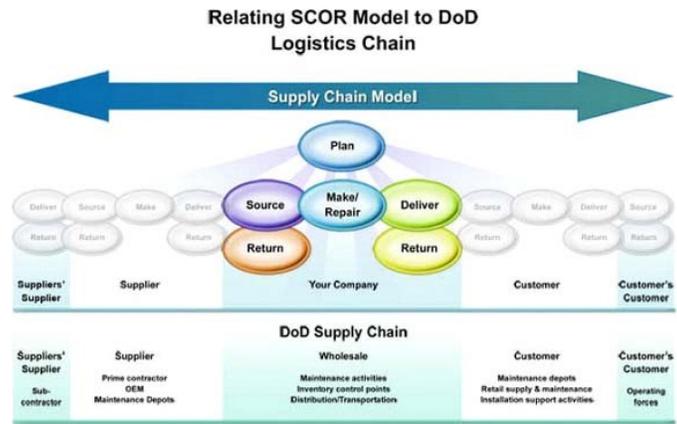


Is your organization part of your Service's or Agency's Supply Chain. Is your organization dependent on the supply chain? Have you ever wondered how all the supply chain pieces should fit together? Do you want to know how your supply chain can be improved, become more efficient, take up less time and resources?

If you'd like to learn how to analyze and correct problems in your supply chain, this is the workshop that can help. A detailed description of our workshop is below. This workshop can be tailored to specific Service or Agency systems.

**Day 1 – Morning -- Supply Chain Overview**

The first lesson identifies the basic structure of a supply chain using APICS Supply Chain Operations Reference. Supply Chain and Supply Chain Management are defined and the basic construct (planning and flow of materials, money and information) is presented. Emphasis during the lesson is on the interrelationship between functional areas and the balance required (Plan, Source, Make/Repair, Distribute and Return).



Finally the students evaluate the major Supply Chain Management issues and challenges facing DoD to include: global market, Diminishing Manufacturing Sources and Material Shortages (DMSMS), counterfeit parts, sourcing of materials, cybersecurity and aging systems. As part of this evaluation, discussion centers on initiatives for overcoming these challenges. The conclusion of the morning lesson is a practical exercise mapping and evaluating a simple supply chain to determine better approaches for fulfilling customer demand.

**Day 1 – Afternoon – Requirements, Requirements Systems and Demand Planning**

The afternoon of Day 1 starts with a customer's demand at the retail level (SCOR Deliver). This is the thread of the workshop as we follow a customer's requirement upstream through the supply chain. The afternoon's overall intent is to identify how requirements are generated (tools, models, formulas) and how stocking decisions are evaluated. Discussions include the importance of information systems and how they are used to convey data, assist in requirements determination/demand planning/forecasting and also the balance inventory between retail and wholesale levels. The workshop's focus for the afternoon is on the repairable demand and its effects on supply chain. This leads to evaluating independent and dependent demand as well as push versus pull demand planning systems.

## **Day 2 – Morning –Demand Planning (continued) and Production and Capacity Planning**

The morning of day 2 starts with evaluating how Ai, Machine Learning and Big Data can be applied in supply chains and specifically for demand planning. In this session the workshop describes big data and its sources , how Ai and Machine Learning assist in evaluating big data for trends and forecasting and how Ai and Machine Learning can help with requirements determination (especially for aging systems). The morning concludes with initial discussions of Production and Capacity Planning (SCOR Make and Return).



## **Day 2 – Afternoon -- Production and Capacity Planning and Linking to Requirements**

In the afternoon the workshop covers Capacity planning and the linkage in Service systems between requirements and production/capacity planning for repairable items and their bills of material (BOMs). The workshop also identifies systems used for linking requirements and capacity planning. In addition the lesson identifies how production decisions are made by analyzing requirements and capacity information. Finally the workshop covers the aggregation process for determining how much to repair based on production capacity and how much to purchase (SCOR Source)

## **Day 3 – Morning -- Strategic Sourcing**

Day three evaluates the decision making process for “make versus buy”. The workshop covers trends in industry for outsourcing and describes the implications of an extended supply chain. This lesson also focuses on the best approaches for mitigating risk due to diminishing manufacturing sources and material shortages (DMSMS) and how market research can assist in developing additional sources of components. This session evaluates the application of advanced/additive manufacturing as a source of materials and covers Intellectual Property (IP) rules and how to apply in sourcing materials. Finally, the workshop’s primary lessons conclude with determining strategies for sourcing domestic and counterfeit free components and maintenance, repair and overhaul (MRO) parts. This includes describing the approach for identifying counterfeit parts and how to apply contracting methods for preventing counterfeit parts in an extended supply chain.

## **Day 3 – Afternoon – Workshop Review and Wrap-Up**

The afternoon of Day 3 concludes with a review and workshop wrap-up, workshop evaluation and discussion of current topics in Supply Chain Management.