

Continuous Improvement Using Lean Principles

January 2014 Update

Campus Lean Facilitators host Lean 5S Workshop

In an effort to spread continuous improvement thinking across campus and make Michigan Tech's Lean culture visible, a team of campus Lean Facilitators have developed a new workshop that is being offered to campus this spring. Lean Facilitators Rick Berkey, Catherine Burns, Wendy Davis, Bob Hiltunen, and Kathy Wardynski with the help of student Process Improvement Coordinators Kaylee Betzinger and Megan Johnson came up with the "<u>5S Blitz</u>" concept which they have marketed to campus with registrations nearly at maximum capacity.

When they registered, participants were asked to think about and describe an area in their work space (physical or virtual) which they might consider for a 5S project. Examples could include their desk, a department supply closet, a shared network drive, or a lab space.

The 5S Blitz is a hands-on workshop where around 15 campus participants will learn about the concepts of 5S (sort, set in order, shine, standardize, and sustain), practice them within their work space and then share their experience with others. At an initial learning session they will meet the trained facilitators who will be helping them with their project and will get an overview of Lean thinking and principles. After the learning session, they will have an opportunity to start putting the concepts into practice throughout the day while they begin their project with the help of a facilitator. Participants will get back together to share some lessons learned at the end of the initial day. Over the following weeks they will finish up their project using their facilitator as needed, and then will share their experience in an open report out to campus.

5S example photos



BEFORE 5S Blitz

AFTER 5S Blitz

Lean Outreach and Connections

The "Local Lean Group" for Houghton, Keweenaw, and Baraga County businesses continue to meet and expand. Three new companies (Calumet Electronics, ThermoAnalytics, and Portage Health Rehab & Sports Medicine) were in attendance at the December 3, 2013 meeting. The topic of discussion at this meeting was Visual Controls. A teach-back on visual controls initiated the discussion, after which the attendees share how they use visual controls in their own businesses. Through this meeting, a connection was established between Calumet Electronics and the <u>Leaders in Continuous Improvement</u> student organization from which a plant tour is being planned for the spring semester. The next meeting of the Local Lean Group is scheduled for Monday, March 3, 2014, in the Lakeshore Center.

The <u>Continuous Improvement Blog</u> continues to be a source of easily digestible information and updates on Lean improvement processes at Michigan Tech. Most of the blog posts are written by the student Process Improvement Coordinators, but guest blogs appear occasionally and add variety to the information offered. Recently, Process Improvement Coordinator Megan Johnson posted on the topic of Rapid Experimentation and shared an experience from a recent 5S improvement project.

Rapid experimentation can be used to test out a hypothesis or countermeasure that can be easily and usually inexpensively implemented, allowing quick iterations through the PDCA cycle. During a recent 5S event with Kathy Wardynski, Manager of Purchasing and Process Improvement for Dining Services, it was determined that Kathy had a need for an inbox where coworkers could leave information for Kathy to "pull" from, rather than having the work "pushed" at her by dropping it off directly on her desk. So, we did a little rapid experimentation! We put creativity before capital and used some funky duct tape from our office to attach a spare wall pocket just outside the door to Kathy's office. Now Kathy is able to pull work from this inbox as she has time to process it.



Improvement Events

Twelve (12) Lean improvement events have been completed since the FY13 report, with an additional sixteen (16) events currently initiated, underway, or just wrapping up. An annual report of the fiscal year with a comprehensive list of all improvement events (event descriptions, results, and any associated cost savings) is shared every fall.

Highlighted Improvement Event

Event Name	Event Description
Cap and Gown Process Mapping	A meeting to create a process map for the University's cap and gown ordering, procurement distribution, and return process occurred on December 12, 2013. This event was used to document the cap and gown process that was recently improved through a kaizen event. The mapping activity was the primary focus of a Leaders In Continuous Improvement meeting, intended to use the exercise as a teaching and learning opportunity for the students as well as to document this sensitive University process.