



Annual Report: Fiscal Year 2023

The mission of Michigan Technological University's Office of Continuous Improvement (OCI) is to provide exceptional value and improve the University's performance by expanding a continuous improvement culture using Lean principles administratively, experientially, and academically to our faculty, staff, students, and the local, state, national, and global Lean community. The University's performance will improve in the areas of operational delivery, financial position, quality, experience and engagement, and students will be prepared to meet tomorrow's needs.

Operational Structure in FY23:

Michigan Tech's continuing Lean transformation uses an embedded Lean facilitator model that places effective problem-solving techniques and improvement tools in the hands of our frontline supervisors and employees, empowering them to not only improve their work but also help others design improvements.

39 University employees are currently certified as Lean yellow belt practitioners, green belt practitioners and facilitators, and black belt senior facilitators. They apply the principles to their own work responsibilities and many facilitate improvement work for the University and within their units.

9 University employees graduated from the 7-day Lean Systems Green Belt training in 2023, completing **60** project activities consisting of practical applications of Lean applied to their own work. Participants received in-depth training on topics like team building, group dynamics, organizational change, facilitating techniques, Lean methods, and Lean tools.

61 Current university employees have completed Lean Systems training since the program began and act as Lean partners and role models to help cultivate a Lean culture.

3 Experienced Lean facilitators advised the OCI on Lean facilitator training, development, certification, strategy, and deployment through the Lean Community Development Group.

OCI Conducted Activities in Three Focus Areas:

1. Close the gap between current state and the University's strategic goals.
2. Foster the continuous process of people development.
3. Create strategic connections, promote collaborative partnerships, and share Lean expertise in the local, state, national, and global community.

Activities of the Office of Continuous Improvement placed a strong focus on operational excellence, standards, achievement and performance metrics, and sustainability to promote best-in-class operations. OCI pursues three strategic initiatives:

1. Close the gap between current state and the University's strategic goals.

1. Measuring Impact: OCI advocates for the measurement of the impact of improvements and innovations using the framework developed by the University of Strathclyde in the United Kingdom. Their research found that the benefits of initiatives fall into four categories: Financial Position, Quality, Operational Delivery, and Experience & Engagement. In each category, savings or improvements are defined as shown here:
 - Financial position – Staff capacity savings, space savings, resource savings, utilities savings, increased revenue
 - Quality – Increased quality, improved conversion rate, improved communications

- Operational Delivery – Reduced end-to-end process time, greater productivity, improved health and safety levels
- Experience & Engagement – Improved stakeholder experience, improved compliance, improved engagement, improved staff satisfaction
- Coached Associate Vice President for Administration (AVPA) direct reports and others on strategic goal setting, key performance metric development, and improvement project facilitation.
 - Several auxiliary units—the golf course, ski hill, residential housing, and the museum—have noted record revenues (financial position impact).
 - Piloted an employee recognition program to enhance employee engagement, wellness, retention, and reinforce behaviors that support AVPA goals and values (experience and engagement impact).
- Facilitated ERP discussions for university leadership centered on how our current and future data and information processing needs are provided (potential quality, operational delivery, and experience and engagement impacts).
- Coached the Human Resources team on their new Shared Services implementation (anticipated quality, operational delivery, and experience and engagement impacts).
- Required Lean Systems training participants to complete individual and team projects to receive Green Belt certification.

Example Green Belt Projects	Impact
Provost Office – Redesign of faculty hiring from request to approval	Reduced the number of staff contacts from 37 to 18 and the time for review from 60 days to 24; an anticipated outcome is an increase in accepted offers and concomitant reduction in faculty time spent on search committees
Information Systems and Services – New online access form for student data	Anticipated outcomes are fewer IT customer contacts for more information resulting in faster IT response time, increased supervisor satisfaction with IT, and employees able to do their needed work sooner
Advancement – Maximizing corporate matching	Potential impact is an increase in matching corporate gifts from available but unclaimed corporate matches
Global Campus – Improved blog post writing workflow	Decreased employee stress, increased number of blog posts, and increased visits to the Global Campus website

2. Foster the continuous process of people's development.

- Delivered Lean Systems Green Belt training, Yellow Belt workshops, and Lean academic courses.
- A student Process Improvement Coordinator (PIC) supported OCI by writing blogs, updating training materials, and managing yellow belt documentation. PICs reduce the load on our volunteer green and black belt facilitators, are student Lean ambassadors, and they learn and apply valuable Lean skills that they apply at Michigan Tech and leverage for job opportunities.
- Provided advisor, support, guest speakers, resources, and connections for [Leaders in Continuous Improvement](#) (LCI) student organization.
- Facilitated bi-monthly book club discussions for the Michigan Lean Consortium.
- Managed quarterly virtual Lean Higher Ed Quick Takes for the Americas Division to educate the Lean higher ed community on Lean culture, principles, processes, methods, and tools as they are applied at universities and colleges.

3. Create strategic connections, promote collaborative partnerships, and share Lean expertise in the local, state, national, and global community.

- The three public universities in Michigan with continuous enrollment growth, University of Michigan, Michigan State University, and Michigan Tech, are also the three universities in Michigan with continued formal internal Lean programs.
- Michigan Tech is a Track Partner for the higher ed track at the October [Lean Solutions Summit](#) in Muskegon, MI. Track partners are known for continuous improvement in their industry.
- Full participation in regional, state, national, and global activities continues to ramp up.
 - Partnering with the [Michigan Manufacturing Technology Center](#) to advance Lean in the Houghton/Keweenaw communities.
 - Invited as a panel member for a transglobal discussion on “People Leading People Leading Lean in Higher Education” for the 2022 Lean HE Global Conference. Also invited to deliver a session “Keeping Your Eye on the Prize: How to Get Your Most Important Work Done.”
 - Invited to present “Brainstorming and Decision Making” to practitioners at the University of Alabama.
 - Served as chair of the [Lean HE Americas Division](#) and member of the Lean HE global steering group, examiner for Michigan Performance Excellence (MIPEX) and Communities of Excellence (COE), and Michigan Lean Consortium (MLC) Events Committee volunteer.

Looking Ahead to FY24:

- OCI will continue its strong focus on supporting Auxiliary units to transform the student experience through process management and improving processes that support critical success factors and industry best practices.
- Risk management strategies will be incorporated into OCI's improvement methodology.
- Requests for improvement event facilitation from units around campus are lagging. Several factors are at play, including workforce availability and general feelings of overload by staff. Continuous improvement work engages the people who are doing the work in improving the work, and results in more time spent on interesting and value-added work, more even workloads, less fire-fighting, and less stress overall, helping us become a best place to work.
- OCI will again offer cohort training for Lean Systems Green Belt certification, and will offer Yellow Belt workshops, and Lean academic courses.
- OCI will develop improvements to collecting of the impact of improvements in the areas of Financial Position, Quality, Operational Delivery, and Experience & Engagement.