

Continuous Improvement Using Lean Principles

December 2016 Update

A Lean Collaboration

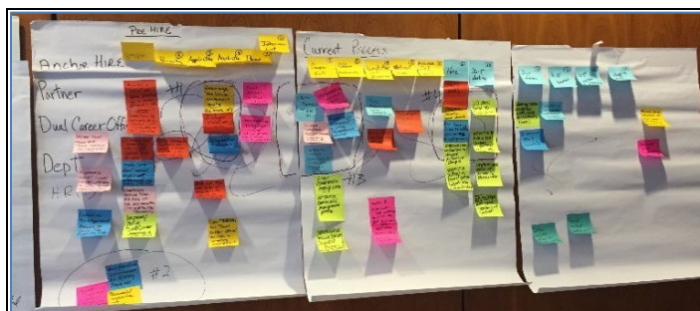
When a new faculty member came to Michigan Tech, there were no standardized policies or procedures to find satisfactory academic employment for their partners. This fall, a diverse team of professionals worked together in a continuous

improvement event to create solutions to this issue. The team consisted of Provost and Vice President for Academic Affairs Jacqueline Huntoon, Dean Wayne Pennington (Engineering), Department Chair Cary Chabalowski (Chemistry), Department Chair Jason Carter (Kinesiology & Integrative Physiology), Director and University Librarian Ellen Marks (Van Pelt and Opie Library), Renee Ozanich (Human Resources), Carrie Richards (Dual Career), Lean Facilitator Kathy Wardynski (Dining Services), and Rylie Store (student process improvement coordinator).

Current initiatives focused almost entirely on assistance at the time of the initial hire, without a long-term plan for an academic career path.



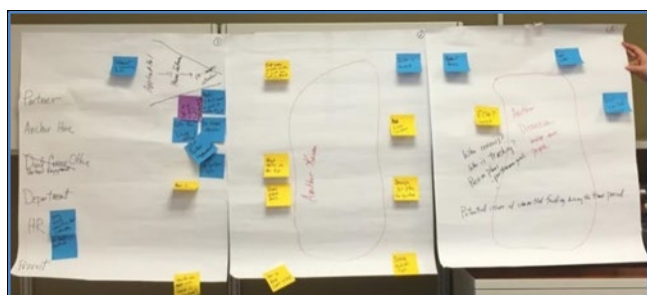
The team works on understanding the current state.



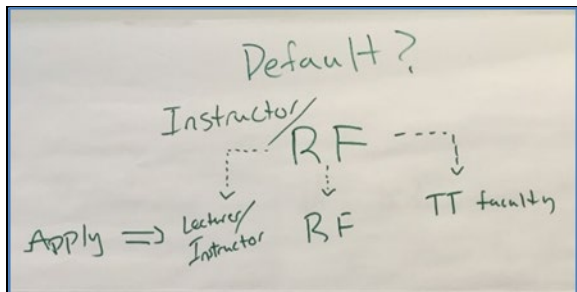
The current state of partner academic employment.

This sometimes led to dissatisfaction from both the faculty hire and the partner, resulting in the loss of potentially good faculty hires and reducing retention rates, increasing recruitment costs, and losing start-up funds.

The team recommended several improvements, including changes to faculty searches, interviewing, and hiring. In the future, departments will be able to take advantage of collective advertising opportunities. Advertising several positions at the same time will make potential partner positions more visible. Faculty candidates will be invited to bring to campus any person who is important to their decision making, and best practices for partner hiring will be developed and shared.



Improvements simplify the process.



A vision for the future.

This continuous improvement event was launched as part of a new approach the university is using to address university-wide initiatives like unit climate, dual careers, and faculty scholarship. The university calls this innovative strategic change model the Advanced Matrix Process for University Programs (AMP-UP). AMP-UP is a model process for collaborative, efficient decision making enabling a climate of inclusiveness and equity that empowers all members of the university community to reach their career goals.

Lean Outreach and Connections

- **Library Wins Award that Includes Lean in Training.** The Van Pelt and Opie Library received the H.W. Wilson Award from the American Library Association. The award is for the creation of professional development for library staff. Lean culture and tools will be included in the training on goal setting, time management, and decision making.
- **Systems Control Visits.** The vice president of operational excellence and two Lean coordinators from Systems Control in Iron Mountain came to benchmark Lean office and service at Michigan Tech. They toured Lean and continuous improvement projects and visual management in the Van Pelt and Opie Library and Auxiliary Services, including the Lean showcase Cash Hub. They also had informative discussions with campus Lean facilitators and the Office of Continuous Improvement's student process improvement coordinators.
- **18 Trainees in New Lean Facilitator Cohort.** Eighteen Michigan Tech employees, representing the executive team areas of Academic Affairs (8), Administration (8), and Student Affairs and Advancement (2), began training to become volunteer Lean facilitators for Michigan Tech. The training is seven days long spread over six months, and includes hands-on projects and guest speakers. The class will graduate in April 2017.
- **Morgan from Emc Network Visits.** James Morgan, PhD, is the author of *The Toyota Product Development System: Integrating People, Process And Technology*. He gave a presentation on Lean product development and engaged in informal discussions on Lean which was well attended by faculty, staff, and students. Dr. Morgan received a Shingo Prize for his research in Lean product development.
- **Intro to Business Students Learn Lean Basics.** Jon Leinonen, lecturer, project advisor, and mentor in residence in the School of Business and Economics, asked the Office of Continuous Improvement to give a presentation on Lean Basics for the 106 students in his Introduction to Business courses. Leinonen believes knowledge of Lean and continuous improvement is essential in today's economy.
- **Michigan Tech Presents at Lean Conferences.** The director of continuous improvement, Ruth Archer, was selected to present *Learning to See the Past, Present, and Next Frontier* at the sixth annual Michigan Lean Consortium (MLC) Conference. She also partnered with colleagues from the University of Illinois on a *Games and Activities for Teaching Lean* workshop delivered at the Network for Change and Continuous Innovation (NCCI) Annual Conference.
- **Two New Student Process Improvement Coordinators On Board.** The Office of Continuous Improvement welcomed Stephen Butina and Rachel Chard as new student process improvement coordinators. They are both pursuing a BS in Management with a concentration in supply chain and operations.



James Morgan talking about Lean.

Formal Continuous Improvement Events as of October 31, 2016

Executive Team Area	Active as of 31 Oct 16	Completed since last report 1 Jul– 31 Oct 16	Completed FY17 YTD	Completed FY16 Full Year
Academic Affairs	1	0	0	11
Administration	3	3	3	12
Financial Services and Operations	1	1	1	0
Research	0	0	0	0
Student Affairs and Advancement	1	0	0	4
Total	6	4	4	27