



Value Stream Map – Indirect Support Operations



Sterling Engineering is a progressive, high-quality, low-cost producer of complex, precision machined parts and assemblies ranging in size from 6 inches to 6 feet. These parts include Turbine Airfoils, Cases, Shafts and Wheels. They have over 60 years of service excellence to worldwide OEM's in the aerospace, power generation, semiconductor machinery and industrial machinery industries. Sterling Engineering is both ISO9001:2000 and AS9100 certified.

Sterling began their Lean Journey in 1999. Dramatic business climate changes throughout the years made the active continuance of Lean Implementation very difficult. However, the belief in the Lean Philosophy never wavered and this is one of the primary reasons that Sterling continued to survive as a viable business. Early in 2008 the Lean Journey was re-energized with enhanced support and the results have been extremely positive to date. Sterling has witnessed increased productivity and improvement in margins. They are making great strides with a strong effort in implementing 5S and Standard Work principles. Sterling expects to continue the Lean Journey indefinitely.



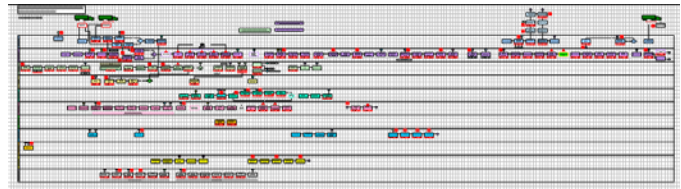
Introduction

In 2009, CCAT met with Sterling Engineering to discuss Value Stream Mapping and a supporting software tool called eVSM™. eVSM™ was designed to provide the user with an easy to use tool for implementing the Lean Enterprise Institute methodologies associated with "Learning to See", "Seeing the Whole", "Making Material Flow" and "Creating Continuous Flow". This capability matched well with Sterling Engineering's request for assistance with creating a non-production Value Stream Map (VSM). They recognized that the value stream mapping tool can be used in the same way they use it on the production floor and they wanted an accurate assessment of the overall administrative process time for a particular product family that has significant non-production customer requirements.

Methods / Procedures

Value stream mapping is an important visualization tool for supporting the implementation of Lean concepts. The goal when applying this tool is to identify and eliminate waste in a process. While it is primarily a communication tool, it can also be used as a planning and a change management tool.

CCAT engaged with Sterling Engineering's Continuous Improvement Manager to identify all departments that were involved in the overall administrative process. CCAT interviewed each functional area and created a VSM using a swim-lane approach to show how the series of processes were organized, the progression within each area and the transfer of information throughout the organization as shown in the figure below.



Conclusions

This VSM effort provided Sterling Engineering with an easier way of visualizing and communicating the current state of the overall administrative processing time associated with a product family. It also served as a future state guide for eliminating waste relative to cost and quality of its administrative services. The VSM helped determine the direction and focus of Sterling Engineering resources relative to NVA (non-value added) and NNVA (necessary non-value added) processes.

References

"With CCAT's help, we were able to clearly see that we are currently spending upwards of five hours per part in administrative work alone. We have already begun the process of mapping out our Future State and fully expect to develop a working team with our customer in order to take significant time out of the process. I sincerely doubt that we would have accomplished this task without CCAT's expertise."

Paul Barrow, Manufacturing Manager Sterling Engineering

For more information

Susan Coffey
CCAT, Inc.
222 Pitkin St, Suite 106
East Hartford, CT 06118

Phone: 860-291-8832
Fax: 860-291-8874
www.ccat.us