Challenges

The typical challenges related to supply chain readiness include:

**Are suppliers meeting their delivery schedules?**
Suppliers missing schedules is an early warning signal of an underlying problem in the supply chain. Delivery issues may occur at any tier in the supply chain.

**A program with new technology that needs to be fast tracked.** When new technology is combined with manufacturing challenges, the ability to fast track the program becomes limited. Combine these challenges with a new supply chain and the problems are compounded.

**In the early stages of supply chain creation the level of maturity is low, but maturity must improve over time to meet the needs of the program.** What is the level of maturity of the supply chain? Is the level of maturity aligned with both the Technology Readiness Levels (TRL) and Manufacturing Readiness Levels (MRL)?

The Solution

The concept of a Supply Chain Readiness Level (SCRL) Assessment is a relatively new concept. The definition of each level along the supply chain readiness spectrum was created in a development effort with the National Aeronautics and Space Administration (NASA) and the University of Alabama Huntsville.

This solution involves the objective and subjective assessment of each of the SCRL key metric, used to determine gaps and risks that need to be addressed.
Solution Benefits

This solution has the following benefits:

**Creates a standard assessment to use as a benchmark**
This provides the ability to measure supply chain tactics resulting from specific supply chain strategies. In addition, risk mitigation can begin in the earliest phases of the lifecycle while costs can be assessed and controlled.

**Promotes proactive collaboration by supply chain participants**
All participants are encouraged to develop collaborative structures and relationships as the maturity of the supply chain rises. Improved visibility and coordination throughout supply chain is a result of higher levels of maturity.

**Enables continuous improvement**
The assessment report provides a snapshot for areas of opportunities for improvement. The supply chain owner is able to assess and adapt the supply chain entities and conditions as customer requirements change.

**Provides a framework for creating contracts, policy and data requirements**
The use of a supply chain framework allows for the creation of contracts, policy and data requirements needed to achieve supply chain strategies and initiatives. Contracts can be worded with the information needed, timing and sources to achieve needed performance criteria.

**Provides best practices, metrics and data requirements for each supply chain initiative or strategy**
The framework provides for a repeatable business process with procedures, standards, and metrics that allows for the capture of organizational knowledge into a repository for future use.

Implementation

The Professional Services required to implement this solution are as follows:

- **Phase 1 – Assessment**
  Determine the “as-is” state of the supply chain maturity, key areas of focus and the targeted supply chains for discovery. This establishes the scope of the effort.

- **Phase 2 – Discovery**
  Based on the scope of the assessment, perform the actual discovery needed to gather the information. This includes meetings with targeted suppliers and departments internally to gather the needed information.

- **Phase 3 – Recommendations**
  Based on the data gathered, a findings report is prepared that identifies the gaps that need to be addressed.

- **Phase 4 – Implementation**
  The approved changes are implemented.

This solution does not require any software as it employs the SCRL framework as the base assessment metric.

About the Electro-Optics Center

The Electro-Optics Center (EOC), a proud part of The Pennsylvania State University, is a hybrid between the best components of a university and those of private industry. This relationship allows us access to the university’s researchers and scientists, its state-of-the-art facilities and leading edge research. Learn more at www.eoc.psu.edu.