NNS Supply Chain Continuous Improvement: Value Chain Assessments

Background

In March, 2012, Newport News Shipbuilding (NNS) refreshed their Supplier Development and Continuous Improvement (SDCI) Program to develop a sound and sustainable approach to supplier continuous improvement that is integrated into the NNS value stream. More efficient suppliers and the processes shared between the Supplier and NNS should reduce program costs, improve NNS and Supplier profitability, and lead to a more robust and responsive value chain.

Process Overview

NNS selects Suppliers for the SDCI Program based on performance history, strategic procurement outlook, and an understanding of a Supplier's continuous improvement maturity. To start, Suppliers participate in a 1-day introductory session at NNS, followed by a Supplier on-site assessment or workshop. We'll capture and follow-up on shared actions, improving our partnered processes.

Value Chain Assessment

The Supplier and NNS will participate in an assessment activity at the Supplier’s facilitated by either a local Manufacturing Extension Partnership representative or a Newport News Shipbuilding representative. This 2-day workshop provides an opportunity for the Supplier and NNS to discover areas of improvement with our shared processes. A detailed value chain map is used as a centerpiece of our discussion, to guide us through our shared outputs and inputs. Resulting actions are for both the Supplier and NNS. Engagement continues that will add value and reduce cost in the process of doing business with NNS. An overview of the assessment process is shown below:
The value chain assessment process is based on concepts laid out by Michael Porter in his works on Competitive Advantage. Porter’s concept of the value chain disaggregates a company into “activities”, or discrete functions or processes that represent the elemental building blocks of competitive advantage.

A systematic way of examining all the activities a company performs and how they interact is necessary for analyzing the sources of competitive advantage. The value chain mapping process provides that systematic framework for analysis.

The linkages between suppliers’ value chains and a company’s value chain provide opportunities for the company to enhance its competitive advantage. It is often possible to benefit both the company and suppliers by influencing the configuration of suppliers’ value chains to jointly optimize the performance of the activities, or by improving the coordination between a company’s and suppliers’ chains. Supplier linkages mean that the relationship with suppliers is not a zero sum game in which one gains only at the expense of the other, but a relationship in which both can gain.
**Action Plan**

Resulting actions are for both the Supplier and NNS. Engagement continues that will add value and reduce cost in the process of doing business with NNS.

**Partner Information**

GENEDGE ALLANCE will be assisting NNS with the Supplier Strategic Continuous Improvement program. GENEDGE is the Commonwealth of Virginia’s Manufacturing Extension Partnership (MEP), part of a nationwide MEP network under the National Institute of Standards and Technology (NIST). NIST MEPS work with U.S. manufacturers to help them create and retain jobs, increase profits, and save time and money. Local MEPS throughout the nation will be used to conduct assessments based on Supplier location. Your local MEP can be a cost effective partner for Supplier improvements, as needed, based on Supplier internal resources.

**For the two-day on-site event, who is needed from your organization?**

- Full time participation from representatives of logistics, engineering, and production, who are knowledgeable in their respective aspects of NNS products produced by the supplier. Subject matter experts in the areas of sales, procurement, finance, IT, etc. should be available as needed.
- A designated representative from your organization to be dedicated to the event who can coordinate getting the right people in the room at the right time.

**For the two-day on-site, who will be there from NNS and the MEP network?**

- One to two representatives from your local NIST MEP network office to run the event. One to two representatives from the NNS Buying Office, a NNS Supply Chain Process Improvement representative and a representative from Supplier Quality.

**Post Assessment:**

- Your local NIST MEP representative will compile assessment data and prepare:
  1. An electronic copy of the supplier value chain map, including tie points with the NNS value chain and improvement opportunities identified with both the Supplier and NNS.
  2. A Supplier Continuous Improvement Gap Analysis, consisting of prioritized recommended lean supply chain projects to close performance gaps and address issues defined in the assessment and analysis, and
  3. Impact estimates expected from those improvement projects.
- The local MEP will present the map and gap analysis to NNS and the Supplier.
- The Supplier is encouraged to embark on the improvement activities using resources, internal and/or external, that meet the suggested needs through a supplier self funded mechanism.
- NNS will follow-up with the Supplier at regular intervals (30/60/90 day, etc.) in the form of visits and/or conference calls to support the partnered continuous improvement dialog and mentorship and to check on progress, possible challenges, and celebrate successes of both parties.