



## Annual Report: Fiscal Year 2021

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The mission of Michigan Technological University's Office of Continuous Improvement (OCI) is to provide exceptional value and improve the University's 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 the University's performance in the areas of operational delivery, financial position, quality, and experience and engagement and will prepare students to create the future.

### Operational Structure in FY21:

Michigan Tech's continuing Lean transformation uses an embedded Lean facilitator model that has our frontline supervisors and employees solving problems and making improvements.

**24** University employees were certified as Lean yellow belt practitioners, green belt facilitators, and black belt senior facilitators. They provide improvement services for the University and within their units, and they apply the principles to their own work responsibilities

**28** University employees volunteered as Lean Implementation Leaders, bringing a commitment to continuous improvement using Lean principles to their immediate work areas. Fully trained in Lean methods and tools, they are Lean partners and role models and help cultivate a Lean culture

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

**1** facilitator has achieved [Lean Bronze certification](#), a global, industry-recognized professional certification. Four others have passed the Lean Bronze Certification knowledge test, which is phase one in the Lean Bronze Certification process

### FY21 Operational Calendar and Focus

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

- All OCI activities were paused and employees were furloughed

#### MTU Flex Operations – 16 August to end of fiscal year 2021

- Resumed and continued operations under a 70% budget reduction; staffing reduced to leave only the OCI Director in place
- Operations seamlessly switched between virtual and face-to-face activities as needed
- Facilitators were trained to utilize virtual whiteboards for online collaboration and improvement
- Lean training was converted to an interactive, activity based virtual environment
- OCI Director increased focus on coaching within the Associate Vice President for Administration's (AVPA) areas
- Activities of the OCI placed a strong focus on operational excellence, standards, achievement and performance metrics, and sustainability to promote best in class operations

### 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 8 cross-unit improvement events and 59 unit- and individual-level improvements
- Provided coaching for strategic goal setting, key performance metric development, and improvement project facilitation for AVPA direct reports
- Worked with AVPA directors on capturing the value of their improvement work and trained Lean facilitators on measuring and documenting the impact of improvements
  - Developed a resource document, *A Practical Approach to Evidencing the Benefits of*

*Improvement and Innovation*, to support value capture in the value domains of financial position, quality, operational delivery, and experience and engagement

- Emphasized value-for-money metrics to illustrate the improvement story of efficiency, effectiveness, and economy

## 2. Foster the continuous process of people development

- Collaborated with AVPA to develop and deploy an Administration Operating System (AOS). The AOS is a systematic, effective approach to aligning the activities of Administration with the University priorities of education, scholarship, and people
  - The AOS has 4 domains: situational awareness, improvement work, organizational development, and strategic alignment
  - Each domain has a tailored set of daily, weekly, monthly, quarterly, and annual tactics that ensure achievement of the domain's purpose
- Certification in online teaching enabled excellence in virtual teaching and learning
  - Recognized by Provost as one of only 69 instructors who received an exceptional "Average of 7 Dimensions" student evaluation score for Fall 2020--top 10% of similarly sized sections
  - Taught continuous improvement academic courses through the Enterprise program
  - Provided virtual Peer Learning Labs and workshops for facilitator continuing education
- Provided advisor, support, guest speakers, resources, and connections for [Leaders in Continuous Improvement \(LCI\)](#) student organization

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

- Consulted with MJ Electric on a change management project and development of position responsibilities for an employee training and development initiative
- Invited as panel member for transnational discussion on "[Grassroots Lean: Developing Communities of Practice](#)" for the 2020 Lean Higher Education Global Festival
- Invited to present "Transformation of Teaching to a Virtual Environment using Lean Thinking" to academic leaders and faculty at King Fahd University of Petroleum & Minerals, Saudi Arabia
- Co-authored the [Companion Guide to Lean Higher Education 2<sup>nd</sup> Edition](#) (2021) with Dr. William Balzer to help readers get the most from his book
- Served as chair of the [Lean Higher Ed \(HE\) Americas Division](#) and member of the Lean HE global steering group, examiner for Michigan Performance Excellence (MIPEX), and member of Michigan Lean Consortium Board of Directors

## Looking Ahead to FY22:

- OCI will have a strong focus on supporting Auxiliary units to transform the student experience through improving processes that support critical success factors and industry best practices
- Campus Lean training will restart, focusing on Lean basics and popular tools
- As resources become available:
  - Student process improvement coordinators (PICs) will be hired. PICs reduce the load on our volunteer green and black belt facilitators and are student Lean ambassadors
  - More Lean training for university employees will be reintroduced on advanced Lean topics
  - Lean Systems training will be restarted. This is the foundational training for Lean yellow belts and the means by which we can grow our Lean certification program again
  - The Copper Country Lean Group will be reestablished
  - Full participation in regional, state, national, and global activities will resume
- In partnership with our well-trained and rigorously certified facilitators across campus, the Office of Continuous Improvement is prepared for resumption of a broad array of activities in support of operational excellence at Michigan Tech