



## Annual Report: Fiscal Year 2020

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The mission of Michigan Technological University's Office of Continuous Improvement (OCI) is to provide exceptional value and improve university performance by spreading 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. This will improve University performance and prepare students to create the future.

### Operational Structure for FY20:

Michigan Tech's Lean transformation uses an embedded Lean facilitator model that has our frontline supervisors and employees solving problems and helping each other make improvements.

**31** university employees performed service as certified Lean facilitators

**4** student employees assisted with the planning, data collection, and facilitation of improvement events, working side-by-side with employees and other students using Lean tools and methods

**3** experienced Lean facilitators advised the OCI on Lean facilitator training, development, certification, strategy, and deployment through the Lean facilitator development board

**2** more facilitators passed a global, industry-recognized professional [Lean Bronze Certification](#) knowledge test, which is phase one in the Lean Bronze Certification process. A total of 5 current facilitators have accomplished this milestone.

### FY20 – A Review of Operations in an Unusual Year:

#### Normal Operations - July 1, 2019 to March 22, 2020

- Normal operations in the OCI

#### Stay Home/Stay Safe - March 23 to May 15, 2020

- Some improvement events were deferred because the people involved were not available
- New methods for conducting virtual improvement events, daily huddles, and training were developed
- Lean facilitator certification cycle closeout was completed, with a number of facilitators unable to complete the requirements

#### Summer Pause - May 16 to August 16, 2020

- All OCI activities were paused and employees were furloughed
- In a personal capacity, Dr. Archer continued to contribute to the national Lean Higher Ed community as an invited Academic Impressions workshop provider, co-presenting with Dr. William Balzer on the topic *Transforming your Institution through Lean Higher Education*

### OCI Conducted Activities in Three Focus Areas:

The Office of Continuous Improvement pursues three strategic initiatives:

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

- Managed 38 cross-unit improvement events and 21 Lean-in-daily-work improvements in every VP area at the university
- Provided strategic goal setting, key performance metric development, and improvement project coaching and facilitation for eight CFO direct reports

- Participated on Michigan Tech General Counsel's steering committee for enterprise risk management
- Provided weekly one-on-one Lean leadership coaching to 10 university leaders to enhance effectiveness, efficiency, and performance in their units
- Collaborated with faculty fellow Adam Wellstead (Social Sciences) to [apply counterfactuals to quantify the financial benefits](#) of improvement activities

## 2. Foster the continuous process of people development

- Developed emerging revenue stream from providing Lean training for the local and regional Lean community
- Supported quality and continuous improvement projects for student teams
- Delivered 12 Lean training courses and workshops for Michigan Tech employees, including a new virtual course: *Lean Project Leadership: Creating and Managing Sustainable Change*
- Engaged students through multiple approaches
  - Taught continuous improvement academic courses through the Pavlis Honors College
  - Provided advisor, support, guest speakers, resources, and connections for [Leaders in Continuous Improvement \(LCI\)](#) student organization
  - Supervised student employee's delivery of student information sessions on Lean

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

- Supported student internships and co-ops, industry tours, campus visitors and guest speakers, and professional workshops from industry, the Lean community, and alumni
- Planned and executed the [2020 Michigan Tech Lean Showcase](#), with 174 registrants from 42 universities in the US, Canada, UK, Australia, Hong Kong, Nigeria, and New Zealand, and 14 regional businesses
- Highlighted in Dr. William Balzer's book [Lean Higher Education: Increasing the Value and Performance of University Processes, 2<sup>nd</sup> ed.](#) (2020) as one of 16 global exemplar universities
- Served as Michigan Performance Excellence (MIPEX) Examiner, Michigan Lean Consortium Board of Directors member, and Lean HE (Higher Education) global steering group chair representing the continental Americas

## Looking Ahead to FY21:

- OCI will place a stronger focus on operational excellence, standards, achievement and performance metrics, and sustainability to promote best in class operations
- Only 21 certified facilitators transitioned to continue their service in FY21. All facilitator's commitment status is being verified, as conditions have changed
- The OCI budget was reduced by \$193,101, and now consists only of the director's salary. As a result:
  - Nominal support will be provided to all facilitators to maintain their expertise and certifications. The performance award pilot has not been renewed. No new cohort of Lean facilitators will be trained
  - The OCI improvement event coordinating and support functions have been paused
  - Faculty fellow collaborations have been paused
  - No students will be employed. Student-to-student outreach activities have been paused
  - Campus Lean training has been reduced. The Copper Country Lean Group has been paused
  - Revenue stream development from external training and certification has been paused
  - The propagation of Michigan Tech's stellar reputation in the state, regional, and global Lean communities as an exemplary Lean university has been paused