizations founded SCC in 1996. Today, the SCOR model is used by thousands of organizations worldwide. SCC membership is open to all organizations interested in applying and advancing the state-of-the-art in supply chain management systems and practices. Our members represent a broad cross-section of industries including manufacturers, distributors, retailers, and service providers as well as technology solution providers, business consultants, academic

institutions, and government organizations. SCC has chapters in Australia/New Zealand, Greater China, Europe, Japan, Latin America, Middle East, North America, Southern Africa, and South East Asia.

Supply Chain Council's website contains additional information on the SCOR model, SCC membership, and other resources.

www.supply-chain.org

Join Supply Chain Council

SCC's frameworks, network, benchmarking, research, and training help your management team analyze your supply chains faster, quickly recognize opportunities, implement changes, improve operational processes, track results, and sustain gains.

SCC is an active, peer-led research organization with a keen focus on continuous research and development. Membership participation on committees and working groups contributes to the development of new models, tools, and practices that are released to the membership.

Membership gives every supply chain professional within your organization access to the SCOR® model, the Customer Chain Operations Reference (CCORSM) model for customer chain management, and the Design Chain Operations Reference (DCORSM) model for design chain management.

We invite you to learn more and join us.
- supply-chain.org/join
- +1 202 962 0440

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SCOR The Global Supply Chain Language

The Supply Chain Operations Reference (SCOR®) model provides a unique framework that links performance metrics, processes, best practices, and people into a unified structure. The framework supports communication between supply chain partners and enhances the effectiveness of supply chain management, technology, and related supply chain improvement activities.

Organizational benefits of adopting the SCOR model include:

- Rapid assessment of supply chain performance
- Clear identification of performance gaps
- Efficient supply chain network redesign and optimization
- Enhanced operational control from standard core processes
- Streamlined management reporting and organizational structure
- Alignment of supply chain team skills with strategic objectives
- A detailed game plan for launching new businesses and products
- Systematic supply chain mergers that capture projected savings

scor®

Supply Chain Operations Reference Model

SCOR is a consensus model. It was developed and continues to evolve with the direct input of industry leaders who manage global supply chains and use it daily to analyze and improve the performance of their organizations. It features an intentionally broad scope and definitions that can be adapted to the specific supply chain requirements of any industry or application.

Executive Overview

How SCOR Delivers Value

As a business leader you are accountable to your customers, shareholders, and stakeholders. Business value, whether real or perceived, is derived from the predictability and sustainability of business outcomes. It lives, healthy or sick, in those gaps between expected vs. perceived vs. actual performance. Value is articulated by measuring what is being managed.

The SCOR model helps refine strategy, define structure (including human capital), manage processes, and measure performance. An organization's annual strategic priorities are manifest in SCOR's vertical process integration (management-led programs for doing the right things, as defined by the customer) and its horizontal process integration (leadership-led programs for doing the right things well, as defined by capabilities).

Organizations that have applied SCOR to help with supply chain problem solving, process improvement, process redesign, or business process engineering, have demonstrated that SCOR is an effective enabler for aligning an organization's portfolio of improvement projects with strategic goals and objectives.

SCOR Helps Solve the Top 5 Supply Chain Challenges

Economic cycles, whether markets are growing or contracting, always force organizations to take an intense look at their supply chains, question their assumptions, root out inefficiencies, and plan for growth. Such analysis and restructuring are an ongoing requirement for effective supply chain management. Here is a brief summary of how SCOR aids this work and helps solve five of the never-ending supply chain management challenges.

① Superior Customer Service

Effective supply chain management is all about delivering the right product in the right quantity and in the right condition with the right documentation to the right place at the right time at the right price. If only it were as simple as it sounds.

The SCOR model provides a framework for measuring and understanding current supply chain conditions and performance and creates a foundation for improvement. It can help supply chain managers evaluate cost/performance tradeoffs, develop strategies for meeting new customer expectations, and respond to domestic and global market growth.

② Cost Control

Supply chain operating costs are under pressure from rising freight prices, global customers, technology upgrades, rising labor rates, expanding healthcare costs, new regulatory demands, and rising commodity prices. To control such costs there are thousands of potential metrics that supply chain organizations can and do measure. Managers need to zero in on the critical few that drive total supply chain costs within their organizations.

SCOR metrics provide the basis for an organization to measure how successful it is in achieving its desired objectives. SCOR metrics are designed to be used in conjunction with supply chain performance attributes, making it easier to compare different supply chains and different supply chain strategies.

3 Planning And Risk Management

Supply chains must periodically be assessed and redesigned in response to market changes, including new product launches, global sourcing, new acquisitions, credit availability, the need to protect intellectual property, and the ability to maintain asset and shipment security. In addition, supply chain risks must be identified and quantified.

Organizations in all sectors—commercial, military, and NGOs—have found that using SCOR as a planning and risk management foundation leads to faster implementation, more comprehensive identification of potential risks, and easier coordination with customers, suppliers, and other stakeholders. SCOR helps users establish rules and strategies, assign responsibilities, coordinate responses, and monitor current conditions.

4 Supplier/Partner Relationship Management

Different organizations, even different departments within the same organization, can have different methods for measuring and communicating performance expectations and results. Trust begins when managers let go of internal biases and make a conscious choice to follow mutually agreed upon standards in order to better understand current performance and opportunities for improvement.

SCOR provides a common language for supply chain classification and analysis. Using a common language and framework makes it easier for teams to communicate, speeds benchmarking efforts, and enhances the evaluation of best practices.

5 Talent

As experienced supply chain managers retire—and organizations scale up to meet growing demand in developing markets—talent acquisition, training, and development are becoming increasingly important. Supply chain leaders need a thorough understanding of the key competencies required for supply chain management roles, specific job qualifications, methods for developing future talent and leaders, and the ability to efficiently source specific skills.

Some SCC members have organized the capabilities of their global supply chain organizations around the SCOR framework. The SCOR skills management framework complements process reference, metrics reference, and practice reference components with baseline skills, experience, aptitudes, and training.

Achieving: Supply Chain Superiority

SCOR is about much more than individual improvement projects. The ultimate objective of any organization that deploys the SCOR model is to build a superior supply chain that is integrated with the overall organizational strategy. Aided by common supply chain definitions, metrics, and strategies, the integrated supply chain extends between and beyond the walls of the organization that owns the customer order.

You know that you can't manage what you can't measure. Well, it's also impossible to make effective decisions if every department in your organization measures performance differently. Organizations that are not integrated—where planning, sourcing, manufacturing, and logistics all have their own agendas and their own performance metrics that do not align with overall business goals—cannot respond effectively to market changes and opportunities. An integrated operating model does not happen spontaneously. The natural tendency is toward expediency and whatever set of metrics makes each department or functional area look best.

SCC research has found a high correlation between organizations that implement an integrated, end-to-end supply chain operating model enabled by the SCOR model and market outperformance in key financial measures. These include profit margins, inventory turns, asset turnover, and working capital. In addition, such organizations benefit from a much lower risk of supply chain disruption.

How SCOR Works:

It's All About Relationships

The SCOR model provides a framework that links business processes, metrics, best practices, and technology into a unified structure. It is hierarchical in nature, interactive, and interlinked. The SCOR model supports supply chain improvement by aiding the capture of an "as-is" current state from which the desired "to-be" future state can be derived.

By speeding data collection, SCOR can make it much less time consuming for managers to find answers to basic questions about how a supply chain is performing, drill down to identify contributing factors, and quickly initiate corrective actions. SCOR facilitates supply chain integration by providing common process and metric definitions applicable across multiple organizations. For each process it includes parent and/or child processes, performance metrics, best practices, and the skills required for the employees performing the process.

For example, consider Perfect Order Fulfillment. This metric provides a good indication of how well every facet of a supply chain—planning, sourcing, manufacturing, and delivery—are tuned and coordinated to meet customer demand. Achieving Perfect Order Fulfillment of 100% is difficult, if not impossible, and may be prohibitively expensive because it has so many contributing factors. These include: on time to customer request, complete order shipment, undamaged, and the correct paperwork.

The SCOR model contains the Perfect Order Fulfillment metric definition, calculation methods, and discussion points. The SCOR model lists the processes that influence the performance of the level 1 metric and the associated level 2 metrics to analyze in order to identify the root causes of any issue. By examining level 2 metrics, managers can then determine the level 3 processes and metrics to investigate.

The SCOR Structure

The Boundaries of Any Model Must be Well Defined

SCOR processes extend from your supplier's supplier to your customer's customer. This includes all customer interactions from order entry through paid invoice; all product (physical material and service) transactions, including equipment, supplies, spare parts, software, etc.; and all market interactions, from understanding aggregate demand to the fulfillment of each order.

SCOR does not describe every business process or activity. It does not address sales and marketing, research and technology development, or product development. SCOR assumes but does not specifically address quality, information technology, or administration.

What is a Process Reference Model?

The purpose of a process reference model, or business process framework, is the ability to describe your process architecture in a way that makes sense to key business partners. It is especially useful for describing value chains that cut across multiple departments and organizations, providing a common language for managing such processes.

A process reference model can be a powerful management tool. Once a complex management process is captured in standard process reference model form, it can be measured, managed, and controlled. It can also be tuned and re-tuned to achieve a specific purpose or attain a competitive advantage.

The SCOR process reference model contains:

- **Performance Metrics:** Standard metrics to measure process performance
- **Processes:** Standard descriptions of management processes and a framework of process relationships
- **Practices:** Management practices that produce best-in-class performance
- **People:** Training and skills requirements aligned with processes, best practices, and metrics

SCOR Performance

The performance section of SCOR consists of two types of elements: Performance Attributes and Metrics. SCOR Level 1 metrics are strategic, high-level measures that cross multiple SCOR processes. Lower level metrics are associated with a narrower subset of processes. For example, delivery performance is calculated as the total number of products delivered on time and in full based on a commit date.

Performance Attributes

A performance attribute is a group of metrics used to express a strategy. An attribute itself cannot be measured; it is used to set strategic direction. For example, "The LX product needs to be best-in-class for reliability," and "The XY market requires us to be among the top five most agile manufacturers." Metrics measure the ability of a supply chain to achieve these strategic attributes.

SCOR identifies five core supply chain performance attributes: Reliability, Responsiveness, Agility, Costs, and Asset Management. Consideration of these attributes makes it possible to compare an organization that strategically chooses to be the low-cost provider against an organization that chooses to compete on reliability and performance.

Reliability	The Reliability attribute addresses the ability to perform tasks as expected. Reliability focuses on the predictability of the outcome of a process. Typical metrics for the reliability attribute include: on-time, the right quantity, the right quality. The SCOR KPI (level 1 metric) is Perfect Order Fulfillment. Reliability is a customer-focused attribute.
Responsiveness	The Responsiveness attribute describes the speed at which tasks are performed. Examples include cycle-time metrics. The SCOR KPI is Order Fulfillment Cycle Time. Responsiveness is a customer-focused attribute.
Agility	The Agility attribute describes the ability to respond to external influences and the ability to change. External influences include: Non-forecasted increases or decreases in demand; suppliers or partners going out of business; natural disasters; acts of (cyber) terrorism; availability of financial tools (the economy); or labor issues. The SCOR KPIs include Flexibility and Adaptability. Agility is a customer-focused attribute.
Costs	The Cost attribute describes the cost of operating the process. It includes labor costs, material costs, and transportation costs. The SCOR KPIs include Cost of Goods Sold and Supply Chain Management Cost. These two indicators cover all supply chain spend. Cost is an internally-focused attribute.
Assets	The Asset Management Efficiency ("Assets") attribute describes the ability to efficiently utilize assets. Asset management strategies in a supply chain include inventory reduction and in-sourcing vs. outsourcing. Metrics include: inventory days of supply and capacity utilization. The SCOR KPIs include: Cash-to-Cash Cycle Time and Return on Fixed Assets. Asset Management Efficiency is an internally-focused attribute.

Metrics

A metric is a standard for measurement of the performance of a process. SCOR metrics are diagnostic metrics. SCOR recognizes three levels of predefined metrics:

- **Level 1 metrics** are diagnostics for the overall health of the supply chain. These metrics are also known as strategic metrics and key performance indicators (KPIs). Benchmarking level 1 metrics helps establish realistic targets that support strategic objectives.

- **Level 2 metrics** serve as diagnostics for the level 1 metrics. The diagnostic relationship helps to identify the root cause or causes of a performance gap for a level 1 metric.

- **Level 3 metrics** serve as diagnostics for level 2 metrics.

The analysis of performance of metrics from level 1 through 3 is referred to as decomposition. Decomposition helps identify the processes that need to be studied further. (Processes are linked to level 1 and level 2 metrics.)

Many metrics in the SCOR model are hierarchical, just as the process elements are hierarchical. Level 1 metrics are created from lower level calculations. Level 2 metrics are generally associated with a narrower subset of processes. For example, Delivery Performance is calculated as the total number of products delivered on time and in full based on a commit date. Additionally, metrics (diagnostics) are used to diagnose variations in performance against plan. For example, an organization may wish to examine the correlation between the request date and commit date.

Supply Chain Council recommends that supply chain scorecards contain at least one metric for each performance attribute to ensure balanced decision making and governance.

Benchmarking: Get More Out of SCOR

SCORmark[SM] benchmarking supports and integrates seamlessly into the analyze phase of applying the SCOR model. It provides a benchmark report that highlights where an organization stands against selected peer groups. Our members use SCORmark to set reasonable performance goals, calculate performance gaps against a global database, and develop organization-specific roadmaps for supply chain competitive success.

Visit supply-chain.org/scormark to learn more.

SCOR Metrics

Supply Chain Reliability

RL.1.1 - Perfect Order Fulfillment

RL.2.1 - % of Orders Delivered In Full

RL.3.33 - Delivery Item Accuracy

RL.3.35 - Delivery Quantity Accuracy

RL.2.2 - Delivery Performance to Customer Commit Date

RL.3.32 - Customer Commit Date Achievement Time Customer Receiving

RL.3.34 - Delivery Location Accuracy

RL.2.3 - Documentation Accuracy

RL.3.31 - Compliance Documentation Accuracy

RL.3.43 - Other Required Documentation Accuracy

RL.3.45 - Payment Documentation Accuracy

RL.3.50 - Shipping Documentation Accuracy

RL.2.4 - Perfect Condition

RL.3.12 - % Of Faultless Installations

RL.3.24 - % Orders/Lines Received Damage Free

RL.3.41 - Orders Delivered Damage Free Conformance

RL.3.42 - Orders Delivered Defect Free Conformance

RL.3.55 - Warranty and Returns

Supply Chain Responsiveness

RS.1.1 - Order Fulfillment Cycle Time

RS.2.1 - Source Cycle Time

RS.3.8 - Authorize Supplier Payment Cycle Time

RS.3.35 - Identify Sources of Supply Cycle Time

RS.3.107 - Receive Product Cycle Time

RS.3.122 - Schedule Product Deliveries Cycle Time

RS.3.125 - Select Supplier and Negotiate Cycle Time

RS.3.139 - Transfer Product Cycle Time

RS.3.140 - Verify Product Cycle Time

RS.2.2 - Make Cycle Time

RS.3.33 - Finalize Production Engineering Cycle Time

RS.3.49 - Issue Material Cycle Time

RS.3.101 - Produce and Test Cycle Time

RS.3.114 - Release Finished Product to Deliver Cycle Time

RS.3.123 - Schedule Production Activities Cycle Time

RS.3.128 - Stage Finished Product Cycle Time

RS.3.142 - Package Cycle Time

RS.2.3 - Deliver Cycle Time

RS.3.16 - Build Loads Cycle Time

RS.3.18 - Consolidate Orders Cycle Time

RS.3.46 - Install Product Cycle Time

RS.3.51 - Load Product & Generate Shipping Documentation Cycle Time

RS.3.95 - Pack Product Cycle Time

RS.3.96 - Pick Product Cycle Time

RS.3.102 - Receive & Verify Product by Customer Cycle Time

RS.3.110 - Receive Product from Source or Make Cycle Time

RS.3.111 - Receive, Configure, Enter, & Validate Order Cycle Time

RS.3.116 - Reserve Resources and Determine Delivery Date Cycle Time

RS.3.117 - Route Shipments Cycle Time

RS.3.120 - Schedule Installation Cycle Time

RS.3.124 - Select Carriers & Rate Shipments Cycle Time

RS.3.126 - Ship Product Cycle Time

RS.2.4 - Delivery Retail Cycle Time

RS.3.17 - Checkout Cycle Time

RS.3.32 - Fill Shopping Cart Cycle Time

RS.3.34 - Generate Stocking Schedule Cycle Time

RS.3.97 - Pick Product from Backroom Cycle Time

RS.3.109 - Receive Product at Store Cycle Time

RS.3.129 - Stock Shelf Cycle Time

Supply Chain Agility

AG.1.1 - Upside Supply Chain Flexibility

AG.2.1 - Upside Flexibility (Source)

AG.2.2 - Upside Flexibility (Make)

AG.2.3 - Upside Flexibility (Deliver)

AG.2.4 - Upside Return Flexibility (Source)

AG.2.5 - Upside Return Flexibility (Deliver)

AG.1.2 - Upside Supply Chain Adaptability

AG.2.6 - Upside Adaptability (Source)

AG.2.7 - Upside Adaptability (Make)

AG.2.8 - Upside Adaptability (Deliver)

AG.2.9 - Upside Return Adaptability (Source)

AG.2.10 - Upside Return Adaptability (Deliver)

AG.1.3 - Downside Supply Chain Adaptability

AG.2.11 - Downside Adaptability (Source)

AG.2.12 - Downside Adaptability (Make)

AG.2.13 - Downside Adaptability (Deliver)

AG.1.4 - Overall Value at Risk (VAR)

AG.2.14 - Supplier's/Customer's/ Product's Risk Rating

AG.2.15 - Value at Risk (Plan)

AG.2.16 - Value at Risk (Source)

AG.2.17 - Value at Risk (Make)

AG.2.18 - Value at Risk (Deliver)

AG.2.19 - Value at Risk (Return)

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Supply Chain Costs

CO.1.1 - Supply Chain Management Cost

CO.2.1 - Cost to Plan

CO.3.104 - Cost to Plan (Deliver)

CO.3.105 - Cost to Plan (Make)

CO.3.106 - Cost to Plan (Return)

CO.3.107 - Cost to Plan (Source)

CO.3.108 - Cost to Plan Supply Chain

CO.2.2 - Cost to Source

CO.3.27 - Cost to Authorize Supplier Payment

CO.3.115 - Cost to Receive Product

CO.3.126 - Cost to Schedule Product Deliveries

CO.3.137 - Cost to Transfer Product

CO.3.138 - Cost to Verify Product

CO.2.3 - Cost to Make

CO.2.4 - Cost to Deliver

CO.3.163 - Order Management Costs

CO.3.200 - Order Delivery Costs

CO.2.5 - Cost to Return

CO.3.131 - Cost to Source Return

CO.2.7 - Mitigation Cost ($)

CO.3.178 - Risk Mitigation Costs (Deliver)

CO.3.179 - Risk Mitigation Costs (Make)

CO.3.180 - Risk Mitigation Costs (Plan)

CO.3.181 - Risk Mitigation Costs (Return)

CO.3.182 - Risk Mitigation Costs (Source)

CO.1.2 - Cost of Goods Sold

CO.3.140 - Direct Labor Cost

CO.3.141 - Direct Material Cost

CO.3.155 - Indirect Cost Related to Production

Supply Chain Asset Management

AM.1.1 - Cash-to-Cash Cycle Time

AM.2.1 - Days Sales Outstanding

AM.2.2 - Inventory Days of Supply

AM.3.45 - Inventory Days of Supply (Finished Goods)

AM.3.16 - Inventory Days of Supply (Raw Material)

AM.3.17 - Inventory Days of Supply (WIP)

AM.3.23 - Recycle Days of Supply

AM.3.28 - Percentage Defective Inventory

AM.3.37 - Percentage Excess Inventory

AM.3.44 - Percentage Unserviceable MRO Inventory

AM.2.3 - Days Payable Outstanding

AM.1.2 - Return on Supply Chain Fixed Assets

AM.2.5 - Supply Chain Fixed Assets

AM.3.11 - Fixed Asset Value (Deliver)

AM.3.18 - Fixed Asset Value (Make)

AM.3.20 - Fixed Asset Value (Plan)

AM.3.24 - Fixed Asset Value (Return)

AM.3.27 - Fixed Asset Value (Source)

AM.1.3 - Return on Working Capital

AM.2.6 - Accounts Payable (Payables Outstanding)

AM.2.7 - Accounts Receivable (Sales Outstanding)

AM.2.8 - Inventory

SCOR Processes

SCOR identifies the unique processes a supply chain requires to support the objective of fulfilling customer orders. By definition, a process is a unique activity performed to meet predefined outcomes.

Similar to nesting Russian matryoshka dolls, SCOR processes are organized by aggregation and decomposition relationships. From level 3 to 2 to 1 is aggregation; from 1 to 2 to 3 is decomposition. SCOR processes help standardize the description of the supply chain architecture (level 1 and level 2 processes) and the implementation of the architecture (level 3 processes). SCOR provides standards down to the level where process descriptions are applicable across a range of industries. Further detail is industry and organization specific (level 4 and below).

SCOR Contains Three Levels of Process Detail

	Level	Application	Examples
In Scope Applicable Across Industries	**1**	Level 1 processes are used to describe the scope and high level configuration of a supply chain. SCOR has five level 1 processes.	Plan, Source, Make, Deliver, and Return
	2	Level 2 processes differentiate the strategies of the level 1 processes. Both the level 2 processes themselves as well as their positioning in the supply chain determine the supply chain strategy. SCOR contains 26 level 2 processes.	Example Make level 2 processes: › Make-to-Stock › Make-to-Order › Engineer-to-Order
	3	Level 3 processes describe the steps performed to execute the level 2 processes. The sequence in which these processes are executed influences the performance of the level 2 processes and the overall supply chain. SCOR contains 185 level 3 processes.	Example Make-to-Order level 3 processes: › Schedule Production Activities › Issue Product › Produce and Test › Package › Stage › Dispose Waste › Release Product
Not in Scope Industry Specific	**4**	Level 4 processes describe the industry specific activities required to perform level 3 processes. Level 4 processes describe the detailed implementation of a process. SCOR does not detail level 4 processes. Organizations and industries develop their own level 4 processes.	Example Issue Product level 4 processes for the electronics industry: › Print Pick List › Pick Items (Bin) › Deliver Bin to Production Cell › Return Empty Bins to Pick Area › Close Pick Order

SCOR Is Based on Five Level 1 Management Processes

Plan (P)

The Plan processes describe the planning activities associated with operating a supply chain. This includes gathering customer requirements, collecting information on available resources, and balancing requirements and resources to determine planned capabilities and resource gaps. This is followed by identifying the actions required to correct any gaps.

Source (S)

The Source processes describe the ordering (or scheduling) and receipt of goods and services. The Source process includes issuing purchase orders, scheduling deliveries, receiving, shipment validation and storage, and accepting supplier invoices.

Make (M)

The Make processes describe the activities associated with the conversion of materials or creation of the content for services. It focuses on conversion of materials rather than production or manufacturing because Make represents all types of material conversions: assembly, chemical processing, maintenance, repair, overhaul, recycling, refurbishment, remanufacturing, and other material conversion processes. As a general guideline: these processes are recognized by the fact that one or more item numbers go in, and one or more different item numbers come out of this process.

Deliver (D)

The Deliver processes describe the activities associated with the creation, maintenance, and fulfillment of customer orders. It includes the receipt, validation, and creation of customer orders; scheduling order delivery; pick, pack, and shipment; and invoicing the customer.

Return (R)

The Return processes describe the activities associated with the reverse flow of goods back from the customer. The Return process includes the identification of the need for a return, the disposition decision making, the scheduling of the return, and the shipment and receipt of the returned goods. (Repair, recycling, refurbishment, and remanufacturing processes are not described using Return process elements. See Make.)

SCOR Processes

Each Level 2 Process Can Be Further Described by Type

Planning	A process that aligns expected resources to meet expected demand requirements.
	Planning processes: › Balance aggregated demand and supply › Generally occur at regular, periodic intervals › Consider consistent planning horizon › Can contribute to supply chain response time
Execution	A process triggered by planned or actual demand that changes the state of material goods.

	Execution processes:
	› Generally involve:
	   1. Scheduling/sequencing,
	   2. Transforming product, and/or
	   3. Moving product to the next process.
	› Can contribute to the order fulfillment cycle time

Enable	A process that prepares, maintains, or manages information or relationships on which planning and execution processes rely.

Each Execution process, for example, has three different possible capabilities of representing and responding to customer orders. Different supply chain strategy supports corresponding product or service types. These categories also affect Plan and Return processes.

Stocked Product (S1, M1, D1, D4)
- Inventory driven (Plan)
- Standard material orders
- High fill rate, short turnaround

Make-to-Order (S2, M2, D2)
- Customer order driven
- Configurable materials
- Longer turn-around times

Engineer-to-Order (S3, M3, D3)
- Customer requirements driven
- Sourcing new materials
- Longest long lead-times, low fill rates

SCOR Process Detailed Example

sD1.2 Receive, Enter, and Validate Order

Definition: Receive orders from the customer and enter them into a an organization's order processing system. Orders can be received through phone, fax, or electronic media. Technically examine orders to ensure an orderable configuration and provide accurate prices. Check the customer's credit. Optionally accept payment.
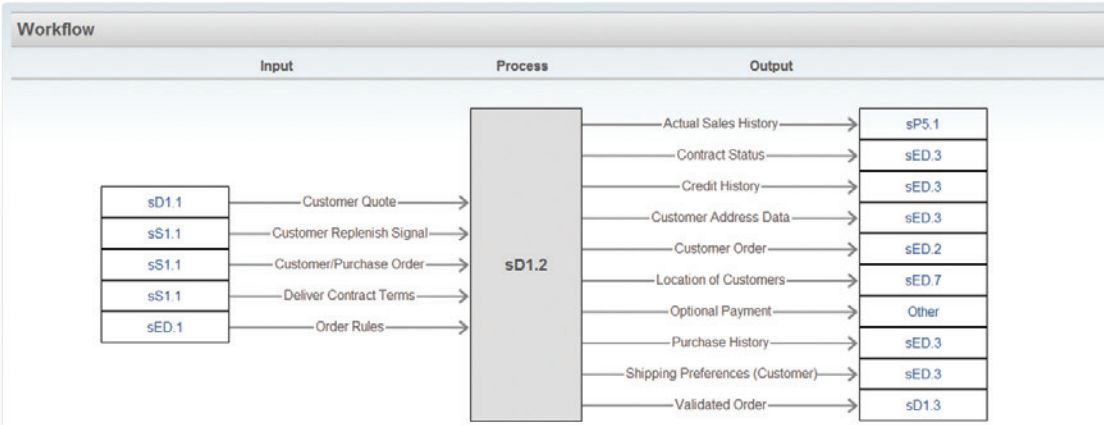
SCOR is available online in a searchable HTML format for all SCC member organizations. Visit supply-chain.org/online-access to access in HTML, download a PDF format, or order a print edition.

SCOR Online Access Screenshot

Metrics

ID	Name	Definition	Revision
RL.3.33	Delivery Item Accuracy	Percentage of orders in which all items ordered are the items...	10.0
RL.3.34	Delivery Location Accuracy	Percentage of orders which is delivered to the correct location...	10.0
RL.3.35	Delivery Quantity Accuracy	Percentage of orders in which all quantities received by the...	10.0
RS.3.94	Order Fulfillment Dwell Time	Any lead time during the order fulfillment process where no...	10.0
RS.3.112	Receive, Enter & Validate Order Cycle Time	The average time associated with receiving and verifying an...	10.0
CO.3.118	Cost to Receive, Enter & Validate Order	The sum of the costs associated with receiving, entering and...	10.0

Practices

ID	Name	Definition	Revision
	Automatic Multi-level Credit Checking: Dollar Limits; Days Sales Outstanding; Margin Testing	Integrated Order/Financial Management	10.0
	Continuous Replenishment Programs; Vendor Managed Inventory, Telemetry to Automatically Communicate Replenishment of Chemicals	Integrated demand/deployment planning to customer location...	10.0
	Electronic Commerce (Customer Visibility of Stock Availability, Use of Hand-Held Terminals for Direct Order Entry, Confirmation, Credit Approval), On-Line Stock Check and Reservation of Inventory	EDI applications and integrated order management	10.0
	Enable Real-Time Visibility into Backlog, Order Status, Shipments, Scheduled Material Receipts, Customer Credit History, and Current Inventory Positions	None identified	10.0
	Remote (Sales, Customers) Order Entry Capability	None identified	10.0
	Value Pricing Based on 'Cost to Serve'; EDLP; Cost Plus Pricing	Activity Based Costing; Integrated Order Management by Customer...	10.0

People

ID	Name	Definition	Revision
HS.0026	Credit/Collection Management	Set of activities to assess and rate the credit risk of a...	10.0
HS.0028	Customer Order Management	The process or the work flow associated with the identification...	10.0
HS.0029	Customer Relationship Management (CRM)	The process for managing a company's relations and interactions...	10.0
HS.0064	Lead-time validation	The process of analyzing and validating feasibility of customer...	10.0
HS.0092	Pricing Management	The analysis and setting of prices (on a per unit or volume...	10.0
HS.0095	Product and Configuration Validation	The analysis of stated product and configuration specifications...	10.0

Workflow

Input		Process	Output	
			Actual Sales History	sP5.1
			Contract Status	sED.3
			Credit History	sED.3
sD1.1	Customer Quote		Customer Address Data	sED.3
sS1.1	Customer Replenish Signal		Customer Order	sED.2
sS1.1	Customer/Purchase Order	sD1.2	Location of Customers	sED.7
sS1.1	Deliver Contract Terms		Optional Payment	Other
sED.1	Order Rules		Purchase History	sED.3
			Shipping Preferences (Customer)	sED.3
			Validated Order	sD1.3

SCOR Process Model

sP PLAN

sP1 Plan Supply Chain	sP2 Plan Source	sP3 Plan Make	sP4 Plan Deliver	sP5 Plan Return
sP1.1: Identify, Prioritize, and Aggregate Supply Chain Requirements	**sP2.1:** Identify, Prioritize, and Aggregate Product Requirements	**sP3.1:** Identify, Prioritize, and Aggregate Production Requirements	**sP4.1:** Identify, Prioritize, and Aggregate Delivery Requirements	**sP5.1:** Identify, Prioritize, and Aggregate Return Requirements
sP1.2: Identify, Prioritize, and Aggregate Supply Chain Resources	**sP2.2:** Identify, Assess, and Aggregate Product Resources	**sP3.2:** Identify, Assess, and Aggregate Production Resources	**sP4.2:** Identify, Assess, and Aggregate Delivery Resources	**sP5.2:** Identify, Assess, and Aggregate Return Resources
sP1.3: Balance Supply Chain Resources with Supply Chain Require-ments	**sP2.3:** Balance Product Resources with Product Requirements	**sP3.3:** Balance Production Resources with Production Requirements	**sP4.3:** Balance Delivery Resources with Delivery Requirements	**sP5.3:** Balance Return Resources with Return Requirements
sP1.4: Establish and Communicate Supply Chain Plans	**sP2.4:** Establish Sourcing Plans	**sP3.4:** Establish Production Plans	**sP4.4:** Establish Delivery Plans	**sP5.4:** Establish and Communicate Return Plans

sS SOURCE

sS1 Source Stocked Product	sS2 Source Make-to-Order Product	sS3 Source Engineer-to-Order Product
sS1.1: Schedule Product Deliveries	**sS2.1:** Schedule Product Deliveries	**sS3.1:** Identify Sources of Supply
sS1.2: Receive Product	**sS2.2:** Receive Product	**sS3.2:** Select Final Supplier(s) and Negotiate
sS1.3: Verify Product	**sS2.3:** Verify Product	**sS3.3:** Schedule Product Deliveries
sS1.4: Transfer Product	**sS2.4:** Transfer Product	**sS3.4:** Receive Product
sS1.5: Authorize Supplier Payment	**sS2.5:** Authorize Supplier Payment	**sS3.5:** Verify Product
		sS3.6: Transfer Product
		sS3.7: Authorize Supplier Payment

sEP Enable Plan

sEP.1: Manage Business Rules for Plan Processes

sEP.2: Manage Performance of Supply Chain

sEP.3: Manage Plan Data Collection

sEP.4: Manage Integrated Supply Chain Inventory

sEP.5: Manage Integrated Supply Chain Capital Assets

sEP.6: Manage Integrated Supply Chain Transportation

sEP.7: Manage Planning Configuration

sEP.8: Manage Plan Regulatory Requirements and Compliance

sEP.9: Manage Supply Chain Risk

sEP.10: Align Supply Chain Unit Plan with Financial Plan

sES Enable Source

sES.1: Manage Sourcing Business Rules

sES.2: Assess Supplier Performance

sES.3: Maintain Source Data

sES.4: Manage Product Inventory

sES.5: Manage Capital Assets

sES.6: Manage Incoming Product

sES.7: Manage Supplier Network

sES.8: Manage Import/Export Requirements

sES.9: Manage Supply Chain Source Risk

sES.10: Manage Supplier Agreements

sM MAKE

sM1 Make-to-Stock	sM2 Make-to-Order	sM3 Engineer-to-Order
sM1.1: Schedule Production Activities	**sM2.1:** Schedule Production Activities	**sM3.1:** Finalize Production Engineering
sM1.2: Issue Product	**sM2.2:** Issue Product	**sM3.2:** Schedule Production Activities
sM1.3: Produce and Test	**sM2.3:** Produce and Test	**sM3.3:** Issue Product
sM1.4: Package	**sM2.4:** Package	**sM3.4:** Produce and Test
sM1.5: Stage Product	**sM2.5:** Stage Finished Product	**sM3.5:** Package
sM1.6: Release Product to Deliver	**sM2.6:** Release Finished Product to Deliver	**sM3.6:** Stage Finished Product
sM1.7: Waste Disposal	**sM2.7:** Waste Disposal	**sM3.7:** Release Product to Deliver
		sM3.8: Waste Disposal

sD DELIVER

sD1 Deliver Stocked Product	sD2 Deliver Make-to-Order Product	sD3 Deliver Engineer-to-Order Product	sD4 Deliver Retail Product
sD1.1: Process Inquiry and Quote	**sD2.1:** Process Inquiry and Quote	**sD3.1:** Obtain and Respond to RFP/RFQ	**sD4.1:** Generate Stocking Schedule
sD1.2: Receive, Enter, and Validate Order	**sD2.2:** Receive, Configure, Enter, and Validate Order	**sD3.2:** Negotiate and Receive Contract	**sD4.2:** Receive Product at the Store
sD1.3: Reserve Inventory and Determine Delivery Date	**sD2.3:** Reserve Inventory and Determine Delivery Date	**sD3.3:** Enter Order, Commit Resources, and Launch Program	**sD4.3:** Pick Product from Backroom
sD1.4: Consolidate Orders	**sD2.4:** Consolidate Orders	**sD3.4:** Schedule Installation	**sD4.4:** Stock Shelf
sD1.5: Build Loads	**sD2.5:** Build Loads	**sD3.5:** Build Loads	**sD4.5:** Fill Shopping Cart
sD1.6: Route Shipments	**sD2.6:** Route Shipments	**sD3.6:** Route Shipments	**sD4.6:** Checkout
sD1.7: Select Carriers and Rate Shipments	**sD2.7:** Select Carriers and Rate Shipments	**sD3.7:** Select Carriers and Rate Shipments	**sD4.7:** Deliver and/or Install
sD1.8: Receive Product from Source or Make	**sD2.8:** Receive Product from Source or Make	**sD3.8:** Receive Product from Source or Make	
sD1.9: Pick Product	**sD2.9:** Pick Product	**sD3.9:** Pick Product	
sD1.10: Pack Product	**sD2.10:** Pack Product	**sD3.10:** Pack Product	
sD1.11: Load Vehicle and Generate Shipping Docs	**sD2.11:** Load Product and Generate Shipping Docs	**sD3.11:** Load Product and Generate Shipping Docs	
sD1.12: Ship Product	**sD2.12:** Ship Product	**sD3.12:** Ship Product	
sD1.13: Receive and Verify Product by Customer	**sD2.13:** Receive and Verify Product by Customer	**sD3.13:** Receive and Verify Product by Customer	
sD1.14: Install Product	**sD2.14:** Install Product	**sD3.14:** Install Product	
sD1.15: Invoice	**sD2.15:** Invoice	**sD3.15:** Invoice	

sR RETURN

sSR1 Source Return Defective Product	sSR2 Source Return MRO Product	sSR3 Source Return Excess Product
sSR1.1: Identify Defective Product Condition	**sSR2.1:** Identify MRO Product Condition	**sSR3.1:** Identify Excess Product Condition
sSR1.2: Disposition Defective Product	**sSR2.2:** Disposition MRO Product	**sSR3.2:** Disposition Excess Product
sSR1.3: Request Defective Product Return Authorization	**sSR2.3:** Request MRO Return Authorization	**sSR3.3:** Request Excess Product Return Authorization
sSR1.4: Schedule Defective Product Shipment	**sSR2.4:** Schedule MRO Shipment	**sSR3.4:** Schedule Excess Product Shipment
sSR1.5: Return Defective Product	**sSR2.5:** Return MRO Product	**sSR3.5:** Return Excess Product

sDR1 Deliver Return Defective Product	sDR2 Deliver Return MRO Product	sDR3 Deliver Return Excess Product
sDR1.1: Authorize Defective Product Return	**sDR2.1:** Authorize MRO Product Return	**sDR3.1:** Authorize Excess Product Return
sDR1.2: Schedule Defective Return Receipt	**sDR2.2:** Schedule MRO Return Receipt	**sDR3.2:** Schedule Excess Return Receipt
sDR1.3: Receive Defective Product (Includes Verify)	**sDR2.3:** Receive MRO Product	**sDR3.3:** Receive Excess Product
sDR1.4: Transfer Defective Product	**sDR2.4:** Transfer MRO Product	**sDR3.4:** Transfer Excess Product

sEM Enable Make

sEM.1: Manage Production Rules	**sEM.6:** Manage Transportation (WIP)
sEM.2: Manage Production Performance	**sEM.7:** Manage Production Network
sEM.3: Manage Make Information	**sEM.8:** Manage Make Regulatory Environment
sEM.4: Manage In-Process Products (WIP)	**sEM.9:** Manage Supply Chain Make Risk
sEM.5: Manage Make Equipment and Facilities	

sED Enable Deliver

sED.1: Manage Deliver Business Rules	**sED.6:** Manage Transportation
sED.2: Assess Delivery Performance	**sED.7:** Manage Product Life Cycle
sED.3: Manage Deliver Information	**sED.8:** Manage Import/Export Requirements
sED.4: Manage Finished Goods Inventory	**sED.9:** Manage Supply Chain Deliver Risk
sED.5: Manage Deliver Capital Assets	

sER Enable Return

sER.1: Manage Business Rules for Return Processes	**sER.6:** Manage Return Transportation
sER.2: Manage Performance of Return Processes	**sER.7:** Manage Return Network Configuration
sER.3: Manage Return Data Collection	**sER.8:** Manage Return Regulatory Requirements and Compliance
sER.4: Manage Return Inventory	**sER.9:** Manage Supply Chain Return Risk
sER.5: Manage Return Capital Assets	

SCOR Best Practices

A best practice is a unique way to configure a process or a set of processes. The uniqueness can be related to the automation of the process, a technology applied in the process, special skills applied to the process, a unique sequence for performing the process, or a unique method for distributing and connecting processes between organizations.

SCOR recognizes that several different types of practices exist within any organization:

- Leading or Emerging practices
- Best practices
- Common practices
- Poor practices

These practice categories go by other names as well. What's important to understand is that different practices have different performance expectations. The classification of a practice will vary by industry. For some industries a practice may be common, whereas the same practice may be considered a leading or best practice in another industry.

The SCOR Best Practices section contains management practices, software solutions, and definitions associated with each process. These practices can contribute to best-in-class performance in supply chain optimization (SCOR), supply chain risk management, and environmentally responsible supply chain management (GreenSCOR). SCOR best practices were selected by SCOR practitioners from a diverse range of industries. It is understood that not all best practices will yield the same results for all industries or supply chains.

Supply Chain Practice Categories

MODERATE / HIGH RETURNS	Best Practices	Leading Practices
	Best practices are current, structured, and repeatable practices that have had a proven and positive impact on supply chain performance.	Leading practices introduce new technology, knowledge, or radically different ways of organizing processes. Leading practices may yield a steep change in performance by redefining the playing field within an industry. Leading practices may not be easy to adopt because of proprietary technology, or special knowledge may prevent wider adoption. Leading practices generally have not been proven in a wide variety of environments and industries.
	› **Current:** Not emerging, not outmoded.	
	› **Structured:** Feature a clearly stated goal, scope, process, and procedure.	
	› **Proven:** Demonstrated in a working environment, and linked to key metrics.	
	› **Repeatable:** Proven in multiple organizations and industries.	

NEGATIVE / LOW RETURNS	Common Practices	Poor Practices
	Common practices are how a wide range of organizations have historically done business by default or happenstance. These well established practices do the job, but don't provide a significant cost or competitive advantage over other practices (except over bad practices).	Poor practices represent ways of doing business, which can be widespread, that have proven to result in poor supply chain performance as indicated by key metrics.

‹ LOW / MODERATE RISK   HIGH RISK ›

SCOR Best Practices

Best Practice: Supply Chain Risk Management

Supply chain risk management is the systematic identification, assessment, and mitigation of potential disruptions in logistics networks with the objective to reduce their negative impact on the logistics network's performance. Potential disruptions can either occur within the supply chain (e.g. insufficient quality, unreliable suppliers, machine breakdown, uncertain demand, etc.) and outside the supply chain (e.g. flooding, terrorism, labor strikes, natural disasters, etc.). Both are considered in an integral multi-phase approach for supply chain risk management.

Establish Context	Define and document the objective and scope (internal and external) for managing risk.
Identify Risk	Collect and document all potential risk events that may impact the organization from meeting its goals.
Assess Risk	Collect and document for each potential risk the causes, probability, and consequences (Understand the Value at Risk).
Evaluate Risk	Determine for each risk whether mitigation actions are required or the risk is acceptable; prioritize risks.
Mitigate Risk	Determine the actions required to eliminate, reduce, or accept and monitor the risks (Risk Mitigation Plan).
Monitor Risk	Continuously monitor effectiveness of mitigation plans; identify emerging risks and changes in internal and external context.

Best Practice: GreenSCOR

The following strategic environmental metrics allow the SCOR model to be used as a framework for environmental accounting:

- Carbon Emissions (Tons CO_2 Equivalent)
- Air Pollutant Emissions (Tons or kg)
- Liquid Waste Generated (Tons or kg)
- Solid Waste Generated (Tons or kg)
- Recycled Waste (Percent)

The SCOR framework ties emissions to the originating processes, providing a structure for measuring environmental performance and identifying where performance can be improved. The hierarchical nature of the model allows strategic environmental footprint goals to be translated to specific targets and activities.

SCOR People

Talented people are at the heart of supply chains that effectively respond to and capitalize on growth opportunities. The SCOR skills framework provides a global view of the needs and issues surrounding skills management for supply chain professionals, including the technical skills, aptitude, and experience required to manage an effective supply chain. This allows supply chain leaders to align the skills of their people and organizational structure with strategic objectives.

The skills management framework within SCOR complements process reference, metrics reference, and practice reference components with an integrated view of supply chain skills in four areas:

❶ Baseline skills necessary for the overall process area (e.g., Sourcing or Planning) and for the individual process.

❷ Critical skills that differentiate leaders in a particular process area from those who only perform at a baseline level.

❸ Performance measures through SCOR metrics that relate to continuous assessment of job performance in each process area.

❹ Credentialing of supply chain skills, including training or certification programs, related to the specific process areas.

Key Elements of SCOR People

Skill – A Skill is the capacity to deliver predetermined results with minimal input of time and energy. Skills are further defined by Experience, Aptitude, Training, and Competency levels. Examples of supply chain skills include: master scheduling, import/export regulations, production planning, and risk mitigation.

Experience – Experience is the knowledge or ability acquired by observation or active participation. Experience is obtained by doing the work in a real-life environment and responding to a variety of challenges that require different responses and actions. Example experiences include: cycle counting, cross docking, and hazardous materials handling.

Aptitudes – An Aptitude is a natural, acquired, learned, or developed ability to perform a certain kind of work at a certain level. Example aptitudes include: accuracy, analytical, and leadership.

Training – Training develops a skill or type of behavior through instruction. Examples of training are SCOR-P certification and APICS CPIM certification. This element also includes on-the-job training.

Competency – Competency levels describe the level or state of qualification to perform a certain role or tasks. SCOR recognizes five commonly accepted competency levels:

❶ **Novice** – Untrained beginner, no experience, requires and follows detailed documentation to be able to perform the work.

❷ **Experienced beginner** – Performs the work; limited situational perception.

❸ **Competent** – Understands the work and can determine priorities to reach organizational goals.

❹ **Proficient** – Oversees all aspects of the work and can prioritize based on situational aspects.

❺ **Expert** – Intuitive understanding. Experts can apply experience patterns to new situations.

SCOR links each skill to Experiences, Aptitudes, and Trainings. Competency level is to Skill what Maturity level is to Process. SCOR does not list or suggest competency levels.

Use SCOR to Match Supply Chain Team Skills to Organization Strategy

The SCOR people elements help supply chain and human resource leaders find and develop people with the requisite technical expertise and experience. It improves the ability to match job responsibilities with candidates' skills and avoid costly hiring mistakes. It makes outsourcing or in-sourcing decisions more clear, and it can help preserve organizational effectiveness and knowledge as retirees leave the workforce.

SCC Members and SCOR Users

SCOR has provided value to a wide range of global, mid-sized, and small organizations across all industries. The following SCC members—representing commercial industry, nonprofit, academic, and government organizations— have applied the SCOR model within their supply chains or helped other organizations apply the model.*

A.T. Kearney, Inc
ABB
Abbott Japan Co., Ltd.
Accenture
ADVA AG Optical Networking
Air Products and Chemicals Inc.
Akzo Nobel
ALCON
Alfa Laval KK
APQC
Andersen Corporation
Aotearoa Fisheries Limited
Applied Materials, Inc.
Aspen Pharmacare Port Elizabeth
AstraZeneca
Avineo
Avnet, Inc.
Avon Products, Inc.
Axia Consulting
Axsens SAS
Babcock International Group
Baden-Württemberg Cooperative State University
BAE Systems
Baptist Health South Florida
Barloworld Logistics (Pty) Ltd
BASF AG
Battelle
Baxter Healthcare
Bayer Group
BearingPoint
Beiersdorf AG
Biotronik AG
Booz Allen Hamilton Inc.
Boston Consulting Group
BP
Bristlecone, Inc.
Bristol-Myers Squib
Bugaboo International
Bulgari SPA
Cabot Corporation
Cafina AG
Capgemini
CH Robinson Worldwide
Chubu Electric Power Co., Inc.
Chuden CTI Co., Ltd
Chugoku Electric Power Co., Inc.
Church of Jesus Christ of Latter-day Saints
Cielo S.A
Cincinnati State Technical and Community College
Cirrelt / Université Laval
Cisco Systems
Clemson University
Cliffstar Corporation
Coca-Cola FEMSA
Cognizant Technology Solutions
Cologne University of Applied Science
Columbia Sportswear
Competitive Capabilities International
Comprehensive Nuclear Test Ban Treaty Organization
Computer Sciences Corporation
Concurrent Technologies Corporation
Coors Brewery Limited
Corning Incorporated
Cranfield School of Management
Cummins Inc.
Danfoss Trata, d.o.o.
Darden Business School, University of Virginia
Delft University of Technology
Dell Inc.

Deloitte Consulting LLP
Deloitte Tohmatsu Consulting Co., Ltd
Denel (Pty) Limited
Department of Veterans Affairs
Douglas Pharmaceuticals
Dow Chemical Company
DSN Innovations
DuPont Company
Eaton Corporation
Embraer Empresa Brasileira de Aeronautica SA
Environmental Defense Fund
Ericsson AB
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Fujifilm Corporation
Fujitsu Limited
Gartner
GlaxoSmithKline
Goizueta Business School, Emory University
Greif, Inc
Griffith Laboratories
Grupo Farmacos Especializados, S. A. de C. V.
Harley-Davidson Motor Company
Harvard Research Group
Heineken
Hewlett Packard Company
Hi Essence Cable Sdn Bhd
Hitachi East Japan Solutions, Ltd.
Hochschule Ulm
Hokkaido Electric Power Co., Ltd.
Holland International Distribution Council
Honda Trading America Corporation
HORUS Consulting bvba
Hospira, Inc.
Huawei Technologies Co., Ltd.
Huber & Suhner AG
Humana Milchindustrie GmbH
IBIS
IBM Corporation
ICIMSI, University of Applied Sciences of Southern Switerland
Infineon Technologies AG
Intec
Intel Corporation
Itheca Group
J&M Management Consulting AG
JDA Software
Jet Propulsion Laboratory
Johnson & Johnson
Kaiser Permanente
Kerry Group plc.
Kluber Lubrication Lubrificantes Especiais Ltda
Knorr Bremse
Kohler Co.
KONE Oyj
KPMG
Kraft Foods
KYOCERA Corporation
Kyushu Electric Power Co., Inc.
Leighs Paints
Lenovo, Inc.
Lifeway Christian Resources of the SBC
Limited Logistics Services, Inc.
Linear Logics Corp.
Locanis AG
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MAN Diesel SE
Manhattan Associates
Massachusetts Institute of Technology
McCormick & Company, Inc.

MeadWestvaco Corporation
Merck KGaA
Miami University
Michigan State University
Micron Technology, Inc.
Microsoft Corporation
Mitsubishi Aircraft Corporation
Mitsui & Co. Ltd.
National Institute of Development Administration
NEC Corporation
New South Wales Electoral Commission
New Zealand Defence Force
Newell Rubbermaid
Niram Gitan Group
Novaquest
NOVATECH
Nycomed GmbH
Olam Information Services Pvt. Ltd
Oliver Wight
Olympus Corporation
Omnia Group
Ontario Government
Oracle Corporation
Ossur Americas Inc.
Pakistan Institute of Management
Panasonic
Penn State University
Petrobras - Petroleo Brasileiro SA
Pfizer, Inc.
Pieralisi Maip spa
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Polymer Group Inc
PolyOne Corporation
Polytechnic of Namibia
Pontificia Universidad Javeriana
PRAGMATEK Consulting Group, Ltd.
PricewaterhouseCoopers
PricewaterhouseCoopers Consultants Co, Ltd.
Procter & Gamble
PRTM Management Consultants, Inc.
Pyramid Applied Solutions B.V.
QAD Inc.
QMI Solutions
QUNIE Corporation
R&G Global Consultants CE BV
Rail Cargo Austria AG
Rand Corporation
Realize Corporation
Redland City Council
Republic Polytechnic
Research in Motion
Revlon Consumer Products
Ritsumeikan University
Roche Diagnostics GmbH
Royal Dutch Shell
Royal Philips
Rutgers Business School
Saab AB
Sandvik AB
SAP AG
Sasol Limited
Saudi Goody Products Marketing Co. Ltd
Schenker International (H.K.) Ltd
Schick Manufacturing Inc.
Schlumberger
Shikoku Electric Power Co.,Inc
Shin Shin Co Ltd
Siemens AG
Sonoco Products Company
SRA International Inc
St Jude Medical Japan Co Ltd

Sterling Commerce
Sunergos LLC
Supply Risk.Org
Syracuse University
Systems Planning Institute
TechTeam Government Solutions
Telenet NV
Tempur - Pedic
Thales AES
The Asaba Group, Inc.
The Boeing Company
The Chartered Institute of Logistics and Transport
The Chinese University of Hong Kong
The Linde Group
The Norwegian Computer Society
The University of Alabama - Supply Chain Institute
The Walt Disney Company
ThyssenKrupp AG
Tieto Corporation
Tokyo Electric Power Company
Tokyo Gas Co., Ltd.
Tokyo Institute of Technology
Toshiba Corporation
Toyo Business Engineering Corp
Transitive Management SPRL
Transplace
Trex Company
TruEconomy Consulting Holding B.V.
Tsinghua University
Turku School of Economics
Ultriva Inc.
Unilever Plc
United Nations World Food Programme
United Space Alliance, LLC
United States Air Force
United States Coast Guard
United States Department of Defense
United States Marine Corps
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University of California at Irvine
University of Michigan
University of Puerto Rico
University of South Africa
University of the Witwatersrand
Upline Consultoria em Gestao Empresarial
Upsher-Smith Laboratories, Inc.
US Army Logistics University
UTI Worldwide
Vallourec & Mannesmann Tubes
Vietnam Supply Chain Community
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Wacker Chemie AG
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Watson Pharmaceuticals
Weleda AG
Wyeth Pharmaceuticals
Xelocity Ltd.
ZAO United Metallurgical Company

*This member list is not comprehensive. For the list of current SCC members go to:
supply-chain.org/membership/members

Learn More

Trainings

SCC offers many supply chain management and SCOR education opportunities. Every year we host trainings in cities around the world that introduce and explain how to integrate SCOR into supply chain management programs. With a focus on execution, our training program explores the technical details, specific management roles, and tasks for applying SCOR within any enterprise.

For example, our SCOR Project training takes participants through the 20 to 25 discrete steps of a SCOR project. SCOR Benchmarking training breaks the benchmarking process into seven well-characterized and repeatable steps that flow from initial scoping (supply chain identification matrix) to strategy, SCORcards, and the benchmark itself.

SCOR trainings include:

- SCOR Framework
- SCOR Project
- SCOR Integration
- SCOR Benchmarking (SCORmark^{SM})
- DCOR Framework
- Performance Based Logistics Using SCOR
- Six Sigma & Lean Using SCOR
- Supply Chain Risk Management Using SCOR

In-House Training

If you need to train multiple employees, you can send them to a public training or invite SCC instructors to conduct training at your facility. No matter where you are around the world, our instructors are available to support your needs. In-house training saves time, reduces travel costs, and lowers the average training fee per employee. Above all, in-house training customized to your industry and organization allows your employees to discuss how to immediately adapt the newly learned tools and techniques to your organization's unique challenges.

Visit supply-chain.org/training to:

- View training locations and dates.
- Read detailed descriptions.
- Access special pricing for members, affiliates, or groups.
- Learn about group training options.

Certification

Supply Chain Council's certification programs enable individuals to demonstrate their SCOR knowledge and skills. Like the SCOR model itself, SCOR certification is based on real-world techniques for measuring and managing a global supply chain, not on concepts or abstractions. Certification allows organizations to rapidly assess the competencies of current personnel and recruits, and evaluate the effectiveness of training.

The SCOR Professional (SCOR-P) certification program establishes a consistent global standard for excellence in using SCOR. SCOR-P certification requires a minimum of five years of supply chain management experience. The SCOR Scholar (SCOR-S) certification is designed for university students who do not yet possess significant work experience. SCOR-S certification demonstrates understanding of supply chain management as interpreted via the SCOR framework. It is the only program of its type in the world that provides professional certification of supply chain knowledge to students.

supply-chain.org/certification

Events

Every year the staff, regional directors, and representatives of Supply Chain Council organize and participate in many business and supply chain management events around the world. SCC hosts Supply Chain World conferences in Europe, Asia, and North America; regional Executive Summits; and SCC regional meetings. Many of our events are open to nonmembers and members of affiliated associations.

supply-chain.org/events

Online

The SCC website (supply-chain.org) offers an array of information on the SCOR frameworks, SCOR benchmarking, and SCOR usage guidelines. It also details SCC member services and benefits, upcoming trainings, our webinar schedule, major industry conferences, and a variety of other supply chain management resources.

Membership

Join Us

Our members represent the full spectrum of people and organizations working and serving the supply chain process area. They include practitioners from every industry, representatives of consulting and software firms providing tools or expertise to supply chain organizations, and academics teaching future supply chain professionals. SCC operates on a global basis with local chapters in key regions. Membership options allow you to participate in one region or globally.

Membership is organization-wide

Every supply chain professional in your organization will have access to the SCOR models, online library, benchmarking, and peer networking. Everyone also receives member discounts on training and events.

To help you get started each new membership includes one complimentary seat at a public training course in the first year of membership as a standard or global member. Learn more about how SCC membership addresses your specific supply chain needs.

supply-chain.org/membership

A Word of Appreciation

Each refinement of the SCOR model is driven by a collaborative team of practitioners from a cross section of industry, government, and nonprofit organizations. These volunteers keep SCC in touch with current industry thinking and best practices and support the development of new membership programs. Supply Chain Council continues to express our deep appreciation to the many volunteers around the world who give their time, energy, and extraordinary expertise to moving the SCOR model forward. Without your contributions our mission to help organizations improve the performance of their supply chains would not be possible.

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